### Czestochowa University of Technology Faculty of Management

## PROCEEDINGS OF THE 1st INTERNATIONAL CONFERENCE CONTEMPORARY ISSUES IN THEORY AND PRACTICE OF MANAGEMENT

## **CITPM 2016**

21<sup>st</sup>-22<sup>nd</sup> April 2016 Czestochowa, Poland

#### **Organizer**

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# COLITICANA SESTIBULE

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#### **Edited by:**

Małgorzata Okręglicka Iwona Gorzeń-Mitka Anna Lemańska-Majdzik Monika Sipa Andrzej Skibiński

Publication has not been a subject of language check. Papers are sorted by autors's names in alphabetical order. All papers passed a double-blind review process.

#### ISBN 978-83-65179-43-2 ISBN 978-83-65179-41-8

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Wydawnictwo Wydziału Zarządzania Politechniki Częstochowskiej 42-200 Częstochowa, al. Armii Krajowej 36 B Phone +48 34 325 04 80, distribution +48 34 325 08 67 e-mail: wyd.wz@zim.pcz.pl Edition I; 120 copies

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#### Typesetting and Make-up by

Marcin Pilarski

#### Cover Design by

Marcin Pilarski

 ISBN 978-83-65179-43-2
 /general: hard copy + electronic copy/

 ISBN 978-83-65179-41-8
 /hard copy/

 ISBN 978-83-65179-42-5
 /electronic copy/

#### Suggested citation:

Author, A., Title of the paper. In Okręglicka, M., Gorzeń-Mitka, I., Lemańska-Majdzik, A., Sipa, M., Skibiński, A. (eds.). *Proceedings of the 1<sup>st</sup> International Conference Contemporary Issues in Theory and Practice of Management 2016*. Częstochowa: Wydawnictwo Wydziału Zarządzania Politechniki Częstochowskiej, 2016, pp. xx-xx. ISBN 978-83-65179-43-2

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#### EFFECTIVE CONTENT MARKETING IN THE FOOD INDUSTRY: 1. FUNCTIONAL FOOD ADVERTISING VIA BTL COMMUNICATION **DEVICES**

Abstract: Foods that help preserve health and prevent illness - functional foods, or supplements are more popular than ever. Thought these have been incorporated into modern diets for some time, it is only now that modern communication devices allow us to boost their popularity in ways unavailable so far. It is especially worthwhile to offer these powerful products to the appropriate target groups; BTL communication devices assist in it, well. With the aid of content marketing, these products can reach new groups online not just those who are already aware of and look for these products, but also those who are still seeking solutions in their situations. This is the main focus of our paper. The analysis of it will be presented via hands-on examples, as well as a range of these foods themselves, and the devices that best assist in raising awareness about them on the market. In addition, the ways will be outlined in which marketing communication can contribute to a healthy lifestyle, and content marketing, together with vertical search engine optimisation, in reaching your target audience. However, it is also worth pointing out that deploying these devices may, under certain circumstances, backfire – the potential problem areas in the analysis will also be highlighted.

Key words: food industry marketing, functional food marketing, online marketing

**JEL Classification:** M31

#### 1. Introduction

Guarding our health and reducing the risks of becoming ill have gained much prominence in recent years; consumers are becoming ever more conscious of the impact their decisions make on their health, and nowhere is this more visible than in the area of nutrition (Moorman–Matulich, 1993).

The familiar range of health supplements on the market is being expanded by a steadily increasing selection of functional foods fuelled by a growing awareness of their benefits. Their market share is growing fast both in Europe and North America (it saw a 15-20% year-by-year increase when these products first appeared on the market in 1990; although this has subsequently levelled off, the upward trend is holding steady (Verbeke, 2005). This development is now presenting the scientific and business worlds with a sizeable challenge that comprises questions regarding these products' manufacture and distribution (Balogh, Baló, 2007). To step up to these challenges on a corporate or even global level, a range of devices will need to be accessed that efficiently spread the word about

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these foods' benefits and significance amongst our target audience. First, the data being already possessed must be used about consumer behaviour and the market in general to identify and fine-tune these effective online marketing devices. In the first decade of the 21<sup>st</sup> century behavioural sciences were flourishing, which gave the hope of understanding human and consumer behaviour (Horváth et al., 2005). The motivations of consumer preferences must be explored first (Csiszárik-Kocsir et al., 2009). A two-way approach was adopted in this, based on consumer behaviour: demand pull and technology push (Balogh, Baló, 2007).

The study presents recent research findings and enumerates the range of online marketing devices that best add to the above purpose, and facilitate effective communication that fosters the growing popularity of functional foods. Basically, ATL communication is regarded to be a costly solution. It consists of the communication forms via Above the Line (ATL) traditional media such as press releases, posters and hoardings as well as the tools of personal selling. Its expensiveness is due to the fact that the rental fee of hoardings is also part of advertising costs. While BTL stands for Below the Line communication, i.e. communicating via non-traditional means.

#### 2. The concept and definition of functional foods

First of all, it must be defined what exactly qualifies as functional food. Several definitions exist in the literature of the field; one of the most widely accepted ones belongs to the European Commission Concerted Action on Functional Food Science (FUFOSE-Group), which reads: "Foodstuffs qualify as functional when, in addition to general health-boosting benefits, they demonstrably improve the functioning of one or more of the body's functions, which is observable in improved overall well-being, mood, and/or a decrease of likelihood of illness. Functional foods may only take the form of actual food and not of tablets or capsules. They should form an integral part of the diet, and be effective in the ordinarily consumed quantities" (Diplock et al., 1999, Katan 1999, Bíró, 2002).

Further, one of the defining shared characteristics of functional foods is that the composition of the final product does not match that of its ingredients - because their components are, in the interest of attaining the desired effect, modified (boosted or stripped) in some way (Bíró, 2004).

According to another definition, functional foods comprise the foodstuffs that help prevent or cure diseases with a dietary basis (that is, those that are caused by a deficiency or surplus of dietary ingredients (Who, 2003). In general, functional food is such food that possesses health protecting or preventive properties.

#### 3. Consumption tendencies of functional foods

Whether we are talking about a given venture's marketing strategy or the various facets of selling and popularising a product range, the factors must be considered that influence our target audience or the present state of play.

Although we may safely assert that knowledge and use of functional foods is spreading fast, there remain target groups who still has to be reached. This insight came up while reading about Németh-T (2013) research findings. They state that 81% of respondents of the nationwide survey do not consume functional foods at all, and just 61.2% knew what these were in the first place. While 88.5% of those polled thought consumption of organic produce important, only 57.5% said the same of functional foods (Német, 2013). We have to bear in mind the consumer behaviour during our analysis and the subsequent establishment of effective communication devices. To this end, data from a past research project will be the baseline. Based on Jasák's (2015) research findings, it can be stated that although the majority of those polled do not yet seek out information on functional foods (which hinders sales efforts), a large segment does recognise their necessity and importance (Jasák, 2015). Jasák also highlights the point that functional foods would be of strategic importance to small and medium sized businesses at present, as they would only be satisfying a niche market (Jasák, 2015). This is also something that must be included, as the devices the SME sector needs to vary greatly according to the extent of available resources. ATL communication devices often require far greater investment, and their measurability leaves much to be desired. Yet measurability has become a major buzzword today - if the aim is to create a successful strategy, the degree of our attained results must be able to be calibrated. This has now become a core feature of a successful marketing strategy (Gacsi, Zeman 2013).

#### 4. Methodology

The importance of our research project is underscored by the timeliness of the topic for exploration. Vast ranges of opportunities and resources remain untapped on the market of functional foods, which could be readily accessed via the appropriate methods, as the data is also possessed that verify the presence of demand on the market.

In order to define the right communication devices, our starting point should be the one below:

- 1) Awareness and knowledge of nutrition underpins food choices (Wansink, 2005; Lehota-Komáromi, 2008).
- 2) Just 61.2% of our representative sample is aware of the concept of functional foods (Német-T. et al 2013).
- 3) Functional foods represent a niche market at present making them ideal for small and medium sized businesses to invest in (Jasák, 2015).
- 4) Although knowledge of functional foods is patchy at best, those who are aware of them do acknowledge their importance (Jasák, 2015).

In addition, our own research data has been included on which platforms and factors consumers consider relevant when learning about functional foods or healthy nutrition in general. To explore them, quantitative research of 593 members was conducted in December 2015. Sample taking was accidental on the Internet and the questionnaire was sent to social media pages of different content. The respondent should have diverse interests. The versatility of the sample is reflected by the breakdown of age, qualification and domicile.

The ratio of those polled, by age group, is presented in Table 1.

Table 1. Ratio of those polled by age group

Age group	Number of respondents	Percent
0-18	20	3.4%
18-25	109	18.4%
26-35	197	33.3%
37-45	154	26.0%
46-60	87	14.7%
60+	25	4.2%

Source: Authors' own research

Table 2. Ratio of those polled by level of education

Level of education	Number of respondents	Percent
Not finished primary school	1	0.2%
Primary school	22	3.7%
Secondary school	158	26.7%
Secondary vocational qualification	179	30.2%
University degree	232	39.2%

Source: Authors' own research

Table 3. Ratio of those polled by location

Location	Number of respondents	Percent
Capital	131	22.1%
Regional centre	128	21.6%
Other city	213	36.0%
Village	120	20.3%

Source: Authors' own research

We sought to ascertain data on which platforms respondents consult when informing about healthy living and nutrition, and which products they use most frequently. It's important to find out which factors influence their decision making the most when picking a product. They were also asked whether they were familiar with the term of functional food. This was particularly important because

although data exists on this, it is ever changing. Based on the above, the main objective of our research is the delineation of consumers' decision making process when it comes to picking functional foods. The resulting picture of consumer behaviour informed about choosing the appropriate communication devices that, when deployed together, form an effective sales generating mechanism.

The hypotheses were the following:

- (H1) Consumers today are growing more and more to traditional ATL communication devices and adverts.
- (H2) Online marketing devices and BTL communication in particular, assist in disseminating knowledge on and reaching potential customers for functional foods.

#### 5. Research results

The aim of the research was to find out what proportion of those polled were already familiar with the term of functional foods. Németh-T. et al. (2013) research, conducted in 2013 puts this figure at 61.3%.

We aimed to probe deeper, and introduced a third category in addition to yes and no. The answers clearly show that the majority of people are not familiar with the concept of functional foods even today. Fortunately, this may and should be improved with better communication. The aim is to establish the appropriate means via further questions that elaborate on existing data (Table 4).

Table 4. Ratio of knowledge about the definition of functional food

Answer	<b>Number of respondents</b>	Percent
Knows	170	29 %
Doesn't know	233	39 %
Surmises	189	32 %

Source: Authors' own research

The aim was also to find out how highly respondents valued functional foods, as this would directly translate into their marketability.

The answers unequivocally state that the market is wide open for functional foods. As a result, 83.8% of respondents said they would opt for actual foods that fit into a healthy lifestyle in favour of traditional medicine or even health supplements.

This piece of information marks the direction that must be followed when devising our online marketing strategy (Table 5).

Table 5. Ratio of preferences of products being part of a healthy lifestyle

Answer	Number of respondents	Percent
Takes food supplements	75	13 %
Eats food that promote a healthy lifestyle	497	84 %
Trusts traditional medicines	21	3 %

Source: Authors' own research

We presented respondents with the three most typical replies to the question of where it is worth looking for answers. The vast majority, 70.4%, of those polled named the internet as their main source of information. This in itself highlights the significance of online marketing, but our research goes even beyond.

The opinions of both friends and acquaintances and medical professionals were also given some weight but the proportions clearly show that in this sector, the internet rules. The previous question has shown that online platforms are more effective in popularising functional foods. However, it is crucial to find out what factors influence our target groups' decision making. The vast majority of respondents, i.e. 65%, follows the experts' opinion. Amongst BTL communication devices, content marketing is expected to be the most effective in 2016, and based on this, it, may lead the way in popularising functional foods. Content marketing is a BTL communication device that enables us to share important information on our own platforms with our target audience. Well written and optimised content attracts our audience to our site, and without resorting to overt selling, converts them into paying customers. Content marketing is therefore such a communication device that generates sales without direct selling. It furnishes visitors with answers to their questions (Table 6).

This is the essence of the well written content: its focus is placed not on generating sales but offering solutions to problems. This approach is just necessary in raising the profile of functional foods in the public consciousness: the concept itself is less well known, yet there is a clear demand so the focus must be on the questions and problems that they can alleviate.

Table 6. Ratio of chosing platforms guided respondents' decision – making in choosing components of a healthy lifestyle and diet

Answer	Number of respondents	Percent
Trusts the recommendation of friends and family	73	12 %
Searches for solutions online	417	71 %
Visits a doctor or pharmacy	102	17 %

Source: Authors' own research

Well written and optimised content can enrich our customers with valuable information while the concept of functional foods was also introduced to them. Naturally, we can have the most brilliantly written content in the world but it will not do much good if our target group do not find it. Fortunately, there are several ways online marketing devices can circumvent this. One of these is search engine optimisation calibrated to our purpose and a range of available devices. Search engine optimisation and good content marketing go hand in hand now. If consumers receive functional foods as the answer to their problem from their internet searches, sales of this group of products will be fostered both directly and indirectly (raising awareness).

The replies to the questions above evidence a marked focus on the recommendations of friends and family when choosing a particular product. How can we harness this? How can we persuade people to popularise functional foods? The answer lies in the joint use of social media and content marketing. Well written, gripping and valuable content can readily be shared on social media platforms - where they are bound to be shared further if they are found genuinely informative. This means that our content, and with it the concept of functional foods or even particular products, will reach even the users who have not been looking for it at the first place. The presence of an appropriate social media platform (such as a Facebook page dedicated to the subject) is of vital importance to the successful continuous promotion of our content. This is where the users could be attracted by means of interesting, informative and relevant posts who will, in time, become paying customers (Table 7).

Table 7. Ratio of factors informing your decision-making process when picking a product?

Answer	<b>Number of respondents</b>	Percent
Trusts the recommendations of my friends	110	19.0 %
Trusts expert opinion I have read	387	65.0 %
Doesn't do research, but buy familiar products	18	3.0 %
Follows the guidance of medical professionals	23	4.0 %
Seeks the opinion of a nutritionist or dietitian	41	7.0 %
Buys what I see advertised	13	2.0 %

Source: Authors' own research

The diagram above also illustrates the marked decline in the efficiency of ATL communication devices - targeted promotions and adverts will not deliver results in the popularisation of functional foods. This insight is further verified by the factor highlighted in our research that identifies the SME sector as the most appropriate one in filling the gap in the market for functional foods. This is because the smaller budgets it typically works with, make it more accessible than a comprehensive ATL advertising campaign.

Neither expert recommendations, medical advice nor the input of dietitians themselves were heeded strongly by the respondents in our sample group. However, even these could be incorporated into the world of online marketing - only "ask a medic" columns should be considered. Then again, further research would be necessary to ascertain whether maintaining such resources would be cost effective in the long run. Having access to the expertise of someone who is willing to occupy such a role, then certainly it could be possible - as these kind of publications and notes can be classified as tools of content marketing.

#### 6. Conclusion

We began our paper with two hypotheses based on the sum of accumulated personal experience, which was then proved. ATL communication devices and traditional advertising methods do not deliver results when it comes to popularising functional foods; this is partly because target groups have become inured to them, and partly because the concept of functional foods has not entered into the realm of public consciousness deeply enough.

BTL communication devices, on the other hand, are far more effective here. Based on a thorough analysis of our research findings, an effective strategy would comprise the triad of Content marketing-Search engine optimisation-Social media because it would even reach the target groups that know what particular product they need but also those who do not yet know the existence or power of functional foods. The deployment of themed social media platforms, well optimised home pages and well penned, informative content together will deliver results in promoting awareness, and thus the sales, of functional foods.

The outcomes of our research could effectively be used by small and medium-sized enterprises dealing with functional food to promote their products. Part of BTL communication tools is more cost efficient than ATL communication but financial problems can still occur in some small-scale enterprises. Another problem is lack of expertise and special knowledge.

Further objectives of the research in the future are the analysis of the components of the target group and the measurability of online tools.

#### References

Balogh, S., Baló, T. (2007). Global and European nutritional trends. *Scientific Journal on Agricultural Economics*, vol. 51, special iss. 20, pp. 50-57. [online]. [cit 2015-11-27] Available: http://ageconsearch.umn.edu/bitstream/204888/2/2007 20 Balogh Balo 50 57.pdf

Bíró, Gy. (2004). New functional food components – Malignant tumours and oxidative degradation. In *Édesipar*, vol.50, iss. 4, pp. 137-146..

Csiszárik-Kocsir, Á., Fodor, M., Varga, E. (2009). *The Motivations of Consumer Preferences and Choosing a Service Provider in the Domestic Market of Institutional Catering*. MEB 2009 7th International Conference 2009. június 5-6, Budapest. Budapesti Műszaki Főiskola, pp. 365-371.

Diplock A.T., Aggett P.J, Ashwell M, Bornet F., Fern E.B., Roberfroid M.B. (1999). Scientific Concepts of Functional Foods in Europe: Consensus Document. British Journal of Nutrition, 81 (Suppl.1), S1-S27.

Gacsi R., Zéman, Z. (2013) Marketing performance management. *International Journal of Business and Management Studies*, vol 5, No 1, pp. 403-413. [online]. [cit 2015-08-23]. Available: http://www.sobiad.org/ejournals/journal\_IJBM/arhieves/2013\_no1/Roland-Gacsi.pdf

Horváth, Á., Lajos, A., Szira, Z., Varga, E. (2005). The Manifestation of Health Consciousness in Food Preference and Consumption Among Young People According to an Empirical Study. *Scientific Journal on Agricultural Economics*, vol. 49, special iss.12, pp. 98-113. [online]. [cit.2015-07-11]. Available:

 $http://ageconsearch.umn.edu/bitstream/54412/2/Horvath\_etal\_2005\_12\%28k\%29\_98\_112.pdf$ 

Jasák, H. (2015). Analyses of Attitudes that Affect the Consumption of Functional Foods. *Journal of Central European Green Innovation*, vol. 3, iss. 3, pp. 95-112.

Katan, M. B. (1999). Functional foods. The Lancet, vol. 354, iss. 9181, p. 794.

Lehota, J., Komáromi, N. (2008). Segmentations and Characteristics of Consumer Behavior of Processed Functional Foods. In Füleki, G., Mézes, M., Csizmadia, B. M., Kiss T. T. et all, (eds) *Bulletin of the Szent István University*, Gödöllő, special iss. part I, pp. 159-167.

Moorman, C., Matulich, E. (1993). A Model of Consumers's PreventiveHealth Behaviors: The Role of Health Motivation and Health Ability. *Journal of Consumer Research*, vol. 20, pp. 208-228.

Verbeke, W. (2005). Consumer acceptance of functional foods: socio-demographic, cognitive and attitudinal determinants. *Food Quality and Preference*, vol. 16, pp. 45-57.

Wansink, B., Westgren, R. E., Cheney, M. M. (2005). Hierarchy of Nutritional Knowledge that Relates to the Consumption of a of a Functional Food. *Nutrition*, vol. 21, iss. 2, pp. 264 – 268

Németh-T., A., Vincze-Tóth, J., Hegyi, J., Troján, Sz. (2013). Potential consumer and customer groups of functional foods - a research study. *Scientific Journal on Agricultural Economics*, vol. 57, iss. 6, pp. 579-587.

WHO (2003). Report on Diet, Nutrition and the Prevention of Chronic Diseasses. Geneva. [online]. [cit.2016-01-11]. Available: http://www.who.int/dietphysicalactivity/publications/trs916/en/gsfao introduction.pdf.

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## 2. THE APPLICATION OF THE STRATEGIC DIMENSIONS OF RECYCLING IN KASHI FACTORY, IRAQ

Abstract: The main purpose of the paper is to examine how can the strategic dimensions of recycling (i.e. the provision of energy, conservation of natural resources, protection of the environment, the economic dimension and the social & educational dimension) be applied in practice, based on the experiences of the waste treatment processes at Kashi factory in Dohuk province, Iraq. The theoretical bases of the research were written by using the relevant literature sources, while the practical part of the research was conducted through field visits and interviews with managers and employees of the factory. Checklists were used in the survey, which were submitted to the managers in order to identify the applicability of the theoretical dimensions. According to the results of the research, these dimensions may be enhanced and their importance should be demonstrated for the top management. The findings of the research can highlight what is the economic, social and environmental importance of these dimensions and what are the most important challenges that may limit their application. The findings of the research were very positive: all the five strategic dimensions of recycling were used in the factory to some extent; the total percentage has reached 70%. The authors propose that by a government support the factory could increase the expansion of the volume of activity and find the special laws and instructions of a waste treatment.

Keywords: environment, recycling, strategic dimensions, sustainability, waste

JEL Classification: M21, Q50, Q53

#### 1. Introduction

Despite the positive impacts of the development of technical devices and applications, huge negative impacts could be detected on human health and the environment and surroundings where they live. The environment tends to the degradation in many countries because of the absence of sustainable development, which causes different kinds of industrial pollution (air, water, and soil). (Al-Nima, 2007). The danger of pollution represents a hazard for human beings as well as the environment and natural objects therefore the best positive interactions should be found between industrial and environmental systems. There are different contemporary concepts including the concept of recycling which represents a wide variety of scientifically verified methods for processing many types of waste, especially industrial waste, which have been discarded by the users after the end of the useful life or after being broken or worn out.

There are many benefits from recycling of waste. Besides the measurable economic benefits (cost reduction) there are environmental benefits deriving from the preservation of the current resources and resulted by the reduction of waste and emissions that are harmful to the health of humans, animals and the environment alike. Therefore, this research aims to identify the extent of the application of the strategic dimensions for recycling and waste treatment in the Kashi factory in Dohuk province, in Iraq, and to submit recommendations to take advantage of them.

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The waste problem is considered one of the big problems facing different organizations and governments worldwide, because environmental pollution (especially industrial waste) may affect human health and other living organizations negatively. The amount of waste has been increased significantly because of the worldwide growth of consumer goods, and this process could be detected in well-developed and underdeveloped countries as well.

In Duhok province of Iraq, approximately 2,000 tons of waste are produced per a day, and unless the government finds suitable solutions for treatment of this waste, it will be a big problem in the future, which will affect environmental sustainability negatively in the province.

The subject of recycling – as it is one of the most important way to protect the environment from the excessive amount of waste – has received considerable attention recently by the government of the Kurdistan region of Iraq as well as by civil society organizations, unions and pressure groups. In this research, we wish to define the most important ways for recycling and to summarize the challenges that the management of an existing factory shall face when applying the strategic dimensions of recycling.

Subsequently, the research aims are the following:

- 1) To identify procedures of the waste treatment in the factory under study.
- 2) To evaluate the possible extent of application of the strategic dimensions for recycling in the factory under examination.
- 3) To assess which strategic dimensions of recycling should have more attention in the examined factory.

In the beginning of the research, two main hypotheses were formulated: (H1) the factory under study applies all the strategic dimensions for recycling and (H2) there is a varying interest in the strategic dimensions for recycling in the examined factory.

#### 2. Concepts of recycling

Recycling means the conversion of products or materials, which has become waste in certain circumstances, into useful materials through physical, chemical or biological processes (Craighill, Powell, 1996). In other words, recycling is the repeated use of products or materials by changing their original use. After they are collected and sorted then processed the products and materials might be used for producing new materials that might be use in different areas with different benefits. Recycling process might be conducted within the organization or outside of it (Higgins, 1998).

Zahir and Ashour (2011), and Morrissey and Browne (2004): refer to that the recycling of waste process depends on the economic viability of these operations and the demand for different products, and the most things that are processed in the operations of recycling waste are the waste of paper, plastic, glass, bone, textiles, metal, and organic materials.

Paper waste is considered the most important waste that is recycled. The manufacturing of the paper waste is considered very important for environmental issues, especially it contributes in reducing the forests trees depletion which are used in the paper industry. Plastic waste has been particularly important because this substances disintegrate slowly into the environment and occupy a lot of space in landfills, also the process of its burning produces harmful gases for human and environment. Glass Waste is sorted according its color, the glass recycle consumes 10% of the amount of energy that required to manufacture of new raw materials. Bone Waste is important to extract many products such as glue, which is used in wood industries, as well as animal charcoal, which is used in the industry of sugar refining. Textiles waste is used to produce carpet or some of the designs and furnishings and it is used to produce cotton at less quality. Metal waste should be differentiated according to their original components. Aluminum plates are considered as the most frequent metal which could be found in the garbage containers. Aluminum can be collected and smelted and then compress it to reduce its size and facilitate shipped, transported and sold it to factories of iron and steel. Organic waste represents leftover food around (50%) of household waste. Dealing with organic waste is different in the cities than in villages, because the population of rural areas may use organic waste as food for birds and animals, but the organic waste in cities have a serious health dimensions (Zahir, Ashour, 2011).

#### 3. The strategic dimensions of recycling

Based on the summarizing works of Pearce and Walter (1977) and Harris et al. (2001) who collected the main pillars and objectives of sustainable development, we have chosen the following five strategic dimensions of recycling as the main pillars of our research.

#### Provision of energy

According to Makower (2009) investing in recycling projects should be considered as investment into energy, because recycling processes may save time, cost and efforts in the provision of required raw materials, which are needed for production processes. However, the recycled materials may serve as a substitute of raw materials of new products that means reducing and saving of energy (Makower, 2009).

#### Conservation of natural resources

It is well known, that many industries are based on natural resources, and it means that this resource will be exposed to depletion in the next time as a result of the expansion of industries and the size of production. Production level sometimes may overflow the actual need of the population. This means that the resources of natural environment will be consumed unless we use recycling processes for resources in order to protect it. Paper industry is a good example for recycling, where the recycled tons of damaged paper can protect 17 trees from cutting and the provision 7,000 gallons of water (US Renewable Energy Association). Another well-known example for conservation of natural resources is using renewable energy sources (Vida, Illés, 2014; Illés et al., 2013).

#### Environmental protection

The value of this dimension lies in the work to minimize the negative effects of hazardous substances if they are left in place or are buried without treatment. Hazardous materials may leak on surface or groundwater and possibly reach the water drinking sites, and this will cause pollution in soil and water and its impact on nature and man. Through adoption of recycling process will can eliminate these risks (Croston, 2009). Therefore, many European countries have developed strategies for the future to process of recycling, and have considered the green methods of managing the whole supply chain (Illés, Vida, 2009; Gábriel, 2014).

#### Economic dimension

The economic dimension of the recycling process is evident in a various aspects as follows:

- The competitive opportunity for productive factories is to get the materials or materials parts at a
  lower price than if they were normal or new materials. This is what makes them able to reduce
  costs and then the final price of the sale, which is reflected positively on the consumer (Al-zaidi,
  Dunay, 2016)
- Products made from recycled materials, even if they lower quality but they can address certain social class of consumers whose economic circumstances may not allow purchasing new and more expensive goods.
- It can be conducted with low cost investment opportunities, it does not need large sums of money and it could be a suitable opportunity to use unskilled labor sources in these factories. Recycling may build working opportunity for unemployed and unskilled people in the collection and compilation of waste materials for the submission to factories for recycling (The Environmental Magazine).

#### Social & educational dimension

Waste collection process largely contributes to the success of the whole recycling process, because it helps to facilitate sorting operations and then recycling. This means that citizens should bear a sense of responsibility to facilitate the work of companies and institutions responsible for the protection of the environment. Citizens' responsibility and their work will bring direct and indirect benefits to the citizen in the future, and this behavior can be circulated on others to follow it. The positive actions will lead to the success of recycling operations, and ultimately they will achieve positive results on the cleaner cities and the more aesthetic landscape. In addition, it will also reflected by the health status of the citizens and it will limit the spread of diseases in a clean environment (Al-bakri, 2011).

#### 4. Methodology

#### 4.1. Methods applied

The practical side of the research has been relied on many methods to collect data which including: personal interviews with the managers of the examined factory and using checklist as a tool to collect data.

The checklist contained five part in accordance with the abovementioned five strategic dimensions; all of them included five statements (paragraphs). The checklists and their data are summarized in the Annexes, at the end of the paper.

For the calculations, we used weighted mean to know the extent of correspondence according to the following formula

$$\bar{X} = \frac{\sum Wf}{\sum f} \tag{1}$$

where W = weight and F = frequency

Then we calculated the percentage extent of correspondence of the actual implementation in the factory under study through the following equation:

Percentage extent of corresponding = 
$$\frac{\text{Weighted Mean}}{2}$$
 (2)

Finally, we calculated the gap of size through the following equation:

Size of the 
$$gap = 1 - percentage$$
 of the extent of corresponding (3)

The checklist was adopted on a triple scale to know how the factory under study applies the strategic dimensions of recycling. The scale is classified from the highest weight to the lowest weight, as illustrated in Table 1, based on the answers to the sample collected by calculating the weighted mean for the level of application of the research sample.

Table 1. Weights of the triple scale in research

f	The extent of the answers application	The mark of scale (weight)
1	Applied	2
2	Applied to some extent	1
3	Not applied	0

Source: Own research

#### 4.2. Place and duration of research

The research was conducted in the waste sorting plant in the city of Kashi, in Dohuk-Kurdistan region of Iraq, between 1<sup>st</sup> September 2015 and 1<sup>st</sup> January 2016.

The research was conducted in waste sorting factory, which contains 300 workers, and this is the oldest factory in Iraq for sorting waste. The factory was established in 2010, with a production capacity to sort waste of 250 tons per day. In 2014, a new production line was implemented and now the production capacity of factory is about 500 tons per day. The factory is supervised by Directorate of the Municipality that belongs to the Ministry of Municipalities and Tourism in Duhok province-Kurdistan of Iraq.

The research sample was represented by the chief manager and all the heads of departments in the factory.

#### 5. Research results - Strategic dimensions of recycling in practice in Kashi Factory

This chapter summarizes the extent of the application of strategic dimensions of recycling in the Kashi Factory after analyzing the results of the checklist. The survey was conducted according to the following steps:

1. Finding the application rate separately for each strategic dimensions, by distribution of the checklists which were prepared to identify the application level of the strategic dimensions. Each dimension contained five questions (see Annexes). The checklists were distributed to the manager and directors of the main sections in the factory, and through the answers, the application rate was calculated.

- 2. Finding the application rate based on statistical methods that have been previously mentioned in the methodology, and as illustrated in Annexes.
- 3. Finding the weighted mean for the five dimensions to find the total application rate about the strategic dimensions for recycling (illustrated in Table 2).

Table 2. The extent of the application of the strategic dimensions of recycling and the percentage of corresponding with instructions and the size of gap in the Kashi Factory

F	The strategic dimensions for recycling	Weighted Mean (Application level)	Correspondence %	Size of gap	Rank
1	Provision of Energy	1.4	70%	30%	Third
2	Conservation of Natural Resources	1.5	75%	25%	Second
3	Environmental protection	1.4	70%	30%	Third
4	Economic dimension	1.6	80%	20%	First
5	Social & educational dimension	1.3	65%	35%	Fourth
Tota	1	1.4	72%	28%	

Source: Own research results

Based on the results of the checklists on the strategic dimensions of recycling we reached the following results.

- 1) *Provision of energy:* The application rate (1.4) means it is applied to some extent, at a percentage of 70%, and the size of gap of this dimension is 30%. The reason of this gap is that they do not sort all waste in the factory, which means that the screening process is limited to some waste. This leads to the loss of many of recyclable materials if it were sorted, it would save energy and costs.
- 2) Conservation of natural resources: The application rate (1.5) means it is applied at a percentage of 75%, and the size of gap of this dimension is 25%. The reason of this gap is that they do not care significantly about the problem of the depletion of natural resources, because they do not have enough aware in conservation of natural resources. They think that these sources are imported from abroad.
- 3) Environmental protection: The application rate (1.4) means that it is applied to some extent, at a percentage of 70%, and the size of gap of this dimension is 30%. The gap is because there are no modern scientific methods to process waste in the landfill stage, therefore, there is some leakage for toxic substances because of the lack of physical and financial possibilities. Therefore, this process as they said needs a lot of money and the state does not provide them.
- 4) *Economic dimension*: The application rate (1.6) means that it is applied at a percentage of 80%, and the size of the gap of this dimension is 20%. The reason of this gap is that the costs of the factory exceed the returns. The other reason is that the waste that come to the factory does not come through suppliers who benefit financially, but come through the municipalities of the state.
- 5) Social & educational dimension: The application rate (1.3) means that it is applied to some extent, at a percentage of 65%, and the size of gap of this dimension is 35%. The gap is because of that the factory does not have the necessary capacity to contain all waste in the province, and they have not done awareness campaigns and guidance to citizens to encourage them to put the waste and sort it according to its types to support and enhance concept of recycling.
- 6) Level of total application of the strategic dimensions for recycling: the application rate is 1.4, which means it is applied to some extent, at a total percentage of 72%, and the total size of gap of this dimension is 28%. This could be considered as a good ratio and it is encouraging and unexpected from this factory that has limited possibilities and was established only few years ago.

#### 6. Conclusions and recommendations

The level of total application of the strategic dimensions of recycling has reached a relatively good ratio in the examined factory and it should be considered as an encouraging result. Nevertheless, because of the existence of some problems (mainly financial problems) the factory's largest capacities might reduce keeping the importance of these dimensions. On the other hand, the factory is facing a problem of underdeveloped mechanization, i.e. there are not any mechanisms in use to separate waste properly in a selective way. The management of the company should solve these problems, but under the present economic conditions, it could not be realized without governmental support.

Our research should be regarded as a pilot project or a case study, and general conclusions could not be drawn. However, the present research may be considered as a first step of a comprehensive evaluation process on recycling strategies of industrial companies. Our findings and method may be used as a good practice for the evaluation of the role of recycling in different industrial companies.

An additional problem is that the awareness level of the concept of recycling in Kurdistan region of Iraq is lower than in other countries. The lack of laws and clear instructions for the collection and treatment of waste that is brought to the factory may induce other threats. As there are many other factories and companies in the region, where the factory management does not know how to deal with their own waste, therefore we propose that the government should issue special regulations and instructions about the collection and treatment of waste and about the expansion of the factory capacity of recycling.

Another important issue – although it is a long-term process – is to improve the awareness of citizens to follow the instructions of littering and the management of household waste and about the importance of recycling. This educational process should be started in public schools.

#### References

Al-Bakri, T. (2011). The strategic dimensions for recycling in enhancing of green marketing philosophy. *Tikrit Journal of Management Science*, vol. 7, no. 23.

Al-Nima, A. T. (2007). The effect of strategic information system in the requirements of green manufacturing. (in Arabic language) Doctoral Thesis, University of Mosul. p. 179.

Al-zaidi, W.A.H., Dunay, A. (2016). The role of re-use in reducing industrial costs. A case study in the general company for electrical industries, in Diyala, Iraq. *Hungarian Agricultural Engineering*. vol. 29, pp. 36-39.

Craighill, A.L., Powell, J.C. (1996). Lifecycle assessment and economic evaluation of recycling: a case study. *Resources*. *Conservation and Recycling*, vol. 17, iss. 2, pp. 75-96.

Croston, G. (2009), Starting Green, Irvine: Entrepreneur Press, 2009.

Gábriel, M. (2014), Motivations and barriers of Green Supply Chain Management: A literature review. In Illés, Dunay, Slocinska (eds.) *New Trends in Management in the 21st Century*. Czestochowa: Czestochowa University of Technology, pp. 61-72.

Harris, J.; Wise, T.; Gallagher, K.; Goodwin, N.R. (eds.) (2001). A Survey of Sustainable Development. Social and Economic Dimensions. Washington D.C.: Island Press, 2001.

Higgins, J. M., Vincze J. W. (1989). Strategic Management: Text and Cases, Philadelphia: Saunders College Pub., 1989.

Illés B. Cs., Vida A. (2009). *Small scale ethanol production – micro and macro economic efficiency study* In: H H Guither, J L. Merry, C E. Merry (eds.) *Proceedings of the 17th International Farm Management Congress*. Bloomington: International Farm Management Association, pp. 621-633.

Illés B.Cs., Dunay, A., Vida, A. (2013). Position of Hungary on EU's Map of Renewable Energy Sources. In V. Dermol, N.Trunk Sirca, G. Dakovic (eds.) MakeLearn International Conference Proceedings: Active Citizenship by Knowledge Management & Innovation. Bangkok; Celje; Lublin: ToKnowPress, pp. 1397-1405.

Makower, J. (2009). Strategies for the Green Economy: Opportunities and Challenges in the New World of Business, New York: McGraw-Hill, 2009.

Morrissey, A.J., Browne, J. (2004). Waste management models and their application to sustainable waste management. *Waste Management*, vol. 24, iss. 3, pp. 297-308.

Pearce, D.W., Walter, I. (eds.) (1977). Resource Conservation: Social and Economic Dimensions of Recycling. New York: New York University Press, 1977.

The Environmental Magazine. [online]. [cit. 2016-03-15]. Available at: http://www.emagazine.com/earth-talk/benefits-of-sorting-recyclables.

US Renewable Energy Association. [online]. [cit. 2016-03-15]. Available at: http://www.usrea.org/recycling-2/.

Vida, A., Illés, B.Cs. (2014). Microeconomic approach of biomass use optimization in Hungary. In Dunay A (ed.) *Challenges for the Agricultural Sector in Central and Eastern Europe*. Budapest: Agroinform Kiadó, pp. 185-198.

Abdul Zahir Nada Ashour, M. (2011). Solid waste, the environment and the economy. (in Arabic language) *Assiut Journal of Environmental Studies*, no 35, pp. 16-28.

#### **Annexes**

#### A 1. Checklist of dimension 'Provision of energy'

	Development of instructions relating to account and health	Level of application		
F	Paragraphs of instructions relating to occupational health and safety	Applied	Applied to some extent	Not Applied
1	Our factory provide recyclable materials to save energy	4	2	2
2	There are more than one substance is sorted in our factory it is used in recycling in order to save energy	5	1	2
3	We provide effort and time for some plants for the production of raw materials by providing them with recyclable materials	5	2	1
4	Recycling plants provide a lot of energy by recycling materials	5	2	1
5	We seek to reduce the size of the pollution of the environment through the heating of the metal smelting and manufacturing operations completion operations	4	2	2
Weig	thts	2	1	0
Frequ	uencies rate (responses)	24	9	7
The 1	result	48	9	0
Appl	ication rate	1,4		
Perce	entage of corresponding with the instructions	70%		
The	size of the gap	30%		

Resource: Own research based on the data of the company

#### A 2. Checklist of dimension 'Conservation of natural resources'

	Paragraphs of instructions relating to occupational health	Level of application		
F	and safety	Applied	Applied to some extent	Not Applied
1	The priorities of our lab work to conserve natural resources	6	1	0
2	Trying in earnest to make the most of the recyclable waste to conserve resources from depletion	4	1	3
3	We provide producers with more than one raw material to conserve resources	6	2	0
4	We are aware of the investment cost in the generation of recycled raw materials to conserve resources	4	2	5
5	Recycled raw materials have kept the depletion of resources in the region, to our knowledge	4	4	0
Weig	hts	2	1	0
Frequ	nencies rate (responses)	25	10	5
The 1	result	50	10	0
Appl	ication rate	1,5		
Perce	entage of corresponding with the instructions	75%		
The s	size of the gap	25%		

Resource: Own research based on the data of the company

#### A 3. Checklist of dimension 'Protection of the environment'

	Paragraphs of instructions relating to occupational health	Level of application		
H -	and safety	Applied	Applied to some extent	Not Applied
1	Our factory has a big role to preserve the environment	6	1	1
2	Our factory reduced a lot of negative effects of the materials on the environment	4	3	1
3	We process more than a dangerous substance to preserve the environment	5	3	0
4	We process non-recyclable waste in a healthy way and a proper	5	2	1
5	There is no leak of hazardous materials in our factory as a result of treatment	1	5	2

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Weights	2	1	0
Frequencies rate (responses)	21	14	5
The result	42	14	0
Application rate	1,4		
Percentage of corresponding with the instructions	70%		
The size of the gap	30%		

Resource: Own research based on the data of the company

#### A 4. Checklist of dimension 'Economic dimension'

	Douggeouple of instructions volcting to account is not bealth	Level of application		
F	Paragraphs of instructions relating to occupational health and safety	Applied	Applied to some extent	Not Applied
1	There is an economic returns for our factory from the sale of recyclable materials	6	2	0
2	There are more than material to achieve an economic returns to factory	6	1	1
3	We offer recyclable materials at a low price for producers	3	4	1
4	We run many of the manpower in the region	6	2	0
5	Some parties benefited economically from our lab as a result of providing us with waste	5	3	0
Weig	thts	2	1	0
Frequ	uencies rate (responses)	26	12	2
The 1	result	52	12	0
Appl	ication rate	1,6		
Perce	entage of corresponding with the instructions	80%		
The s	size of the gap	20%		

Resource: Own research based on the data of the company

#### A 5. Checklist of dimension 'Social & educational dimension'

	Demonstrate of instructions relating to account and booking	Level of ap	plication	
F	Paragraphs of instructions relating to occupational health and safety	Applied	Applied to some extent	Not Applied
1	Our factory work through its practices to enhance social responsibility	3	4	1
2	Our factory have been doing Dohuk governorate the most beautiful and cleanest	7	1	0
3	Our factory has a role in reducing the spread of diseases due to waste in the province	5	3	1
4	We have been working awareness campaigns for the collection of waste in special containers especially recyclable materials	3	2	4
5	We encourage schools, universities and civil society organizations in enhancing the concept of recycling in the educational dimension.	3	2	1
Weig	thts	2	1	0
Frequ	uencies rate (responses)	21	12	7
The 1	result	42	12	0
Appl	ication rate	1,3		
Perce	entage of corresponding with the instructions	65%		
The s	size of the gap	35%		

Resource: Own research based on the data of the company

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## 3. EFFECTS OF INTELLECTUAL CAPITAL COMPONENTS ON CORPORATE ENTREPRENEURSHIP

**Abstract:** Nowadays, the increase in rivalry and enhancement of the qualities of products have encountered organizations with severe challenges. Corporate entrepreneurship is one of the most significant factors affecting the success and growth of organizations. Intellectual capital, on the other hand, has been considered as one of the key elements for corporate entrepreneurship. Therefore, this study was conducted to answer the following research question: how intellectual capital components affect corporate entrepreneurship. In other words, the main aim of this study is to investigate the impact of intellectual capital components (which are employees' competence, innovation capital, process capital, internal structure, social capital and external structure) on the corporate entrepreneurship. In terms of purpose, this study have been classified as applied research, while, in terms of data collection and data analysis, it is a descriptive-correlation research. A questionnaire was administered to collect data; and multiple regression analysis using SPSS 19.0 utilized for data analysis and hypotheses testing. The results show that intellectual capital components have a positive significant effect on the corporate entrepreneurship. It was also clarified that 31% (R<sup>2</sup>=0.31) of the dependent variable's (corporate entrepreneurship) changes can be explained by the independent variables (intellectual capital components).

Keywords: corporate entrepreneurship, human capital, intellectual capital, relational capital, and structural capital

JEL Classification: D20, M10, M20

#### 1. Introduction

Intelligence properties, especially human resources, have been counted of the most important properties of an organization, as the success of an organization is directly related to the ability of managing these intangible assets (Sukarmijan, Sapong, 2014). Since achieving the organizational goals is depended on the performance of employees, the trend is to evaluate the organization performance based on intellectual capital rather financial efficiency and profitability (Cabrita, Bontis, 2008). On the other hand, most of today's organization's assets are intangible (Sullivan, 2000); therefore, success of an organization is extremely based on the knowledge strategic management and there is a less emphasis on physical and financial resources. Despite of substantial growth of tangible and financial assets importance, it is hard to find organizations are just relying on their financial assets due to factors such as the grows of science and technology, changes in global economic, the emergence of new organizations, and the intense competition between organizations which have led the nature of works toward self-employment and self-entrepreneurship (Chen, 2008); as entrepreneurship and entrepreneurs have a key role in the economic development of communities specially in the change in social values to the accelerated economic growth (Hurta, Dunay, 2013).

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Hence, the perception of organizational entrepreneurship is a crucial necessity for both organization to perform effectively employees to feel satisfaction; as it plays an important role in formation of the vision and behavior of employees. Thus, this research aims to study the effect of intellectual capital on organizational entrepreneurship as the complicated structures to be able increase the ability of employees.

#### 2. Literature review

#### 2.1. Intellectual capital

Intangible assets have been counting as the source of value creation (Garcia-Meca et al., 2005). Although, for the first time in scientific studies, the term intellectual capital used in 1969 by an economist called John Kenneth Galbrith to explain the gap between book value and market value of institutions (Ren, 2009; Chen et al., 2004), its wide interest raised in 1990s. Intellectual capital generally includes the gap between book value and market value of the assets of an organization (Lopez-Saez, Navas-Lopez, 2011). Intellectual capital consists of knowledge, ability, skill, work instruction, experience and creativity leading to competitive advantage for organization (Xiaohong, Sijing, 2010). In addition, knowledge creates value for organization and this value can create development capacities and competitive advantage (Herremans et al., 2011). Due to the extension of intellectual capital concept, the researchers in this field agree on three dimensions of intellectual capital as human capital, structural capital and relational capital. Then, we deal with the previous studies regarding these three dimensions:

*Human capital* includes knowledge, skills and abilities of employees and this knowledge and skills increase productivity of people in organization (Harris, 2010). This dimension of intellectual capital consists of two dimensions of employees' competence and innovation capital.

Structural capital consists the knowledge that is remained even when the employees leave the organization (Kianto et al., 2010). This dimension of intellectual capital includes software, hardware systems, organization culture, services system, intellectual property, laboratory, industrial structure, etc. (Tongshui, Jianfang, 2010). This dimension of intellectual capital is divided into two dimensions of internal structure and process capital.

Relational capital contains organization relations with co-workers, customers, partners, suppliers, investors and society (Shih et al., 2011; Lopez, Cuartas, 2010). Relational capital is the sum of relations between company and key beneficiaries as customers, suppliers and partners (Chang, Chen, 2012). This dimension of intelelctual capital conssits of two dimensiosn of social capital tand external structure.

#### 2.2. Corporate entrepreneurship

Crockett (2005) considers entrepreneurship as dynamic process of changing innovative attitude. Accumulation of tacit knowledge and entrepreneurship culture of necessary resources can create wealth through commercialization of studies and can lead to technological innovations and companies with new technologies (Kargwell, Inguva, 2012). An enterpreneur performs his tasks by showing strong leadership in business strategy and motivation in employees via creative thinking (Fillis, Rentschler, 2010). Those participating in enterpreneurship activities need innovation and creativity and the change of production, identification processes of new markets, etc (Bann, 2009). Wagner (2007) in the study showed that at the beginning of enterpreneurial activities, risk taking played important role (Wagner, 2007). Postigo (2002) in their studies found that creativity and innovation were interacting with enterpreneurship as entrepreneurship was not important without creativity and innovation (Postigo, 2002). Turan and Kara (2007) in their study regarding this feature found that creativity and innovation were moderated by difference in civilization and cutture and indivudal based-autonomy cultures emphasized on this feature. Regarding autonomy feature and its nature in formation of entrepreneurs' activities, Mitchell (2004) performed some studies on students and the results of study showed that there was a direct relationship between this feature and ability of entrepreneurs.

Generally, most of researchers consider entrepreneurship based on two major types. Individual entrepreneurship in which the entrepreneur performs entrepreneurship separately and corporate entrepreneurship in which the entrepreneur starts entrepreneurship in the pre-established organizations, as it is based on the process starting with opportunity recognition and ends with the

operation (Handfield et al., 2009). According to the model presented by Entrepreneurship Development Institute of India (EDI), entrepreneurs have five features: achievement, autonomy, risk taking, creativity and will (Zali et al., 2007). John Burch (1986) considered the features of entrepreneurs as the need to achieve, pressure to cope up with the problems, work quality, development of quality, accepting responsibility, reward, optimism, excellence and profit. As it was said, the most important features of entrepreneurs are as follows:

Achievement Motivation: This feature indicates one's tendency to achieve goal based on a set of best criteria (Landstrom, 2005).

*Risk Taken:* One of the features of entrepreneurs is high ambiguity and risk toleration as accepting uncertainty as a part of life (Deakins, Freel, 2002).

*Internal control locus:* Entrepreneurs believe that they guide their destiny and their success or failure is the result of their actions than destiny or chance.

*Tendency to autonomy:* Entrepreneurs are independent people, in need to autonomy and avoid being controlled by other people.

*Creativity:* Creativity is a combination of flexibility, innovation and sensitivity regarding the ideas enabling a person to change normal thinking method to different method and create satisfactory results for themselves or others (Brennan, Dooley, 2005).

*Self-confidence:* Entrepreneurs have high self-confidence and accept their strategies and they believe they can do.

*High motivation:* Psychologists consider motivation as all the factors motivating live creatures as human being and direct to the activities. Motivation is the first constituting element of behavior.

*Opportunistic features:* Being opportunistic is another feature of entrepreneurs; an entrepreneur identifies opportunities not expressed by others.

#### 3. Conceptual model and study hypotheses

In the body of science, research, mostly, has investigated the impact of intellectual capital on organizational performance (Kin Hang Chan, 2009) and the relationship between intellectual capital and new product performance (Shu-Hua Chie, Min-Chih Chao, 2010; Ya-Hui Hsu et al., 2009). Whilst, there is a great gap in the literature in the common topics of intellectual capital and entrepreneurship. Hence, this study aims to study the effect of intellectual capital dimensions (employees' competence, innovation capital, process capital, internal structure, social capital and external structure) on corporate entrepreneurship. The secondary objectives of this study are as follow:

- 1. To investigate the employees' competence effect on corporate entrepreneurship.
- 2. To investigate the innovation capital effect on corporate entrepreneurship.
- 3. To investigate the internal structure effect on corporate entrepreneurship.
- 4. To investigate the process capital effect on corporate entrepreneurship.
- 5. To investigate the social capital effect on corporate entrepreneurship.
- 6. To investigate the external structure effect on corporate entrepreneurship.

As the conceptual model of study proposed as shown in Figure 1. This figure shows conceptual model of study. Corporate entrepreneurship is considered as a latent variable. This variable is evaluated by observer variables, the need to achievement and success, high risk and ambiguity toleration, internal locus of control, tendency to autonomy, creativity, self-confidence, high motivation and opportunistic. Based on the conceptual model of study in Figure 1, the study hypotheses are:

- 1. The employees' competence has positive and significant effect on corporate entrepreneurship.
- 2. The innovation capital has positive and significant effect on corporate entrepreneurship.
- 3. The internal structure has positive and significant effect on corporate entrepreneurship.
- 4. The process capital has positive and significant effect on corporate entrepreneurship.
- 5. The social capital has positive and significant effect on corporate entrepreneurship.
- 6. The external structure has positive and significant effect on corporate entrepreneurship.

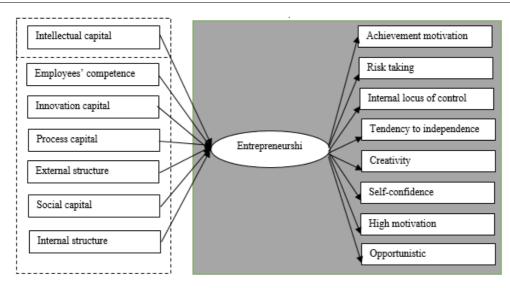


Figure 1. Conceptual model of study

Source: Own work

#### 4. Methodology

The present study is survey-analytic in terms of method. On the other hand, the study is applied as the expected results can be applied to improve the performance of organizations. The study population are the departments of literature and human sciences', basic sciences', technical and engineering's faculty members at Persian Gulf University and Islamic Azad University of Bushehr, Iran. Totally, 170 questionnaires are distributed randomly and 155 questionnaires are used for analysis. To measure intellectual capital, a questionnaire designed by the authors of the current study based on the literature. Regarding the items of corporate entrepreneurship variable, some of the items are extracted by review of literature and some of them are provided by authors. To evaluate reliability of questionnaires, Cronbach's alpha is used. The validity of questionnaires is performed based on experts' opinion and the required changes are made. The following Table 1 shows the reliability of study variables. Cronbach's alpha for all study variables is higher than 60%, thus the designed questionnaires have reliability.

Table 1. Reliability of study variables

Latent variable	Observer variable	Cronbach's alpha	Number of questions
	The need to achievement and progress		
	High risk toleration and ambiguity		
	Internal locus of control		
Corporate	Autonomy	0.68	30
entrepreneurship	Creativity	0.08	
	Self-confidence		
	High motivation		
	Opportunistic		
	Employees competence		
	Innovation capital		
Intellectual conital	Social capital	0.07	24
Intellectual capital	Process capital	0.87	34
	External structure		
	Internal structure		

Source: Own work

#### 5. Data analysis of study

In this study, 155 questionnaires were evaluated. As shown in Table 2, among the respondents, 28.1% are women, 71.9% men. In terms of education, the highest respondents to questionnaires are at PhD level with 33.8%. The collected data in work experience show that people with experience 5-10 years with 41.3% are the highest respondents to questionnaires.

Table 2. Demographic features of respondents

Variable	Dimension	F%	F
Gender	Woman	28.1	45
Gender	Man	71.9	115
	Diploma	3.8	6
	Associate	8.8	14
Education	BA	32.5	52
	MA	21.3	34
	PhD	33.8	54
	Less than 5 years	31.9	51
Work experience	5-10 years	41.3	66
	Above 10 years	26.9	43

Source: Own work

Table 3 shows the condition of observer variables of corporate entrepreneurship. The data show that average corporate entrepreneurship is 3.8148. Among observer variables of corporate entrepreneurship, internal locus of control has the highest value and self-confidence has the lowest value.

Table 3. The condition of sub-variables of corporate entrepreneurship in the studied universities

Dimensions	SD	Mean	Max	Min	N
Corporate entrepreneurship	0.31805	3.8148	4.50	2.83	155
The need to achievement and progress	0.4898	4.0871	5.00	2.75	155
High risk toleration and ambiguity	0.6024	3.8435	5.00	2.50	155
Internal locus of control	0.4931	4.1000	5.00	2.00	155
Autonomy	0.5155	3.9984	5.00	2.75	155
Creativity	0.5352	3.7435	4.75	2.25	155
Self-confidence	0.6530	3.3726	5.00	1.75	155
High motivation	0.6155	3.6468	5.00	1.00	155
Opportunistic	0.7308	3.6387	5.00	2.00	155

Source: Own work

Intellectual capital is another variable in this study. Table 4 shows the mean variables for the dimensions of this variable in studied universities. The mean of this variable is 3.5367. Among observer variables, intellectual capital, employee's competence has the highest value and internal structure has the lowest value.

Table 4. The condition of sub-variables of intellectual capital

Dimensions	SD	Mean	Max	Min	N
Intellectual capital	0.2927	3.5367	4.50	2.74	155
Employees competence	0.5239	3.9240	5.00	2.88	155
Innovation capital	0.3770	3.6794	4.90	2.80	155
Social capital	0.4676	3.4500	4.50	1.75	155
Process capital	0.6925	3.1855	5.00	1.00	155
External structure	0.7235	3.2375	4.60	1.20	155
Internal structure	0.6648	3.1118	5.00	1.00	155

Source: Own work

#### 6. The test of conceptual model and study hypotheses

To evaluate the impact of intellectual capital dimensions on corporate entrepreneurship, linear regression method was used, while to evaluate study hypotheses, Beta coefficient significance test was used. To judge about this test, at first calculated t-value and relevant level are considered to support H0 and H1. The findings of linear regression by SPSS 19 are presented as:

- H0: Intellectual capital dimensions have not positive and significant impact on corporate entrepreneurship.
- H1: Intellectual capital dimensions have positive and significant impact on corporate entrepreneurship.

Regarding regression analysis, we can say the results of regression are significant if the fitted regression model is significant. ANOVA analysis shows this significance. Table 5 shows calculated F and significance of test based on degree of freedom. Based on F statistics (0.000), we can support significance of regression model.

Table 5. ANOVA analysis for testing model

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	2256.730	4	564.183	5850.296	0.000
Residual	14.562	151	0.096		
Total	2271.292	155			

Predictors: Innovation capital, social capital, process capital and internal structure

Dependent Variables: Corporate entrepreneurship

Source: Own work

Durbin-Watson statistics is also tested and it is equal to 1.6. Meanwhile, Multi-variate regression method by Backward is used for hypotheses test.

Table 6 shows that results of significance test of Beta coefficient for study hypotheses, the impact of intellectual capital dimensions on corporate entrepreneurship.

Table 6. The multi-variate regression results (final model)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		В	Std. Error	Beta		
2	Innovation capital	0.440	0.038	0.425	11.684	0.000
	Social capital	0.405	0.048	0.368	8.489	0.000
	Process capital	0.138	0.048	0.118	2.909	0.004
	Internal structure	0.111	0.049	0.092	2.257	0.025

Source: Own work

According to the t-values and significance level sig=0.000 with 95% confidence interval, we can support the impact of four dimensions of intellectual capital dimensions, innovation capital, social capital, process capital and internal structure on corporate entrepreneurship.

Table 7 shows coefficient of determination (R<sup>2</sup>) for linear regression test to identify the effects of independent variables (intellectual capital dimensions) on dependent variable (corporate entrepreneurship). Based on the data of Table, 31% of dependent variable changes (corporate entrepreneurship) are explained via independent variables and the rest depends upon other factors not seen in this study.

Table 7. Coefficient of determination of estimation

Model	R	R Square	Std. Error of the Estimate
1	0.558	0.311	0.26921

Source: Own work

#### 7. Conclusions and recommendations

In knowledge-based economy, intellectual capital is a source for value creation as management of this rare source leads to the organization success. Besides, one of the main strategies for creating sustainable competitive advantage is corporate entrepreneurship. Thus, study conducted to evaluate the impact of intellectual capital dimensions on corporate entrepreneurship. Our findings show that four dimensions of intellectual capital (innovation capital, process, internal structure and social capital) have a positive and significant impact on corporate entrepreneurship. The results showed that employees' competence does not have significant impact on corporate entrepreneurship but human capital (innovation capital) affects corporate entrepreneurship. Therefore, this research, regarding human capital dimension, proposes that if employees do not have entrepreneurial attitude, the managers should change their attitudes via training, the employees can have competence and skills as high analysis ability, creative thinking, ability of seeing the opportunities in problems, futuristic views, judgment based on limited information, innovative use of knowledge, having various ideas and strong tendency to success.

The result of evaluating of third and fourth hypotheses of this study illustrates that structural capital (process capital and internal structure) affects corporate entrepreneurship. Hence, it has been suggesting that the managers should provide a flexible structure and a supportive culture focusing on increasing attitude, goal setting, planning, creativity, innovation, collaboration, freedom and responsibility and is also based on network and teamwork approach.

The evaluation of fifth and sixth hypotheses of study show that external structure does not have significant impact on corporate entrepreneurship but social capital had positive and significant impact on corporate entrepreneurship. Thus, it is recommended that if the organization identifies new needs of customers and beneficiaries to achieve their loyalty, this forms entrepreneurial activities in organization and opportunities can be provided to achieve competitive advantage.

Since this is an applied research, its results can be utilized toward improving the organizational performance. The recommendations of this study, which are based on the confirmation of the effect of intellectual capital components on corporate entrepreneurship, provide the managers guidelines for improving the corporate entrepreneurship which leads finally to competitive advantages. In other word, the recommendations are considered as the applications of this study. Nonetheless, since the university faculty members were the population of this study, generalization of the finding to all organizations with different structures is hard and it is the limitation of this study. Hence, it is recommended that the researcher do this research in other organizations and compare the results with the result of the current study.

#### References

Bann, C. (2009). An innovative view of the entrepreneur through exploration of the "Lived Experience" of the entrepreneur in startup of the business. *Journal of Business & Economic Studies*, vol. 15(2), pp. 62-82.

Brennan, A., Dooley, L. (2005). Network creativity: A structured management framework for stimulating innovation. *Technovation*, vol. 25(12), pp. 1388-1399.

Burch, John G. (1986). Profiling the entrepreneur. Business Horizons, vol. 29, iss. 5, pp. 13-16.

Cabrita, M., Bontis, N. (2008). Intellectual capital and business performance in the portuguese banking industry. *International Journal of Technology management*, vol. 43(1), pp. 212-237.

Chang, C.-H., Chen, Y.-S. (2012). The determinants of green intellectual capital. *Management Decision*, vol. 50(1), pp. 74-94.

Chen, Y., Zhu, Z., Xie, H. (2004). Measuring intellectual capital: A new model and empirical study. *Journal of Intellectual Capital*, vol. 5(1), pp. 195-212.

Chen, Y. S. (2008). The positive effect of green Intellectual capital on competitive advantages of firms. *Journal of Business Ethics*, vol. 77(3), pp. 271-286.

Crockett, D.R. (2004). The venture management team in corporate entrepreneurship: The role of corporate support and control. *Doctoral Disertation*, The University of Texas at Arlington.

Deakins, D., Freel, M. (2002). Entrepreneurship and small firms. 3d edition, London: McGraw-Hill, 2002.

Fillis, I., Rentschler, R. (2010). The role of creativity in entreprenership. *Journal of Enterprising Culture*, vol. 18(1), pp. 49-81.

Garcia-Meca, E., Parra, I., Larran, M., Martinez, I. (2005). The explanatory factors of intellectual capital disclosure to financial analysts. *European Accounting Review*, vol. 14(1), pp. 63-94.

Handfield, R., Petersen, K., Cousins, P., Lawson, B. (2009). An organizational entrepreneurship model of supply management integration and performance outcomes. *International Journal of Operations & Production Management*, vol. 29(2), pp. 100-126.

Harris, L. (2000). A theory of intellectual capital. Advances in Developing Human Resources, vol. 2(1), pp. 22-37.

Herremans, M., Isaac, G., Kline, J.B., Nazari, A. (2011). Intellectual capital and uncertainly of knowledge: control by design of the management system. *Journal of Business Ethics*, vol. 98(4), pp. 627-640.

Hurta, H., Dunay, A. (2013). Trust as a Social Capital in Hungarian Small and Medium-Sized Enterprises. In Illés, Cs. B., Bylok, F. (Eds.) *People, knowledge and modern technologies in the management of contemporary organizations - theoretical and practical approaches*, Gödöllő: Szent István Publishing House, pp. 56-67.

Kargwell, S., Inguva, S. (2012). Factors influencing the first generation entrepreneurs: An Analytical Study on the graduates of UAE Universities. *International Journal of Business and Social Science*, vol. 3(7), pp. 143-149.

Kianto, A., Hurmelinna-Laukkanen, P., Ritala, P. (2010). Intellectual capital in service- and product-oriented companies. *Journal of Intellectual Capital*, vol. 11(3), pp. 305 - 325.

Landstrom, H. (2007). Pioneers in entrepreneurship and small business research (vol. 8). Boston: Springer Science & Business Media, 2007.

López, G., Cuartas, D., Munoz, J. E., Hoyos, S. (2010). Intellectual capital: An approach to its systemic model. In 2010 2nd International Congress on Engineering Education (ICEED), Malaysia: Faculty of Electrical Engineering, Universiti Teknologi MARA, pp. 245-248.

Lopez-Saez, P., Navas-Lopez, A. (2011). Towards an -based view of the firms: Origins and nature. *Journal of Business Ethics*, vol. 98(4), pp. 649-662.

Mitchell, B. (2004). Ivision of management, School of economics and management university of natal, Durban, South African. *Journal of Entrepreneurship*, vol. 13(2), pp. 167-183.

Postigo, S. (2002). Entrepreneurship education in Argentina: The case of San Anders University. Proceedings Of The Conference Entitled The Internationalizing In Entrepreneurship Education And Training.

Ren, J. Y. (2009). The empirical study on the relationship between corporate intellectual capital and corporate performance. In *Industrial Engineering and Engineering Management*, 16th International Conference on Industrial Engineering and Engineering Management (IE&EM 2009), pp. 2054-2058.

Shih, K.-H., Lin, C.-W., Lin, B. (2011). Assessing the quality gap of intellectual capital in banks. *Total Quality Management*, vol. 22(3), pp. 289-303.

Sukarmijan, S. S., Sapong, O. D. V. (2014). The importance of intellectual property for SMEs; Challenges and moving forward. *UMK Procedia*, vol. 1, pp. 74-81.

Sullivan, J. (2000). Valuing intangible companies: An intellectual capital approach. *Journal of Intellectual Capital*, vol. 1(4), pp. 328-340.

Tongshui, X., Jianfang, N. (2010, November). A study on the measurement of regional intellectual capital. In 2010 International Conference on E-Product E-Service and E-Entertainment (ICEEE), Henan, China: IEEE, pp. 1-4.

Turan, M., & Kara, A. (2007). An exploratory study of characteristics and attributes of Turkish entrepreneurs: A cross-country comparison to Irish entrepreneurs. *Journal of International Entrepreneurship*, vol. 5(1-2), pp. 25-46.

Wagner, J. (2007). What a difference a Y makes female and Male nasent entrepreneurs in Germany. *Journal Small Business Economics*, vol. 19, pp. 32-44.

Xiaohong, Z., Sijing, L. (2010). The research on intellectual capital sharing of organization. International Conference on Information Management, Innovation Management and Industrial Engineering, vol. 4, pp. 608-611.

Zali, M., Madhushi, M., Kordnaij, E. (2007). Assessment of entrepreneurial characteristics of students (Case study: Mazandaran University). *Journal of Humanities Teacher*, vol. 11(3), pp. 81-113.

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## 4. METHODICAL PRINCIPLES OF THE SYNERGETIC EFFECT IN THE IMPLEMENTATION OF INNOVATION PUBLIC-PRIVATE PARTNERSHIP PROJECTS

**Abstract:** Public-private partnership (PPP) serves as a subject of research in the implementation of innovation projects. PPP is a form of interaction between public and private sectors on mutually advantageous conditions in order to meet social needs through resource sharing. Being the most advanced field innovation activity increases competitiveness of the country and its regions. It is evident that the synergetic effect appears due to interaction of public and private partners in the implementation of PPP innovation projects. However, the effect is difficult to define methodically. Therefore, the aim of this paper is to work out theoretical and methodical principles of the synergetic effect in the implementation of PPP innovation projects. In order to achieve the aim the authors analyze both general and specific reasons for successful interaction of public and private partners. The synergetic effect of PPP consists of the scientific and technological effect, the production effect, the economic effect, the internationalization effect, the budget effect. All the components of the synergetic effect are given in a formalized form and expressed as the amount of its effects.

Key words: innovation projects, public-private partnership, synergetic effect

**JEL Classification: M14** 

#### 1. Introduction

There is no doubt that a highly innovative activity significantly raises the country's competitiveness. Recently, Russia's position in global competitiveness has increased. It is evident from the countries ranking on the Global Competitiveness Index (Global Competitiveness Index, GCI) of the World Economic Forum. In the ranking of 2013-2014 Russia ranked at 64th position among 143 countries while in the ranking of 2014-2015 it rose to 53rd position and according to a group of indicators, reflecting the condition of innovation activity - from 99th to 75th position (Sukhov, 2015, p. 11). It shows that in increasing competitiveness innovation factors in Russia have not become crucial yet. But according to the Global Innovation Index (The Global Index) of the International Business School INSEAD, Russia moved up from 62nd position in 2013 to 49th position in 2014 (Sukhov, 2015, pp. 18-20). However, despite this positive trend, the individual indicators, and especially a group of "institutions" have changed slightly. Even deteriorating took place: from 87th position in 2013, Russia fell to 88th position in 2014. All this shows undeveloped innovation activities, such as social and political institutions (Sukhov, 2015, pp. 24-26) i.e. institutionalization. Under institutionalization we understand "a process of establishing, developing any new public institutions as stable forms of organization of people in the society and a process of determining and strengthening social norms, rules, statuses and roles, bringing them into a system that is able to meet a social need" (Porshnev et al., 2001, p. 196). In our opinion, Russia innovation institutionalization level is not high enough. We prove our statement by choosing public-private partnership as a subject of our research.

Public-private partnership (PPP) is a form of interaction between the public and private sectors on mutually advantageous conditions in order to meet social needs through resource sharing; a method of obtaining a synergetic effect by combining resources of different authors and activating resources of both

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public and corporate management; a strategic tool to improve social responsibility of business. Despite the fact that RF Federal Law № 224-FZ dated 1 July 2015 "On Public-Private Partnership, Municipal-Private Partnership in the Russian Federation of Certain Legislative Acts of the Russian Federation" was adopted, 7th article of the law about PPP agreement does not include objects of innovation (Federal Law, 2015).

The distinctive features of PPP are the following:

- a long-term partnership agreements;
- projects funding owing to public and private investments;
- partnership interaction in a competitive environment;
- partners responsibility: the state defines projects goals, cost and quality as well as monitoring and the private partner in turn carries out business activities on different stages of the project;
- risks allocation between the agreement members.

The private sector, taking part in PPP projects, cannot fulfill social functions due to different conditions. PPP allows realizing the advantages of the public (proprietary rights, availability of regulatory functions) and private sectors (resources, professional experience, managerial capacity, and innovation) to obtain real positive results in social and innovation fields.

Almost in all the legal acts collaboration of public authorities within PPP are connected with investments or innovations. However, the mechanism of partnership can be used not only in the implementation of investment or innovation programs but also in solving problems of information collaboration, preliminary consultation, defense of employees rights, workplace safety and security.

Determining the responsibilities and interests of the state and private sectors is important within PPP. Traditionally, the state regulates activities within PPP in three major directions:

- working out a strategy and principles of interaction between the public and private partners;
- forming a legal and institutional basis for the development and implementation of PPP projects;
- working out a model and forms of PPP.

#### 2. Research methodology

In one of our works (Zinnurov, Zakirova, 2013), we offered the theoretical and methodical principles of the institutional system of PPP in the development of innovation activity, which do not contradict the conceptual principles of PPP, mentioned in Federal Law of PPP. In Article 9 of Federal Law № 224-FZ a procedure for evaluating the effectiveness of the PPP project is established as mandatory. It is evident that implementation of PPP projects concerns both the public partner (Russian Federation, on behalf of which the Government or its authorized federal executive body acts; or a federal subject of the Russian Federation, on behalf of which the supreme executive body of a federal subject of the Russian Federation acts; or a municipal entity, on behalf of which head of the municipality acts) and private partner - a legal entity to conclude an agreement on PPP. It is obvious that in the process of such interaction, according to the law of synergy when the potential of a newly created system is greater than the amount of its parts, there appears a synergetic effect (Porshnev et al., 2001, p. 597). However, this effect is not widely covered in special literature (Varnavskiy, 2005; Deryabina, Sedelin, 2007; Ispravnikova 2016; Soldatenkov, 2010; Hoppe, Schmitz, 2013; Iossa, Martimort, 2012; Osborne, 2000; Emelyanov, 2012).

#### 3. Implementation model PPP

We are interested in the synergetic effect that occurs because of the interaction between the public and private partners in the implementation of PPP innovation projects. Developing theoretical and methodical principles of the synergetic effect is the main purpose of our research.

It is evident that motivation of the public and private partners is a key to a successful cooperation in the implementation of projects. In articles devoted to this subject, the problem of motivation of both public and private partners is highlighted (Goldberg et al., 2011; Ivanov, Ivanova et al., 2006; Firsova, 2011; Bogachev, Oktyabrskiy, 2012; Nikolaev, 2012; Sergeev, 2012). Here, under motivation activity, we understand "a process of analysis and assessment of conditions and the corresponding unrealized needs, the choice of motive for further actions". This motivation can be characterized by both general and specific reasons. In a more systematic way, they are shown in Table 1.

Analyzing the synergetic effect of PPP projects in innovation activity one should rely on the researchers' view of the issue. The research team, working under the direction of I. Goldberg does not directly point out the synergetic effect in the PPP projects implementation. Though when dealing with the public support of research and development in the Israeli economy it has determined the following synergetic effects of public funding (Goldberg et al., 2011).

- 1. New research and development would be impossible without public support. It was found that the amount of new works exceeds 2-3 times the amount (minimum) of public support being stable in all the sectors of the Israeli economy.
- 2. A more than twofold increase in the volume of research and development is possible owing to the grant of the public partner (as the effect of a chain reaction). In the industry of Israel the public grant of 1 million shekels (US \$ 280 000) from the National innovation system gives 1.28 million shekels of growth in private spending on research and development that means an overall increase of 2.28 million shekels from the volume of such work in the whole economy of Israel.
- 3. A multiplicative effect due to the public support of research and development results in the increase of industrial production. The overall impact of successful research and development is in a production volume direct increase of the firm production that organized such works and an indirect impact on other firms that increased production as well (side effects). The public support of such works has a high overall impact on the economy. The multiplicative effect increases by 5 to 6 times compared with the public support and further growth of industrial production for medium to large-sized firms.

Table 1. Motivational reasons of public and private partners in the implementation of innovation projects

Type of partner	General reasons	Specific reasons
Public partner	Economic growth and the competitiveness of scientific and technological goods and services. Stimulation of innovation activity of high-tech goods and services producers.  Establishing new high-tech firms and supporting small and medium-sized innovation enterprises. Attracting extra budgetary funding. Improving the efficiency of government expenditures on research and development.	Development of key technologies for Federal authority needs. Economic use and commercialization of research and development results using the public budget. Infrastructure development.
Private partner	Opportunities for obtaining higher profit. New opportunities for innovation business development.	Access to public funding, the results of research and development of the public sector and its infrastructure, as well as information and equipment.

Source: Zinnurov, Bikmetov, 2013

Conclusions of the international group paper "The commercialization of the results of scientific and technological activities: the European experience, the possible lessons for Russia" are worth noticing. It empathizes synergetic effects of innovation, such as the commercialization: gaining extra income, developing scientific and technological excellence; improving the competitiveness of the country (Ivanov et al., 2007)

The views of researchers can be taken as a methodical basis in determining the synergetic effect in the implementation of innovation projects of PPP. These views allow creating a methodical basis for this effect that is presented in the paper (Zinnurov, Zakirova, 2013, pp. 130-133), and we have clarified the individual components of the synergetic effect.

Summarizing the opinions of the above-mentioned authors, along with those of Yu.S. Bogachev, Octyabrskiy (2012), and Zhukova (2011), we can conclude that the synergetic effect of PPP in the development of innovation activity is expressed in the following components.

- 1. The scientific and technological effect is connected, first, with new research and development, which would be impossible without PPP (the so-called "chain reaction"); second, with an increase of at least twice of the volume of such works due to the public grant within PPP; third, with the achievement of scientific and technological excellence (high competitiveness) by innovation projects participants of PPP, expressed in the assets, such as advanced training of researchers and development of a modern scientific and technological equipment; fourth, with an international cooperation of researches working on projects of PPP, that expands their competence and opens up new horizons of research; fifth, with researchers and developers improvement of skills of intellectual property commercialization since innovation projects of PPP aim at maximum commercial use of results.
- 2. The production effect is expressed in the multiple increase of the industrial production volume. It is usually shown in the form of a multiplicative effect due to a direct impact of successful research

carried out by the support of the public partner within PPP on the company itself and an indirect impact on other companies, that is reflected in the sharp increase of industrial production (up to 5-6 times).

- 3. The economic effect is expressed in an extra direct income, for example, in the form of royalties from the cession of rights of industrial intellectual property within innovation projects of PPP, and an extra indirect income in the form of cost of start-up companies based on research and development carried out in the Russian Academy of Sciences and universities. These incomes several times exceed costs of PPP innovation projects.
- 4. The effect of internationalization is expressed in the appearance of innovation activity leaders among research and development teams in the implementation of PPP innovation projects. The leaders cooperating with industrial companies will tend to enter foreign markets and become international companies.
- 5. The budget effect is expressed, on the one hand, when the public partner economizes budget funds, which would be necessary if the scientific and industrial problem was solved entirely by using budget funds (the federal budget, the regional budget or the municipal budget), on the other hand, the private partner economizes its funds in the amount of funds of the public partner, which can be used for other purposes. This effect influences the private partner when the public partner provides different guarantees or introduces preferential taxation. But in this case the public partner loses the corresponding financial flows.

Consequently, the integral synergetic effect of PPP in the implementation of the innovation project will be described as the amount of its components listed above:

$$ISE = STE + PE + EE + IE + BE$$
 (1)

where *ISE* is the integral synergetic effect of PPP in the implementation of the innovation project; *STE* is the scientific and technological effect;

PE is the production effect;

*EE* is the economic effect;

*IE* is the internationalization effect:

BE is the budget effect.

Each component of the integral synergetic effect in a formalized form is shown below.

1. The scientific and technological effect

$$STE=RC+STE$$
 (2)

where *RC* is the new research cost in the implementation of the PPP innovation project (the "chain reaction");

STE is the level of the private partner's scientific and technological excellence (competitiveness) as a result of the PPP innovation project.

The new research cost in the implementation of the PPP innovation project (the "chain reaction") is calculated as follows:

$$RC = GR \times GS$$
 (3)

where GS is the amount of the public partner grant support in the implementation of the PPP innovation project;

*GR* is the growth rate, showing new research due to the public partner grant support, which would be impossible without such support in the implementation of the PPP innovation project.

The private partner's scientific and technological excellence level (increase of competitiveness) in the implementation of the PPP innovation project is calculated as the amount of two components:

- a) salary increase to private partner's scientific and engineering employees who improved skills in the implementation of the PPP innovation project (SI);
- b) goods and services production growth on a new established or improved research and experimental basis as a result of the PPP innovation project (GSG):

$$STE=SI+GSG$$
 (4)

In its turn, the rate of salary increase to scientific and engineering employees can be defined as follows:

$$SI = SIR \times E$$
 (5)

where SIR is the salary increase rate per a scientific and engineering employee who improved skills due to the PPP innovation project;

*E* is the number of employees who improved skills.

The private partner's goods and services production growth rate on a new established or improved research and experimental basis can be determined by the formula:

$$GSG = VR \times GSV \tag{6}$$

where VR is the goods and services production volume growth rate;

GSV is the cost of goods and services production volume on an existing research and experimental basis before the private partner's participation in the implementation of the PPP innovation project.

2. The production effect

$$PE = (G1 \times PV1) + (G2 \times PV2) \tag{7}$$

where PVI is the private partner's industrial production volume before the participation in the implementation of the PPP innovation project;

G1 is the private partner's industrial production volume growth rate in the form of a multiplicative effect due to the direct impact of successful research projects implemented within innovation projects owing to the public partner grant support;

*PV2* is the other firms' industrial production volume before the implementation of the PPP innovation project;

G2 is the industrial production volume growth rate in the form of other firms' multiplicative effect due to the indirect impact of successful research projects implemented by the private partner owing to the public partner grant support.

3. The economic effect

$$EE = DEI + IEI$$
 (8)

where *DEI* is the private partner's direct extra income, as a rule, in the form of royalties from the assignment of rights under the license agreement on intellectual (industrial) property within the PPP innovation project;

$$DEI = R \times LPV \times LP \times T \tag{9}$$

where R is the royalty rate (the amount of month, quarter or annual payments of the licensee (purchaser) from the price of the license paid to the licensor (seller), in %;

LPV is the licensee (purchaser) production volume under the license agreement;

LP is the licensee unit price (purchaser) under the license agreement;

T is the term of the license agreement (year, quarter, month).

*IEI* is the indirect extra income in the form of goods and services cost produced by start-up companies on the basis of research carried out in the institutions of the Russian Academy of Sciences and universities within the PPP innovation project.

4. The internationalization effect

$$IE=UP\times EG$$
 (10)

where EG is the volume of exported goods and services produced by a Russian company as a private partner or its abroad branches as a result of the PPP innovation project;

*UP* is the unit price of exported goods and services or goods and services produced by a Russian company as a private partner or its abroad branches as a result of the PPP innovation project.

5. The budget effect

$$BE=PPBS+PPFS+PPSG$$
 (11)

where *PPBS* is the public partner's budget savings in the form of the share of a private partner in the implementation of the PPP innovation project;

*PPFS* is the private partner's own (borrowed) fund savings necessary for the PPP innovation project owing to the public partner grant;

*PPSG* is the private partner's savings owing to different guarantees of preferential taxation provided by the public partner etc.

The synergetic efficiency (SE) in the implementation of the PPP innovation project will be determined as a ratio between the integral synergetic effect (ISE) and the total costs in the implementation of the PPP innovation project, including the public partner's financial and legal support (PFS) and the share of the private partner's own (borrowed) funds, directed to the implementation of the innovation project (PPF):

$$SE = \frac{ISE}{PFS + PPF} \tag{12}$$

## 4. Conclusion

In conclusion, it is worth noting that the proposed methodical principles of the synergetic effect and synergetic efficiency create a reliable basis for the preliminary assessment of their efficiency and a comparative advantage owing to the implementation of PPP innovation projects. Both public and private partners who are responsible for the implementation of PPP obtain theoretical and methodical tools for decision-making when implementing projects and therefore are able to avoid risks. Ministry of Industry and Innovation Policy of the Republic of Bashkortostan of Russian Federation applied these tools in order to use them when working out methods of efficiency assessment and determining a comparative advantage of PPP innovation projects.

## References

Babatunde S.O., Opawole A., Akinsiku O.E. (2012). Critical success factors in public-private partnership (PPP) on infrastructure delivery in Nigeria. *Journal of Facilities Management*, vol. 10, pp. 212-225.

Bogachev Yu.S., Oktyabrskiy A.M. (2012). *Public-private partnership for innovation systems. Modern science: urgent problems of theory and practice* [online] [cit.16-08-2012]. Available: http://www.nauteh-journal.ru/index.php/-ep 12-02 / 396-a.

Cheung E., Chan A.P.C., Kajewski St. (2012). Factors contributing to successful public private partnership projects: Comparing Hong Kong with Australia and the Unite Kingdom. *Journal of Facilities Management*, vol. 10, pp. 45-58.

Deryabina M.A., Sedelin L.I. (2007). *Public-private partnership: theory and practice: scientific report.* Moscow: Institute of Economics of the Russian Academy of Sciences, 2007.

Emelyanov Y.S. (2012). *Public-private partnership in innovation activity: Foreign and Russian experience*. Moscow: Knizhniy Dom "LIBROKOM", 2012.

Federal Law № 224-FZ dated 1 July 2015. "On Public-Private Partnership, Municipal-Private Partnership in the Russian Federation of Certain Legislative Acts of the Russian Federation".

Firsova A.A. (2011). Problems and prospects of public-private partnership to invest in innovation activity in Russia. *Management in Russia and abroad*, vol. 5, pp. 63-68.

Grimsey, D., Lewis, M.K. (2002). Evaluating the risks of public private partnerships for infrastructure projects. International *Journal of Project Management*, vol. 20, pp. 107-118.

Goldberg, I., Goddard J. G., Kuriakose S., Racine J.-L.(2011). *Expanding horizons of innovations. Rethinking of the role of the state of developing countries in Europe and Central Asia*. Washington: The World Bank, 2011.

Hoppe, E. I., Schmitz, P.W. (2013). Public-private partnerships versus traditional procurement: Innovation incentives and information gathering. *The RAND Journal of Economics*, vol. 44, pp. 56-74.

Iossa E., Martimort D. (2012). Risk allocation and the costs and benefits of public-private partnerships. *The RAND Journal of Economics*, vol. 43, pp. 442-474.

Ispravnikova N.R. (2016). *Public-private partnership: problems of formation. Electronic dictionary of the Sociological Faculty of Moscow State University* [online]. [cit. 20-02-2016]. Available: http://www.lib.socio.msu.ru.

Ivanov V., Ivanova N., Rozebum I., Haisbers H. (2006). *National innovation system in Russia and the EU*. Moscow: TSIPRAN RAS, 2006.

Ivanov V.V., Klesova S., Lukshin O.P., Sushkov P.V. (2007). Commercialization of scientific and technological activities: European experience and possible lessons for Russia. Moscow: TSIPRAN RAS, 2007.

Nikolaev A.I. (2007). *Public-private partnership in the Russian Federation: the economic content and legal support. Real estate and investment* [online]. [cit. 17-03-2012]. Available: http://dpr.ru/ioumal/ioumal 30 8.htm.

Osborne S.P. (2000). *Public-private partnerships: Theory and Practice in international perspective*. London: Taylor & Francis, Routledge, 2000.

Porshnev A.G., Kibanov A.Ya, Gunin V.N. (2001). *Management of organization. Encyclopedic Dictionary*. Moscow: INFRA-M, 2001.

Sukhov V.I. (2015). Russia in the mirror of the international rankings. Reference book. Novosibirsk: Autograph, 2015.

Sergeev M. (2012). *Public-private partnership in innovation* [online]. [cit. 16-08-2012]. Available: http://secandsafe.ru/pravovavabaza/blogi/ekonomicheskava bezopasnost/gosudarstv.

Soldatenkov V.Yu. (2010). Social necessity of partnership development between the state and business. *Management in Russia and abroad*, vol. 4, pp. 19-23.

Tang, L., Shen, Q., Cheng, E.W. (2010). A review of studies on public-private partnership projects in the construction industry. *International Journal of Project Management*, vol. 28, pp. 683-694.

Varnavskiy V.G. (2005). Partnership of the public and private sectors: forms, projects, risks. Moscow: Nauka, 2005.

Zhukova N.C. (2011). The innovative potential of public-private partnership in the implementation of infrastructure projects. *Economics and management*, vol. 12, pp. 138-142.

Zinnurov U.G., Zakirova E.O. (2013). *Institutional mechanisms of public-private partnership in the development of innovation activities*. Ufa: Ufa State Aviation Technical University, 2013.

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# 5. KNOWLEDGE MANAGEMENT IN ENTERPRISES - POLISH EXPERIENCES

**Abstract:** For today's organizations the chance to develop is the appropriate use of knowledge and competence of employees. Knowledge is a very important intangible resource of companies, and the concept of knowledge management plays an important role in the entire management system. Managers increasingly recognize the role and importance of this concept in shaping a business's competitiveness. The main aim of the article is to identify knowledge management on the Polish market in enterprises. This article presents the results of empirical research conducted in 2013 and 2015. Author introduces a comparative analysis of the research. The examination results confirm the evolution of the knowledge management model in Poland.

Keywords: knowledge, knowledge management

**JEL Classification:** M21

## 1. Introduction

Nowadays organizations have a chance to develop by the appropriate use of knowledge and competence of employees. Knowledge is a very important intangible resource of companies, and the concept of knowledge management plays an important role in the entire management system. The knowledge is a base for building the future company called sustainable enterprise (Grudzewski, Hejduk, 2010).

The consequence of these changes is the contemporary enterprises transform in knowledge-based organizations, and managers increasingly recognize the role and importance of the concept of knowledge management in creating the enterprise competitiveness. The knowledge is now perceived as a strategic corporate asset. Knowledge management characterizes a deliberate and systematic approach to ensure full utilization of the knowledge base of an organization. It refers to capturing, codifying, storing and disseminating knowledge that is held by people in organizations in the pursuit of strategic competitiveness (Han, Park, 2009). The knowledge management involves the creation of conditions of knowledge sharing and its use in such a way to improve the organization functioning. More and more organizations take action in implementing the concept of knowledge management and motivate their employees to share their experiences. There are implemented IT solutions, knowledge base, data warehouses to prevent losing of valuable knowledge resources and supporting communication between employees. Despite the growing interest in knowledge management concept among both researchers and practitioners there is inadequate research scope conducted in Poland in this area. The main aim of the article is to identify the knowledge management in Polish enterprises.

## 2. Theoretical background

The concept of a company based on knowledge (oriented at knowledge) seems to meet the contemporary challenges that a model of an organization is faced with, especially in terms of flexible mechanisms of reacting to instability and changes in the environment by the way of efficient collection, development, and processing of knowledge about individual and institutionalized clients, existing and future competition, business partners, existing and potential suppliers, individual

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employees, resources, the inner capacity of an enterprise, the socio-economic conditions, political and legal circumstances, modern technologies, or new management methods (Morawski, 2006; Ziółkowska, 2013). In the companies operating nowadays, one may observe, in some sense, a decrease in the value of fixed assets, such as inventory or capital and an increase in the importance of non-material assets, such as competences or professionalism which are constituents of knowledge. The number of enterprises whose worth is determined by their capital and material possessions is constantly decreasing; increasingly, however, success is ensured by the fact that a company has very special assets, such as: collected knowledge, know-how, or utility models. Knowledge management allows determining the value of an organization as a whole and not just its material assets.

Knowledge as a mix of framed experience, values, contextual information and expert insight provides a framework for evaluating and incorporating new experiences and information (Davenport, Prusak, 1995). Bender and Fish consider that knowledge originates in the head of an individual (the mental state of having ideas, facts, concepts, data and techniques, as recorded in an individual's memory) and builds on information that is transformed and enriched by personal experience, beliefs and values with decision and action-relevant meaning (Bender, Fish, 2000). Knowledge management is a process that helps the organization to generate richness according to its intellectual or based on knowledge assets (Bukowitz, Williams, 1999).

All issues related to knowledge management and innovation should be integrated into the organizational knowledge strategy if organizations are really serious about sustaining their competitive advantage (Ordóñez de Pablos, 2010).

Research into knowledge management has intensified in recent years, and knowledge is increasingly regarded as one of the most important assets in company organizations (Stankosky, 2005; Albors-Garrigos et al., 2010).

As a result of the study of the main factors of building a permanent position as market leader, it was found that of the four main paradigms are: knowledge, innovation, trust and organizational culture (organizational entrepreneurship), the first three paradigms are most appreciated (Grudzewski et al., 2010). Organizations should also analyze their situation what in a moment of introducing changes is crucial and helps plan it better. Companies cannot be working day-to-day, they need to have a clear strategy. Basing on it as well as on mission, vision and main objectives enterprises are able to match appropriate method and tool to face any changes (Bitkowska, Weiss, 2012).

Enterprises should use modern technology solutions in the field of collection, storage, transferring and sharing of information and flexibly respond to the environment demands. Important roles are played by the knowledge workers, defined as specialists, highly qualified professional with organizational skills (Bitkowska, Weiss, 2011; Ziółkowska, 2013).

Knowledge sharing is regarded as the informal communication process involving the sharing of knowledge between co-workers (Siemsen et al., 2008). Organizational members are better equipped with skills and knowledge when they engage in knowledge sharing (Sitko-Lutek et al., 2010). It is difficult to enforce knowledge sharing because knowledge is created and stored within the organizational members (Chow, Chan, 2008). In the workplace, knowledge sharing problem is relatively common in which the individual employees with knowledge are less inclined to share their knowledge (Ho et al., 2009). Knowledge sharing will not happen if one does not intend to share knowledge (Siemsen et al., 2008). Knowledge transfer between personnel could benefit an organization's improved competitive advantage in the marketplace from a strategic approach to knowledge management (Glauber, 2016).

Knowledge sharing behaviors are generally unnatural because individuals perceive their knowledge as valuable assets, and open sharing of knowledge with others is limited by their natural tendency to keep information to themselves (Davenport, Prusak, 1998; Hsu et al., 2007). It is important to understand how the individual attitudinal and behavioral outcomes may have a differential impact on employees' knowledge sharing behaviors (Teh, Sun, 2012). The job attitudes (i.e. job involvement, job satisfaction and organizational commitment) may influence the employees' knowledge sharing behaviors.

Many studies in the literature focus on knowledge management principles (Nonaka, Takeuchi, 1995; Leonard-Barton, 1995) and KM practices (Zack, 1999; Davenport, Klahr, 1998; Scott, 1998). These efforts lead many organizations to establish KM-related organizations or positions.

In today's global marketplace, companies outsource not only tangible resources, but they also acquire tacit knowledge. Based on this, the study herein attempts to construct a knowledge outsourcing model from the base of decision analysis and making in order to help firms consider whether, what, and how to outsource knowledge (Tarn, Chien-Chih, 2012).

Holsappleand and Wu have indicated that knowledge management is a field that providing an integrative context for explaining a myriad of interactions between individuals, teams, organizations, systems and their surrounding environment across disciplines as varied as accounting, marketing, human resources, strategic management, operations management and information systems (Holsappleand, Wu, 2008).

## 3. Methodology of the research

The comparative analysis of studies conducted between 2013 and 2015 indicated that more and more companies use the knowledge management and the importance of the solution grows amongst Polish managers (Figure 1).

The main aim of the article is to identify knowledge management on the Polish market in enterprises. The following hypotheses have been put forward:

H1. Interest of KM in enterprises in Poland is rising.

H2. Implementing solutions in the knowledge management mainly concerned the following areas: the knowledge and experience exchange system of enterprises, introducing the idea of the knowledge sharing.

First study was conducted in 2013 on a group of 102 enterprises operating in Poland, which included among others 35,2%, enterprises employing over 249 employees, 30,1% medium-sized enterprises 22,6% small and 12,1% micro. The study was carried out by direct interview, based on a questionnaire.

Second empirical studies were conducted in 2015 on a sample of 144 enterprises including micro, small, medium and large companies operating on Polish territory. Tests were carried out by direct interview based on a prepared questionnaire. Among the surveyed companies the largest share had enterprises with 50-249 of employees - 38,8%, and 250 or more - 28,6%. Small businesses constituted 15,8% of the sample, while the contribution of microenterprises was 15,8%.

The survey questionnaires were filled out by the management staff, the executives, board members, owners or experts in knowledge management.

## 4. Comparative analysis of research carried out in 2013 and 2015 in enterprises in Poland

31,9% of surveyed organizations in 2015 reported the implementation of this concept (an increase of 11,7% compared to the previous survey). Also a number of companies which used the elements of the knowledge management increased (from 11,9% to 18,2%). 22,9% of surveyed enterprises in 2015 intend to apply this concept in the near future, compared with 12,3% which reported it in 2013. Significantly decreased the number of organizations which claim this concept is not useful in the business (9,6%). The slight modification underwent a number of companies which declared that there is no possibility of applying the knowledge management. Only 8,6% of the organization in 2015 indicated a lack of the concept familiarity (in 2015 up to 24,3%). The comparative analysis indicates a growing interest of enterprises operating in Poland in the knowledge management concept. An increase in the awareness amongst managers indicates that the knowledge management concept can play substantial role in shaping the enterprises competitive position.

The aim of next examinations was a diagnosis of the scope and the level of applying the knowledge management in Polish enterprises and actions identifying that organizations take in this respect. There were analyzed the solutions of the knowledge management in enterprises operating on the Polish market with reference to the forming of their competitiveness. It was assumed that the low level of manager's awareness affects the lack of application of this concept and, consequently, affects the poor competitive position.

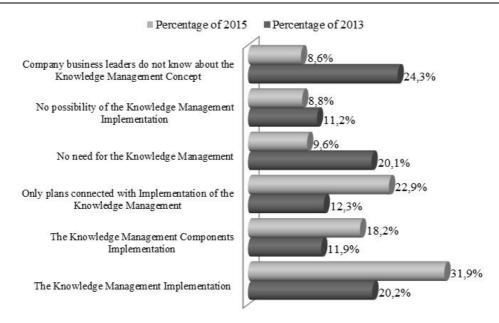
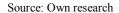


Figure 1. Using the knowledge management in the surveyed enterprise



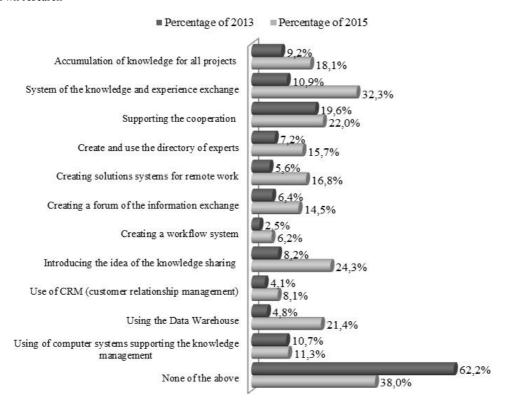


Figure 2. Undertaken activities in the field of the knowledge management

Source: Own research

Surveyed companies took more and more high activity in terms of solutions connected with the knowledge management (Figure 2). It means enterprises enhancing and engaging in both development and using this concept. Enterprises assigned the high activity for creating the system of the exchange of knowledge and experience (10,9% in 2013, 32,3% in 2015). A significant increase could also be observed in the area of introducing the idea of the knowledge sharing (8,2% in 2013, 24,3% in 2015). Increasing the enterprises activity also included exploiting the data warehouse (4,8% in 2013, 21,4% in 2015), a forum of the information exchange /exchange of ideas (4,8% in 2013, 21,4% in 2015),

creating solution systems for remote work (4,8% in 2013, 21,4% in 2015), creating and using the directory of experts (4,8% in 2013, 21,4% in 2015), accumulation of knowledge for all projects in the organization (4,8% in 2013, 21,4% in 2015).

The slight increase was observed in the following areas: supporting the cooperation and the reuse of the existing knowledge, creating a workflow system, using the CRM, Using of computer systems supporting the knowledge management. Studies conducted in 2015 indicate a greater involvement of manager staff, motivating employees to sharing the knowledge, experiences of using modern solutions.

## 5. Conclusion

The economy based on the knowledge puts new challenges to the enterprises in the effective and efficient development of organizational learning processes. The scope of forming and implementing the knowledge management has a decisive influence on the competitive companies' predominance. The results indicated that awareness of the role of the knowledge management among Polish manager's increases. One of the main reasons is the lack of knowledge and awareness of managers connected with the importance of using this concept in enterprises. Large companies definitely more willingly use the knowledge management as well as its components. It has been observed the increase of interest in the implementation of this concept among managers. It is important to strengthen targeting managers and employees on the role of knowledge in the operation of their enterprises, opening into knowledge sharing, stimulation, motivation, knowledge, and also development of knowledge workers. The examination results confirm the evolution of the knowledge management model in Poland. It becomes more modern and innovative. Presented hypothesis were confirmed. Interest of KM in polish enterprises are arising. Implementing solutions in the knowledge management mainly concerned the following areas: the knowledge and experience exchange system of enterprises), introducing the idea of the knowledge sharing is confirmed.

The article has some limitations of the current study. Research concerned the state of knowledge management in Polish enterprises. This theme of research is worth of continuing in aim to make comparisons between Polish and European enterprises. It is important area of future work and invites other researchers to join in discovery some trends in knowledge management.

Implications means targeting managers and employees on the role of knowledge in the operation of their enterprises, opening into knowledge sharing, stimulation, motivation, knowledge, and also development of knowledge workers.

### References

Albors-Garrigos, J., Ramos, J.C., Mas-Machuca, M. (2010). Actional intelligence, a critical competence for innovation performance: a research multi-case analysis. *International Journal of Technology Intelligence and Planning*, vol. 6(3), pp. 210-25.

Bender, S., Fish, A. (2000). The transfer of knowledge and the retention of expertise: the continuing need for global assignments. *Journal of Knowledge Management*, vol. 4(2), pp. 125-37.

Bitkowska, A., Weiss, E. (2011). The role of knowledge workers in the Information Society. In da Rocha Brito C. (ed.). *Forming international engineers for the information society*. XL IGIP International Symposium on Engineering EducationSantos, Brasil: Council of Researches in Education and Sciences (COPEC), pp. 277-280.

Bitkowska, A., Weiss, E. (2012). Process approach in selected management concepts. In Słomski, W. Weiss, E. Voznakova, I. Suchodolska A. (eds.). *Selected issues in organization and management of enterprise. Theory and practice.* Woodland Hills, CA: York University, 2012.

Bitkowska, A. (2015). The orientation of business process management toward the creation of knowledge in enterprises, *Human Factors and Ergonomics in Manufacturing & Service Industries*, vol. 25, no 1, pp. 43-57.

Chow, W.S., Chan, L.S. (2008). Social network, social trust and shared goals in organizational knowledge sharing., *Information & Management*, vol. 45(7), pp. 458-465.

Davenport, T.H. Prusak, L. (1998). Working knowledge: how organizations manage what they know, Boston, MA: Harvard Business School Press, 1998.

Davenport, T.H., Klahr, P. (1998). Managing customer support knowledge, California Management Review, vol. 40, pp. 193-208.

Davenport, T.H., Prusak, L. (1995). Working knowledge: How organizations manage what they know. Cambridge, MA: Harvard Business School Press, 1995.

Glauber, D.J. (2016). Knowledge management strategies within a corporate environment of papers, *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, vol. 10, no 2, pp. 412-416.

Grudzewski W.M., Hejduk, I. K. (2010). Sustainable enterprises – in the New economic conditions, In *Proceedings of 2nd Annual International Conference on Sustainable Enterprises of the Future*. Pittsburgh, PA: Robert Morris University, 2010.

Grudzewski, W. M., Hejduk, I.K., Sankowska, A., Wańtuchowicz, M. (2010). Sustainability in business, Enterprise of the future. Warsaw: Poltex, 2010.

Hejduk, I. K. (2005). On the way to the future: The knowledge-based enterprises. *Human Factors and Ergonomics in Manufacturing*, vol. 15(1), pp. 5-14.

Ho, C.T.B., Hsu, S.F., Oh, K.B. (2009). Knowledge sharing: game and reasoned action perspectives. *Industrial Management & Data Systems*, vol. 109(9), pp. 1211-1230.

Hsu, M.H., Ju, T.L., Yen, C.H., Chang, C.M. (2007). Knowledge sharing behavior in virtual communities: the relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, vol. 65, pp. 153-69.

Leonard-Barton, D. (1995). Wellsprings of knowledge, Watertown, MA: Harvard. Business School Press, 1995.

Lin, R., Che, R., Ting, Ch. (2012). Turning knowledge management into innovation in the high-tech industry. *Industrial Management & Data Systems*, vol. 112(1), pp. 42-63.

Mas Machuca, M., Martínez Costa, C. (2012). A study of knowledge culture in the consulting industry. *Industrial Management & Data Systems*, vol. 112(1), pp. 24-41.

Morawski M. (2006). Celowość tworzenia zintegrowanego systemu zarządzania pracownikami wiedzy, In *Nowe kierunki w zarządzaniu przedsiębiorstwem - celowość, skuteczność, efektywność*. Wrocław: Prace Naukowe Akademii Ekonomicznej we Wrocławiu, vol. 1104, pp. 166-167.

Nonaka, I., Takeuchi, H. (1995). The Knowledge-creating company, Oxford: Oxford University Press, 1995.

Ordóñez de Pablos, P. (2010). Preface to the special issue: Emerging information technologies for effective knowledge management-towards high-performance business organizations and value networks. *Human Factors and Ergonomics in Manufacturing & Service Industries*, vol. 2, pp. 99-102.

Phusavat, K., Comepa, N. Sitko-Lutek, A., Ooi, K. (2011). Interrelationships between intellectual capital and performance. Empirical examination. *Industrial Management & Data Systems*, vol. 111(6), pp. 810-829.

Siemsen, E., Roth, A.V., Balasubramanian, S. (2008). How motivation, opportunity, and ability drive knowledge sharing: the constraining-factor model. *Journal of Operations Management*, vol. 26(3), pp. 426-445.

Stankosky, M. (2005). Creating the discipline of knowledge management: The latest in university research. New York, NY: Butterworth-Heinemann, 2005.

Tarn, D.C., Chien-Chih, E. (2012). Knowledge outsourcing: A proposed model. *International Journal of Management*, part 2, vol. 29(1), pp. 247-266.

Ting, S.L., Wang, W.M., Tse, Y.K., Ip, W.H. (2011). Knowledge elicitation approach in enhancing tacit knowledge sharing. *Industrial Management & Data Systems*, vol. 111(7), pp. 1039-1064.

Teh, P., Sun, H. (2012). Knowledge sharing, job attitudes and organizational citizenship behavior. *Industrial Management & Data Systems*, vol. 112(1), pp. 64-82.

Zack, M.H.(1998). Developing a knowledge strategy. California Management Review, vol. 40, pp. 119-23.

Ziółkowska, B., (2013). Zarzadzanie procesami tworzenia wartości w przedsiębiorstwie. Perspektywa wirtualizacji, Częstochowa: Wydawnictwo Politechniki Częstochowskiej, 2013.

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## 6. TRANSFORMATIONAL LEADERS IN THE VIRTUAL TEAMS

Abstract: Due to the technological developments the new way of working known as 'global virtual teams' (GVT) emerged. Doing the business globally, across borders in diversified environment has become a huge challenge to the leaders of such teams, who should apply the appropriate leadership model. The aim of the article is to verify if the transformational leadership model is adequate to manage such teams. Author identified and described the transformational leadership qualities of the virtual team's leaders. The methodology for this study is a review of the relevant literature on transformational leadership in the global virtual teams. The critical analysis of literature enabled to identify the desired transformational leadership attributes such as integrity and self-confidence. Transformational virtual leader should exhibit a genuine concern for others and develop potential, empower and define boundaries of responsibility. The higher level of satisfaction with a transformational leader in virtual teams is observed. The literature review conducted in this paper reveals the gap in the research on the transformational leadership model in global virtual teams and its impact on the performance of those teams. The literature review gives an insight in the current state of knowledge in this field required for leaders working in diverse virtual teams in multinational corporations.

Keywords: transformational leadership, global virtual teams

**JEL Classification:** M12

## 1. Introduction

As organizations become more complex, dynamic, and global, virtual teaming became very popular way of working internationally (Carte et al., 2006) and play an increasingly important role in those organizations (Hertel et al., 2004; Lipnack, Stamps, 2000). As a result, major challenges of virtual teams have been identified: leadership, trust, distance, time, technology and culture (Duarte, Tennant-Snyder, 1999; Garton, Wegryn, 2006; Gibson, Cohen, 2003; Jones, Oyung, Pace, 2005; Lipnack, Stamps, 2000; Mankin, Cohen, 2003; Nemiro, 2004). Virtual teams are a key component of successful multinational companies (Kahai et al., 2003). Therefore understanding of the leader's role is important in order to achieve the effectiveness in such environment (Hertel et al., 2005; Kahai Avolio, 2006; Kahai et al., 1997, 2003, 2004; Sosik et al., 1997; Sosik et al., 1998).

Leaders can choose one of many leadership models developed over the past several years. It is important to note that there are no right or wrong theories. Identification of a leadership model allowing virtual teams to be effective and successful is a real leadership challenge (Kerber, Buono, 2004; Sobel-Lojeski, Reilly, 2006).

## 2. Aim and methodology

The aim of the article is to verify if the transformational leadership model is adequate to manage such teams. Author identified and described the transformational leadership qualities of the virtual team's leaders. The methodology for this study is a review of the relevant literature on transformational leadership in the global virtual teams.

## 3. Transformational leadership in global virtual teams

For the first time the transformational leadership was described by Burns and extended by Bass in 1985. Burns says that transformational leadership "occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978). According to Bass, a transformational leader is one who "motivates followers to do more than they were originally expected to do" (Bass, 1985). Leadership is also defined as a

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function of the relationship between a leader and followers (Conger, Kanungo, 1987; House 1977; Yagil, 1998). Some researchers suggest that models of transformational leadership are an extension to transactional leadership (Bass, 1985; Berlew, 1974; Hollander, Offermann, 1990).

Published studies on transformational leadership link it to such topics as cross-cultural leadership (Kirkman et al., 2009), virtual teams (Avolio et al., 2001; Bell, Kozlowski, 2002; Hambley et al., 2007), personality (Hautala, 2006) and many others (McCleskey, 2014). Moreover, it becomes increasingly important to study leadership in context (Antonakis et al., 2003; House, Aditya, 1997; Shamir, Howell, 1999), particularly in the cultural context of virtual teams. As traditional leadership forms a particular challenge for leaders in virtual team settings (Andressen et al., 2012; Hertel et al., 2005).

It has been proved that transformational leadership increases the employees' satisfaction (Hater, Bass, 1998) and trust (Barling, 2000; Padsokoff et al.,1996; Pillani, Williams, 1999). It is also associated with the higher performance (Barling et al., 1996; Geyer, Steyrer, 1998; Howell, Avolio, 1993). Analyses revealed that the transformational leaders achieved higher levels of virtual team performance (Purvanova, Bono, 2009). According to Arnold, a significant relationship exists between leadership style, specifically transformational leadership, and project success in virtual teams. Transformational leadership style is the dominant and effective style in virtual projects (Arnold, 2008). Studies have found significant and positive relationships between transformational leadership and the amount of effort team members are willing to make, satisfaction with the leader, and effectiveness (Bass, 1998). Visionary leadership was positively related to work attitudes (Whitford, Moss, 2009). Previous studies demonstrates a positive relationship between transformational leadership and employees' empowerment (Andressen et al., 2012; Dvir et al., 2002; Jung et al., 2003; Jung, Sosik, 2002; Kark et al., 2003). Empowering leadership ultimately improve individual performance (Bell, Kozlowski, 2002; Hill, Bartol, 2016).

Higher levels of satisfaction with a transformational rather than a transactional leader in virtual contexts were observed (Hoyt, Blascovich, 2003; Ruggieri, 2009). Finding of Kelloway regarding the remote transformational leaders (Kelloway et al., 2003):

- team members are satisfied and get a feeling of justice from the transformational leader's message comparing to the exceptional and the laissez faire leaders;
- e-mail messages from remote transformational leaders' are more motivating, intellectually stimulating, and achieve better performance in comparison to the emails from the exceptional and laissez faire leaders.

The remote transformational leaders' tools and strategies for leading global virtual teams can be described in four roles: charismatic leadership, inspirational leadership or motivation, intellectual stimulation, and individualized consideration, which means that each team member is an individual who is provided with coaching, mentoring, and growth opportunities (Bass, 1985). Another research results indicated statistically significant positive correlations between these transformational leadership attributes: idealized influence-attributed, idealized influence-behaviors, intellectual stimulation, individual consideration, inspirational motivation; and outcome variables: employ satisfaction, leadership effectiveness (Mawanda, 2012).

According to the body of knowledge, transitional leadership defines priorities, shared values, and perceived common goals. Leaders affect team members by enhancing their awareness of task importance, making them focus first on team or organizational goals rather than their own interests (Bass, 1998). The characteristics of transformational leadership are that the leader focuses on values morals, and ethics (Nemiro et al., 2008). This is especially important due to the fact that global virtual teams consist of people from many cultures. The transformational leader is more focused on people than on processes. In addition, transformational leaders may increase their team members' expectations of success and confidence (Wren, 1995).

Transformational leaders show an authentic interest in individuals and develop the team members' strengths. Transformational leadership increases the level of human contact of the leader and the team members, which is crucial in virtual teams.

Members of the virtual teams are lacking the personal contact. Leaders must be sensitive not only to interpersonal factors but also to communication, and culture. Transformational leaders are sensitive to the cultural differences that virtual teams experience; understand the political and cultural dynamics of leading a virtual group (Shamir, Howell, 1999). According to Ross and Offermann, transformational

leadership was positively related to self – confidence (Ross, Offermann, 1997). Transformational leaders perceive themselves good at personal effectiveness, interpersonal control, and social self - confidence (Sosik, Megerian, 1999). They are ready to make difficult decisions and be resilient to failure. They need to shape behaviors that are required in a virtual environment, such as working in culturally diversified teams, across boundaries, time zones, and using technology effectively. Transformational leaders look for potential in team members and built reward and recognition systems as a result team members become more active themselves, which is crucial in dispersed teams. (Nemiro et al., 2008). Trust and openness are required in virtual settings (Vlosky et al., 2000). Transformational leaders are honest – the team members belief in leader's words. They are persistent and determined in gaining the goals, they are ethical and moral, and share the success with the whole team (Avolio, Bass, 1991). They support team members to find solutions to problems. The task of transformational leaders is to encourage the creation of new ideas (Richardson, 1995).

The transformational leaders use their charisma to motivate members of virtual teams and show concern and awareness through regular electronic communications (Maher, 2014). Transformational leaders are accessible, approachable and built a relationship with each individual and give personal attention to team members and their needs. The leaders create a learning environment by tolerance for mistakes so that virtual team members are more likely to take initiative (Alimo-Metcalfe, Alban-Metcalfe, 1999). Working in the virtual environment can cause a lack of visibility. Therefore, the transformational leaders must outline a vision, which should be communicated in simple language (Nemiro et al., 2008). Leaders provide the opportunity for people to be themselves. It is especially important because the team members are representatives of different cultures. These leaders highly value qualities such as humanity and sensitivity (Coulson-Thomas, 1998). In the virtual team, leaders that express idealized attributes enhances the group's collective belief that it can be successful (Cox, 2005).

According to the research, the perception of the virtual team members indicates that transformational leadership attributes are desired traits in leaders. Trustworthiness is clearly valued highly in the leader of a virtual team. The ideal leader should (Braga, 2003):

- be honest and have strong moral principles;
- be genuinely concern for others;
- use employees to their fullest potential, empower, define boundaries of responsibility;
- be selfconfident;
- understands the political dynamics of leading the group;
- communicate effectively the vision;
- work with the group to achieve results;
- base their decisions on moral and ethical principles;
- be decisive when required and prepared to make difficult decisions;
- trust team members to make decisions and take the initiative on important issues;
- be sensitive to human relations and have the ability to handle and resolve conflicts.

Leaders who engaged team members in discussion, made great efforts to achieve agreement, set group norms, coached team members, noticed difficulties caused by distance and virtual communication, created clear expectations and goals, and rewarded performance led much more successful virtual teams (Armstrong, Cole, 2002). In order to lead a successful virtual team leaders should establish trust, ensure that team members feel understood and appreciated, manage virtual meetings, monitor team progress, enhance the external visibility of team members, and ensure that individuals benefit from their participation in virtual teams (Malhotra et al., 2007). Weisband found that leaders who created awareness about other team members' progress on their individual tasks, schedules, and personal lives and interests, as well as clarified the project task requirements, led more successful virtual teams (Weisband, 2002).

There are researchers who recon that it is still relatively unclear what leader behaviors lead to successful follower performance in a virtual team. The existing literature suggests that those behaviors may vary from those in face-to-face teams (Gajendran, Joshi, 2012; Malhotra et al., 2007; Saphiere, 1996; Schmidt, 2014).

Although the cited literature concerning transformational leadership allowed us to understand the topic, it is small compared to the amount of research on virtual teams as a whole and the popularity of virtual teams in modern organizations (Schmidt, 2014).

## 4. Conclusion

Globalization will drive the need for virtual teams in the organizations. The topic of leadership in virtual teams is an increasingly important issue, especially for those doing business globally. Leadership in global virtual teams is important. Leaders may play a central role in functioning of global virtual teams, particularly as they influence team members how to deal with obstacles, face challenges and reach common goals.

Transformational leadership is one of the appropriate models to deal with global virtual teams. It appears clear that leadership is necessary for success in the virtual settings, however, is not as clear which leadership model to choose.

Transformational leadership can increase performance, satisfaction, and motivation of the virtual team members. The critical analysis of the literature found that the most important attributes of leaders in virtual teams are integrity, self-confidence, a genuine concern for others, empowerment, trust, ethical decision making, decisiveness, and regular and clear communication.

Limitation of that study is many of the attributes of transformational leadership theory are contained within the definition of other leadership definitions. The virtual environment raises unique concerns and challenges, and a greater understanding of leadership attributes that are important to members of a virtual team. This may have a huge impact on the learning processes that affect not only knowledge transfer but also the team's success.

There is a very little research concerning leadership style and project success in a virtual environment. The few studies have systematically examined leadership in virtual teams. A fresh look at leadership in virtual teams is needed due to the increasing trend toward global virtual teams. We are still early in the process of establishing the best practices that will guide new ways of working in and leading the global virtual teams.

The results from that study might bring some managerial implications. Human resources can apply the findings of this study by searching for qualities and attributes of transformational leadership when selecting managers of global virtual teams. This focus on selecting leaders having such qualities could positively affect virtual team engagement and outcomes.

## References

Alimo - Metcalfe, B., Alban - Metcalfe, R. J. (1999). The transformational leadership questionnaire (TLQ - LGV): A convergent and discriminate validation study. *Leadership and Organization Development Journal*, vol. 21, iss. 6, pp. 280-296.

Andressen, P., Konradt, U., Neck, C. P. (2012). The Relation Between Self-Leadership and Transformational Leadership: Competing Models and the Moderating Role of Virtuality. *Journal of Leadership & Organizational Studies*, vol. 20, iss. 10, pp. 1-15.

Antonakis, J., Avolio, B. J., Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *Leadership Quarterly*, vol. 14, pp. 261–295.

Armstrong, D. J., Cole, P. (2002). Managing distances and differences in geographically distributed work groups. In . Hinds P., Kiesler S., (eds.). *Distributed Work*. Cambridge, MA: The MIT Press, pp. 167-186.

Arnold, G. E. (2008). Examining the relationship between leadership style and project success in virtual projects. A Dissertation, 2008.

Avolio, B. J., Bass, B. M. (1991). Full - range training of leadership. Manual. Binghamton, NY: Bass/Avolio, Associates, 1991.

Avolio, B. J., Kahai, S. (2003). Placing the "E" in e-leadership: Minor tweak or fundamental change. In Murphy S.E., Riggio R.E., (eds.). *The future of leadership development*. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 49-70.

Avolio, B. J., Kahai, S. S., Dodge, G. E. (2001). E-leadership: Implications for theory, research, and practice. *Leadership Quarterly*, vol. 11, pp. 615-668.

Barling, J. (2000). Editorial. Journal of Occupational Health Psychology, vol. 5, pp. 1-2.

Barling, J., Weber, T., Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, vol. 81, pp. 827-832.

Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press, 1985.

Bass, B. M. (1998). Transformational leadership: Industrial, military, and educational impact. Mahwah, NJ: Erlbaum, 1998.

Bell, B. S., Kozlowski, S. J. (2002). A typology of virtual teams: Implications for effective leadership. *Group and Organizational Management*, vol. 21, pp. 14-49.

Berlew, D. E. (1974). Leadership and organizational excitement. California Management Review, vol. 17, pp. 21-30.

Braga, D. (2003). *Transformational leadership attributes as perceived by team members of knowledge networks*. Doctoral dissertation. Pepperdine University, 2003.

Burns, J. M. (1978). Leadership. New York: HarperCollins, 1978.

Carte, T. A., Chidambaram, L., Becker, A. (2006). Emergent leadership in self-managed virtual teams. *Group Decision and Negotiation*, vol. 15, iss. 4, p. 323.

Chinowsky, P. S., Rojas, E. M. (2003). Virtual teams: Guide to successful implementation. *Journal of Management in Engineering*, vol. 19, iss. 3, pp. 98-106.

Conger, J. A., Kanungo, R. N. (1987). Towards a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, vol. 12, pp. 637-647.

Coulson - Thomas, C. J. (1998). Career, development and the future of the organization. *Career Development International*, vol. 3, pp. 13-17.

Cox, L. R. (2005). Virtual teams: An exploratory study of the effect of leader behavior on team effectiveness. A Dissertation, 2005.

Cromb, D. (2005). Implementing virtual teams: A guide to organizational and human factors. *Leadership & Organization Development Journal*, vol. 26, p. 166.

Duarte, D. L., Tennant-Snyder, N. (1999). *Mastering virtual teams: Strategies, tools, and techniques that succeed.* San Francisco: Jossey – Bass, 1999.

Dube, L., Pare, G. (2004). The multi-faceted nature of virtual team. In D. J. Pauleen (eds.). *Virtual teams: Projects, protocols, and process*. Hershey, PA: Idea Group, 2004, pp. 1-39.

Dvir, T., Eden, D., Avolio, B. J., Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, vol. 45, pp. 735-744.

Gajendran, R. S., Joshi, A. (2012). Innovation in globally distributed teams: The role of LMX, communication frequency, and member influence on team decisions. *Journal of Applied Psychology*, vol. 97, pp. 1252-1261.

Garton, C., Wegryn, K. (2006). Managing without walls: Maximize success with virtual, global, and cross - cultural teams. Double Oak, TX: MC Press, LLC, 2006.

Geyer, A.L.J., Steyrer, J. M. (1998). Transformational leadership and objective performance in banks. *Applied Psychology*. *An International Review*, vol. 47, pp. 397-420.

Gibson, C., Cohen, S. (2003). Virtual teams that work: Creating conditions for virtual team effectiveness. San Francisco: Jossey – Bass, 2003.

Hambley, L. A., O'Neill, T. A., Kline, T. J. (2007). Virtual team leadership: The effects of leadership style and communication medium on team interaction styles and outcomes. *Organizational Behavior & Human Decision Processes*, vol. 103, iss. 1, pp. 1-20.

Harvey, M., Novicevic, M. M., Garrison, G. (2005). Global virtual teams: A human resource capital architecture. *International Journal of Human Resource Management*, vol. 16, pp. 1583-1599.

Hater, J. J., Bass, B. M. (1998). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, vol. 73, pp. 695-702.

Hautala, T.M. (2006). The relationship between personality and transformational leadership. *Journal of Management Development*, vol. 25, iss. 8, pp. 777-794.

Hertel, G., Geister, S., Konradt, U. (2005). Managing virtual teams: a review of current empirical research. *Human Resource Management Review*, vol. 15, pp. 69-95.

Hertel, G., Konradt, U., Orlikowski, B. (2004). Managing distance by interdependence: goal setting, task interdependence, and team based rewards in virtual teams. *European Journal of Work and Organizational Psychology*, vol. 13, pp. 1-28.

Hill, N. S., Bartol, K. M. (2016). Empowering leadership and effective collaboration in geographically dispersed teams. *Personnel psychology*, vol. 69, pp. 159-198.

Hollander, E. P., Offermann, L. R. (1990). Power and leadership in organizations: Relationships in transition. *American Psychologist*, vol. 45, pp. 179-189.

House, R. J. (1977). A 1976 theory of charismatic leadership. In Hunt, J. G., Larson, L. L. (eds.). *Leadership: The cutting edge.* Carbondale: Southern Illinois University Press, pp. 189-207.

House, R. J., Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis? *Journal of Management*, vol. 23, pp. 409-473.

Howell, J. M., Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control and support for innovation: Key predictors of consolidated - business unit performance. *Journal of Applied Psychology*, vol. 78, pp. 891-902.

- Hoyt, C. L., Blascovich, J. (2003). Transformational and transactional leadership in virtual and physical environments. *Small Group Research*, vol. 34, pp. 678-715.
- Jones, R., Oyung, R., Pace, L. (2005). Working virtually: Challenges of virtual teams. Hershey, PA: Cybertech Publishing, 2005.
- Jung, D. I., Chow, C., Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *Leadership Quarterly*, vol. 14, pp. 525-545.
- Jung, D. I., Sosik, J. J. (2002). Transformational leadership in work groups: The role of empowerment, cohesiveness, and collective-efficacy on perceived group performance. *Small Group Research*, vol. 33, pp. 313-336.
- Kahai, S., Avolio, B. (2006). Leadership style, anonymity, and the discussion of an ethical issue in an electronic context. *International Journal of e-Collaboration*, vol. 2, iss. 2, pp. 1–26.
- Kahai, S., Sosik, J., Avolio, B. (1997). Effects of leadership style and problem structure on work group process and outcomes in an electronic meeting system environment. *Personnel Psychology*, vol. 50, pp. 121-146.
- Kahai, S. S., Sosik, J. J., Avolio, B. J. (2003). Effects of leadership style, and rewards on creativity-relevant processes and outcomes in an electronic meeting context. *Leadership Quarterly*, vol. 14, pp. 499-524.
- Kahai, S., Sosik, J., Avolio, B. (2004). Effects of participative and directive leadership in electronic groups. *Groups and Organization Management*, vol. 29, iss. 1, pp. 67-105.
- Kark, R., Shamir, B., Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, vol. 88, pp. 246-255.
- Kelloway, K., Barling, J., Kelly, E., Comtois, J. Gatien, B. (2003). Remote transformational leadership, *Journal of Leadership and Organization*, vol. 24, iss. 3, pp. 163-171.
- Kerber, K. W., Buono, A. F. (2004). Leadership challenges in global virtual teams: Lessons from the field. *SAM Advanced Management Journal*, vol. 69, iss. 4, pp. 4-10.
- Kirkman, B. L., Chen, G., Farh, J.-L., Chen, Z., Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, vol. 52, iss. 4, pp. 744-764.
- Lipnack, J., Stamps, J. (2000). Virtual teams: People working across boundaries with technology. Hoboken, NJ: Wiley 2000.
- Maher, A. (2014). Leading remote and virtual teams In A real challenge for leaders and entrepreneurs. Proceedings of the 2nd European Conference on Management, Leadership, and Governance, Wellesley: Babson College, pp. 160-166.
- Malhotra, A., Majchrzak, A., Rosen, B. (2007). Leading virtual teams. *Academy of Management Perspectives*, vol. 21, pp. 60-70.
- Mankin, D., Cohen, S. (2003). Business without boundaries: An action framework for collaborating across time, distance, organization, and culture. San Francisco: Jossey Bass, 2003.
- Mawanda, H. J. (2012). Beyond technology, an analysis of the perceived impact of transformational leadership and contingent rewards as extrinsic motivation on virtual team member satisfaction and leadership effectiveness: A quantitative study. A Dissertation Presented in Partial Fulfillment. Capella University, 2012.
- McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of Business Studies Quarterly*, vol. 5, iss. 4, pp. 117-130.
- Nemiro, J. (2004). Creativity in virtual teams: Key components for success. San Francisco: Jossey Bass/Pfeiffer, 2004.
- Nemiro, J., Beyerlein, M., Beyerlein, L., Beyerlein, S. (2008). The handbook of high-performance virtual teams. A toolkit for collaborating across boundaries. San Francisco: Jossey Bass, 2008.
- Padsokoff, P. M., MacKenzie, S. B., Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, vol. 22, pp. 259-298.
- Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Executive*, vol. 18, pp. 47-57.
- Pillani, P. M., Williams, E. S. (1999). Fairness perception and trust as mediators for transformational and transactional leadership: A two sample study. Journal of Management, vol. 25, pp. 649-661.
- Purvanova, R. K., Bono, J. E. (2009). Transformational leadership in context: Face-to-face and virtual teams. *The Leadership Quarterly*, vol. 20, pp. 343–357.
- Richardson, B. (1995). Learning contexts and roles for the leaning organization leader. *Learning Organization*, vol. 2, pp. 15-33.
- Ruggieri, S. (2009). Leadership in virtual teams: a comparison of transformational and transactional leaders. *Social Behavior & Personality: An International Journal*, vol. 37, iss. 8, pp. 1017-1021.

Saphiere, D. M. H. (1996). Productive behaviors of global business teams. *International Journal of Intercultural Relations*, vol. 20, iss. 2, pp. 227-259.

Schmidt, G. B. (2014). Virtual Leadership: An Important Leadership Context. *Industrial and Organizational Psychology*, vol. 7, iss. 2, pp. 182-187.

Shamir, B., Howell, J. M. (1999). Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *Leadership Quarterly*, vol. 10, iss. 2, pp. 19-47.

Sobel-Lojeski, K., Reilly, R. (2006). The role of virtual distance in innovation and success. *Proceedings of the 39th Annual Hawaii International Conference on System Science HICSS*, Kauia, 2006.

Sosik, J. J., Avolio, B. J., Kahai, S. S. (1997). Effects of leadership style and anonymity on group potency and effectiveness in a group decision support system environment. *Journal of Applied Psychology*, vol. 82, iss. 1, pp. 89-103.

Sosik, J. J., Avolio, B. J., Kahai, S. S., Jung, D. I. (1998). Computer supported work group potency and effectiveness: the role of transformational leadership, anonymity, and task interdependence. *Computers in Human Behavior*, vol. 14, iss. 3, pp. 491–511.

Sosik, J. J., Megerian, L. E. (1999). Understanding leader emotional intelligence and performance. *Group and Organization Management*, vol. 24, iss. 3, pp. 367-390.

Vlosky, R., Fontenot, R., Blalock, L. (2000). Extranets: Impacts on business practices and relationships. *Journal of Business and Industrial Marketing*, vol. 15, iss. 6, pp. 438-457.

Yagil, D. (1998). Charismatic leadership and organizational hierarchy: Attribution of charisma to close and distant leaders. *Leadership Quarterly*, vol. 9, iss. 2, pp. 161-176.

Weisband, S. (2002). Maintaining awareness in distributed team collaboration: Implications for leadership and performance. In Hinds P., Kiesler S. (eds.). Distributed work. Cambridge, MA: MIT Press, pp. 311-333.

Whitford, T., Moss, S. A. (2009). Transformational Leadership in Distributed Work Groups: The Moderating Role of Follower Regulatory Focus and Goal Orientation. *Communication Research*, vol. 20, iss. 10, pp. 1-28.

Wren, J. T. (1995). The leader's companion. New York: Free Press, 1995.

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## 7. THE ROLE OF CULTURE IN INTERNATIONAL MARKETING

**Abstract:** The paper is devoted to the role that culture plays in international marketing. The authors draw attention to an integral part of human capital in – the intercultural competence that is deemed relevant in international advertising campaigns. The authors define the concept of culture, analyse the components of culture, and explain models of culture developed by the most prominent researchers based on cultural dimensions. Since culture, cultural environment, and their characteristics are considered to be the key prerequisites for successful and effective advertising campaigns in foreign markets, categories of differences related to cultural environment, such as cultural imperatives, cultural electiveness, cultural exclusiveness and last but not least cultural taboos are also dealt with. The empirical section of the paper provides examples of mistakes made by some of the biggest brands to prove that advertising campaigns have to reflect specific cultural differences and expectations across nations. In the paper, literature research methodology, as well as comparative analysis were employed.

Keywords: cultural environment, culture, intercultural competence, cultural dimensions, commercial

JEL Classification: M3, Z00

## 1. Introduction

21st century has marked advances in the field of information technology and ever-increasing pace of change and more competitive global markets, and thus high expectations of customers. Undoubtedly, marketing is to take into consideration these circumstances as well. Traditionally, marketing was perceived as a tool to increase sales with producers playing the most important role. Over time, customers have moved to the foreground. Since customers have different needs and expectations across countries, local markets need to be understood and different customs and cultures need to be adapted to when developing promotional campaigns for products and services in overseas markets. We maintain that a competitive and knowledge-based society requires qualified, creative and suitably trained people possessing human capital in order to be capable of facing and responding flexibly to major challenges within a society. Human capital refers to the "ability of an individual to create new knowledge (innovations)" (Vojtovič, 2009, p. 320). It follows, that new knowledge is the key prerequisite for economic and social progress of societies. New knowledge means that "it is something new, what distinguishes itself from the old one. It is new not only because knowledge is its driving engine (knowledge economy), neither because it uses innovations (innovative economy), nor because it is network-interconnected (network economy) (Krajňáková, Vojtovič, 2011, p.144). Since new knowledge can be created by highly-qualified people with sound human capital, we agree that "investing in human capital brings about improvement of performance, flexibility, and productivity, and enhances the ability to innovate, which naturally follows from continuous enhancement of qualification as well as skills and expertise of staff" (Vojtovič et al., 2013, p. 42). It follows that human capital of marketers acting in international markets must also include intercultural competence. Intercultural competence is defined as the "ability to communicate effectively and appropriately in intercultural situations" (Deardorff, 2006, p. 238). It goes without saying that "individuals capable of

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effective cross-cultural communication can limit potential misunderstandings, minimize social barriers, and reduce ethnocentrism" (Lauring, 2011). The purpose of the paper is to draw attention to the importance of possessing intercultural competence, and being aware of cultural differences affecting marketing strategies in international markets.

## 2. The role of cultural environment in international marketing

International marketing refers to the application of marketing principles to more than one country. It can also be perceived as a business strategy focusing on international markets and optimum placement of goods and services on the markets as well as a business strategy, through which foreign markets are examined and suitable ways how to enter these markets are chosen. International marketing is aimed to understand distinct environments. Therefore, companies shall not only take into consideration the features of local markets but also tailor their marketing strategy accordingly. There are several factors that need to be regarded when entering foreign markets, such as social and cultural differences governing foreign consumers' behaviour and decision-making, trade and political conditions, legal conditions, organization of foreign markets (incl. problems related to the market research / entry to the distribution networks), preference of goods and services of domestic origin, way of life, language barriers, need to adapt marketing mix, other local factors. When not respecting these differences, serious blunders may occur (Kotler, 2001). All societies and their cultures share common characteristics. Due to potential clash of cultures in international trade, cultural sensitivity and awareness are of critical importance. There are numerous reasons why companies decide to enter foreign markets, such as for instance higher revenues, cost savings, effort to reduce dependency on a single market, product life-cycle extension, etc. In relation to international marketing, cultural environment is of primary concern. Culture affects the behaviour of individuals, groups and entire society; and is shaping their attitudes, values, assumptions, and habits. Not respecting this set of rules, values and expectations may result in misunderstandings or even conflicts. Thus, culture refers to a system of values, social norms and rules, which are typical for society and which are passed from generation to generation through cultural elements, such as language, symbols, history, ceremonies, rituals, values, norms, etc. Values that underpin the social and cultural system of society are learned in the process of socialization. The value paradigm is always unique, and may change over time, but the change tends to be rather slow. Thus, global marketing has to consider distinct cultural environments that influence consumer behaviour patterns. What some cultures may perceive as improper practices may be viewed as moral or acceptable by other cultures. The scientific model of "the structure of culture" points to the relations and bonds between the basic subsystems of culture: the system of education, science, art, mythology, morality, politics, religion, etc. Sociologists say that culture refers to the properties of society. Culture arises from society and society evolves thanks to culture, and the demise of society means the demise of culture. Actually, each culture refers to the ways one classifies or denotes objective reality and views the world, which is reflected in one's thinking, feeling and doing. Moreover, culture is associated to the way humans sense, perceive and organize everything that surrounds them and which is apparent in the way they communicate. They are the patterns of meaning that are passed on from generation to generation by means of symbols, communication schemes or models. Thus, culture is understood as a way of being, thinking, feeling and acting that humans have acquired in a particular social and linguistic environment.

In order to identify differences across cultures, several models of culture been developed. Kluckhohn and Strodtbeck (1961) proposed a model of culture that was based on value orientations. They argued that cultures can be distinguished by the way they address five common human concerns, such as man-nature relationship (attitudes towards the need or responsibility to control nature or live in harmony with nature), time sense (attitudes towards past, present and future), human nature (attitudes towards the basic nature of people), human activity (being, becoming or learning mode of activity) and social relations (hierarchical, collateral or individual form of organization). Trompenaars (1998, p. 6) regarded culture as "a dynamic process of solving human problems/dilemmas in the areas of human relationships, time, nature". He developed the onion model of culture as he believed that the levels of culture can be compared to the layers of an onion. There are a number of interpretations of this model but the simplest one consists of three or five layers. The outer, explicit or visible layers, represent cultural artefacts and symbols such as flags, architecture, hair styles, jewellery or traditional clothing and all the material things that the culture has ever made. The next layer is represented by language,

common rituals, customs and traditions. This could include how people greet each other, how they eat meals, get married or practice their religion. Next layers, noticeable but more implicit or invisible ones, represent norms, rules, values, beliefs and attitudes that are much harder to recognize, get to know and understand. In the centre of the onion, there is the most implicit, most invisible layer of the culture that hides the underlying values, cultural assumptions and the worldview of the culture which influence all of the other layers. Culture is the "context in which things happen; out of context even legal matters lack significance" (Trompenaars, 1998, p.8). Trompenaars and Hampden-Turner (1997) classified cultures along a mix of patterns related to behaviour and values, and developed a cultural model composed of seven dimensions/dilemmas: universalism versus particularism, individualism versus communitarianism, achievement versus ascription, neutral versus emotional, specific versus diffuse, sequential versus synchronous time, internal direction versus outer direction. We believe that the first dilemma addresses an issue of importance, be it standards or relations. Universalist cultures value standards and values that can only be departed from after consultation. On the other hand, particularistic cultures tend to look for something special and distinct to create something incomparable. We believe that the individualism versus communitarianism dimension poses a question whether we act as individuals or as a part of a group. The dimension of achievement versus ascription concerns the human worth, whether performance-based or ascribed – derived from origin, gender, age, career or a person's career or position. Neutral versus emotional dimension deals with emotions, whether controlled or expressed in an open and spontaneous manner. The fifth dilemma deals with the way members of a particular culture distinguish between public and private space. Specific-culture individuals have a large public space which is easily shared with others. Small private space is shared with close friends and associates. The public and private space of diffuse culture individuals, however, tends to be interwoven. The sixth dilemma is concerned with time – synchronous time individuals are able to work on various projects at once whereas sequential culture individuals focus on one activity or project at a time. The dimension on internal direction versus external direction addresses the way people relate to their environment – people with internal direction believe they can control nature to achieve goals while the outer direction people think just the opposite – they believe that nature, or their environment control them.

In his classic study of culture, Geert Hofstede (Lustig, Koester, 2009, p.113-139) identified the following five dimensions of culture:

- 1) Individualism/collectivism describing the strength of the relation between and individual and other individuals in the society. In cultures that are high in individualism, people tend to think and act as individuals rather than as members of a group. In cultures that are high in collectivism, people think of themselves mainly as group members.
- 2) Power distance concerns the way the culture deals with unequal distribution of power and defines the amount of inequality that is normal. In countries with large power distances, the culture defines it as normal to maintain large differences in power. In countries with small power distances, people try to eliminate inequalities.
- 3) Uncertainty avoidance describes how cultures handle the fact that the future is unpredictable. High uncertainty avoidance refers to a strong cultural preference for structured situations. In countries with high uncertainty avoidance, people tend to rely heavily on religion, law, and technology to give them a degree of security and clear rules about how to behave. In countries with low uncertainty avoidance, people seem to take each day as it comes.
- 4) Masculinity/femininity is the emphasis a culture places on practices or qualities that have traditionally been considered masculine or feminine. A "masculine" culture is a culture that values achievement, money making, assertiveness, and competition. A "feminine" culture is one that places a high value on relationships, service, care for the weak, and preserving the environment.
- 5) Long-term/short-term orientation suggests whether the focus of cultural values is on the future (long term) or the past and present (short term). Cultures with a long-term orientation value saving and persistence, which tend to pay off in the future.
- 6) The dimension related to indulgence versus restraint juxtaposes hedonism with self-discipline. Thus, high-indulgence cultures encourage pleasure, enjoyment, consumption, spending whereas high-restraint cultures encourage the control of such hedonistic gratifications, and the pleasures and enjoyment that go hand in hand with leisure-time activities.

Hall (1996) distinguishes high-context and low-context cultures. High-context cultures place more emphasis on the context than the words even though words play a decisive role and less legal documents are used in such cultures. Thus, the pace of negotiations tends to be slower as it takes time to establish trust and create close relationships. High-context cultures are characterized by high use of non-verbal communication. High-context countries include Japan and other countries located in Asia, Brazil and other countries located in South America, countries located in Africa, and a majority of Middle East countries. The reverse is true for low-context cultures that convey messages rather by words than non-verbal means. Verbal messages are clear and direct. The pace of negotiations is fast, communication depends on language precision and legal documents. Low-context cultures include the USA, European countries, especially Anglo-Saxon cultures. Hall (1996) also categorized cultures according to their attitude towards time. Thus, cultures were divided into strongly monochronic, slightly monochronic and polychromic ones. Monochromic cultures do one thing at a time, they like to concentrate on the job at hand, respect privacy, and adhere to plans and deadlines. Polychronic cultures like to do multiple things simultaneously, tend to change plans often and easily, and their main concern are people, mainly those closely related to them. In addition to the above models of culture, there have also been other scholars researching cultural models and cultural differences. We, however, believe that the above authors laid the foundations for further exploration of cultures in terms of cultural dimensions. We maintain that the research of cultural differences is of paramount importance in the globalized world of today. This is why companies acting globally should match their marketing strategies with national differences in terms of consumer needs, habits, as well as norms, political, economic, cultural and social conditions. Figure 1 shows cultural environment related to international marketing.

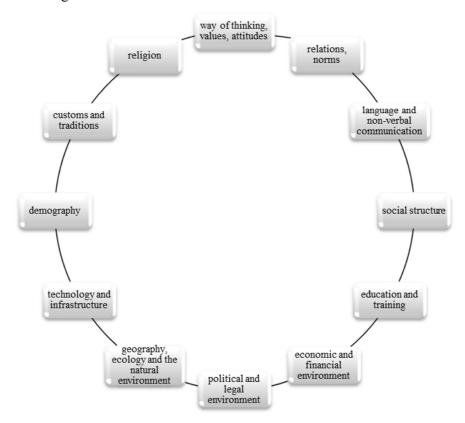


Figure 1. Cultural environment related to international marketing

Source: Elaborated and adapted by authors according to Kotler, Armstrong, 2004

- There are 4 categories of differences related to cultural environment (Knapik, Zorkóciová, 2006, p.75):
- Cultural imperatives that are the customs companies must conform to if they want to succeed.
   Relationship and trust building is an example of cultural imperative in many Asian countries such as China and Japan and Latin American countries. Before doing business in these countries, it is a cultural imperative to devote some time to building relationship and trust.

- Cultural electiveness refers to customs that one may conform to, but is not obliged to. These
  customs are to build friendship and trust, e.g. taking a bow when meeting a Japanese business
  partner.
- Cultural exclusiveness relates to customs that are only for local people and foreigners should not try to partake in these customs. If for instance Christians go to the Middle East, they should not attempt to act like Muslims because this would be insulting their religion.
- Cultural taboos that cannot be violated by locals as well as foreigners.

## 2.1. Methodology of research

The purpose of the paper is to draw attention to the role that culture and cultural environment play in international marketing campaigns. In the empirical section, several marketing blunders made by some of the biggest brands are provided to prove that advertising campaigns have to be accommodated to specific cultural differences across nations. In addition, differences in wine and beer commercials related to distinct cultural settings are pointed to. In the paper, literature research methodology, as well as comparative analysis and synthesis were employed.

## 2.2. International advertising campaigns and cultural settings

Culturally-bound blunders or cross-language errors made in international marketing campaigns may cause various problems. An example would be the problems Chevrolet had marketing the Chevy Nova automobile in Latin America. "Nova" means "it doesn't go" in Spanish. As a result, Chevrolet was forced to pull the car out of the market.

Other cross-language errors in advertising include the translation of Pepsi slogan "Come alive with the Pepsi Generation" which came out as "Pepsi will bring your ancestors back from the dead" in Taiwan

Even an experienced multinational company like McDonald's can make blunders. In the course of a World Cup Promotion, Mc Donald's printed the flags of competitor countries on throwaway hamburger wrappers. One of the competitor countries was Saudi Arabia whose green and white flag bears a passage in Arabic that can be translated as "There is no God but Allah, and Mohammed is his Prophet". Offended Muslims complained that such sacred words should not be crumpled up and thrown in the trash.

Philips started to make profit in Japan after their coffee-makers were redesigned to be smaller in dimensions so that they could fit into the compact Japanese kitchens. Philips also had to downsize its shavers to fit the smaller Japanese hand. Another blunder in Japan occurred when SC Johnson launched their cleaning way in Japanese shops. Many people have wooden floors in their homes, so it was likely to sell well. The marketing department of SC Johnson, however, had not thought about the fact that no one wears shoes inside.

Another example would be Hallmark cards that had to be withdrawn from the French market. The Hallmark cards always have a special message, but the French people preferred hand-written cards instead; they find it more personal and more appealing.

The last example would be Coca-Cola that was forced to withdraw 2 litre bottle from the Spanish market, after discovering that few Spanish had refrigerators with compartments big enough for such a bottle. It is obvious that developing a successful marketing policy requires marketing specialists to know and understand the culture in which one wants to do well. It is the understanding and awareness of cultural environment that are instrumental in better understanding of consumer behaviour, needs and wants for goods and services. These days, many western fashion designers have enthusiastic customers in Middle Eastern women. To succeed, however, they need to make some adjustments. For instance, Italian clothing manufacturer Missoni makes sure its collections include longer pants and skirts and shawls to cover the head and bare shoulders. Moreover, advertising possibilities are constrained as companies cannot utilize some of the sexier images being used in the West (Solomon et al., 2014).

It follows that culture is one of the elements in a company's international marketing strategy that can determine success or failure of a product in overseas markets. In order to be effective, any marketing campaign, primarily television advertisements should reflect local customs, lifestyle, and economic conditions related to the target culture. If not so, the advertising message may be unpersuasive and/or completely ineffective since the message encoded by one culture must be correctly decoded by the other culture. In order to understand the process of decoding in the target

market, it has to be found out why and by whom the product is purchased, how the product is viewed by consumers and what its position in the target culture is. An example would be table wine that is drunk on special occasions in many countries in Central and Northern Europe. On the other hand, wine is drunk as a normal part of the daily diet. Therefore, wine advertisements showing wine as luxury products would be confusing for Southern Europeans. It follows that any marketing strategy has to be adapted to local cultural customs.

Concerning beer advertising in overseas markets, beer television advertisements broadcast on several international channels were watched and compared. It was found that beer that is being drunk in all European Union countries is advertised under different cultural contexts according to some authors such as Edward Hall. In Spain, drinking beer is usually associated with football and a company of friends while watching football matches. In Germany, however, drinking beer is utterly a social act – beer is drunk during trips to beaches, at picnics and is considered the perfect drink for a gathering of friends. Drinking beer in Germany is also associated with the centuries-old tradition of brewing high-quality beer. Beer commercials shown in both Spain and Germany do not usually include many women contrary to Great Britain where women appear together with men in advertisements for beer. They usually wear attractive clothing and the portrayal of women can be regarded as slightly erotic. In commercials shown in Great Britain, beer is drunk to relax after coming home from work without the presence of anybody else - a depiction that is not at all used in German and Spanish advertising. The sample of commercials was not big enough and only the cultural environment in relation to advertising strategy was drawn attention to. It was, however, found that commercials do respect differences across cultures that should not be underestimated when developing international advertising strategies.

## 3. Conclusion

The process of globalization requires companies and organizations to acquire and develop the competences to compete successfully in international markets. One of such competences, an integral part of human capital, is intercultural competence. The cultural impacts on international marketing are immense. Failing to understand cultural differences in a market can have disastrous consequences. It is apparent that developing an effective marketing policy requires marketing specialists to know and understand the culture in which they want to succeed. Culture has a profound impact on the behaviour of individuals, groups and entire society; and is shaping their attitudes, values, assumptions, and habits. Paying not proper attention to this set of rules, values, assumptions, beliefs, expectations, and other may lead to misunderstandings or even conflicts. Thus, culture refers to a system of values, social norms and rules, which are typical for society and which are passed from generation to generation through cultural elements, such as language, symbols, history, ceremonies, rituals, values, norms, etc. Thus, global marketing has to take into consideration distinct cultural environments that shape and guide consumer behaviour patterns. It is the understanding and awareness of cultural environment that serve as a means of better understanding of consumer behaviour, needs and wants for goods and services. In order to succeed, any marketing promotion, primarily advertisements shown on television should reflect local customs, lifestyle, and social and economic conditions related to the target market since insensitivity to culture and local customs can make an advertisement unpersuasive or completely ineffective. Thus, the main advantage of the paper lies in detailing several models of culture that analyse cultural differences and can be used in the context of international marketing and advertising. Moreover, the paper attempts to draw attention to culture determining factors, i.e. cultural factors between different societies that have to be taken into consideration and reflected in the form and content of commercials and advertisements. The findings of the study on differences related to cross-cultural advertising are, however, limited due to the small sample size of adverts.

## References

Belás, J., Ključnikov, A., Vojtovič, S., Sobeková-Májková, M. (2015). Approach of the SME Entrepreneurs to Financial Risk Management in Relation to Gender and Level of Education. *Economics and Sociology*, vol. 8, no 4, pp. 32-42.

Deardoff, D.K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, vol. 10, no 3, pp. 241-266.

Grenčíková, A., Vojtovič, S., Gullerová, M. (2013). Staff qualification and the quality of tourism-related services in the Nitra region. *Bulletin of Geography. Socio-economic Series*, no 21, pp. 41-48.

Hall, E.T. (1996). Beyond Culture. New York: Doubleday, 1996.

Kluckhohn, F.R., Strodtbeck, F.L. (1961). Variations in value orientations. Evanston, IL: Row, Peterson, 1961.

Knapik, P. - Zorkóciová, O. (2006). Vplyv kultúrnych odlišností na obchod a rokovanie v medzinárodnom obchode. Bratislava: Ekonóm, 2006.

Kotler, P. (2001). Marketing. 10. rozšírené vydanie. Praha: Grada Publishing, 2001.

Kotler, P., Armstrong, G. (2004). Marketing. Praha: Grada Publishing, 2004.

Krajňáková, E., Vojtovič, S. (2011). Development of Science and Education among the Priorities of State. In 8<sup>th</sup> International Conference on Efficiency and Responsibility in Education. Prague: CZU, pp. 143-147.

Krajňáková, E., Vojtovič, S. (2014). Priorities in the Methods and Forms of Higher Education. In *International Conference: Psychology & Psychiatry, Sociology & Healthcare Education*. Sofia: SGEM, pp. 673-682.

Lauring, J. (2011). Intercultural organizational communication. Journal of Business Communication, vol. 48, iss.3, pp. 231-255.

Lustig, M.W, Koester, J. (2009). *Intercultural Competence: Interpersonal Communication across Cultures*. Boston: Pearson Education., 2009.

Solomon, M. R, Marshall, G. W., Stuart, E. W. (2014). *Marketing. Real people, real choices*. 7 ed. Prentice Hall: New Jersey, 2014.

Strunz H., Vojtovic, S. (2014). Vocational Training and Employment in the Creative Industry. In *Political Sciences, Law, Finance Economics & Tourism*. Sofia: SGEM, pp. 787-794.

Trompenaars, F. (1998). Riding the Waves of Culture: Understanding Diversity in Global Business. New York: McGraw Hill, 1998.

Vojtovič, S. (2009). Ľudský potenciál ako facilitátor rozvoja regiónu. In *Význam ľudského potenciálu v regionálnom rozvoji*. Zborník z vedeckej konferencie. Podhájska: EEDA, pp. 318-327.

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## 8. COMMUNICATION CHALLENGES IN THE MULTI-CULTURAL CONTEXT

**Abstract:** The nature of the business environment of the 21<sup>st</sup> century has adopted new multicultural make-up which brings differences in areas such as communication styles, approach to time, managerial styles and a number of other cross cultural differences. Cultural diversity can be seen as a useful asset owing to possibilities of innovation resulting from the combination of different cultural perspectives. However, management of communication between individuals and groups from different cultural backgrounds can be a critical issue. This article aims to present the insights gained from the outcomes of the small-scale research study on the communication aspects of culturally diverse settings. The study has adopted a form of a questionnaire that was distributed at three multinational companies. The point of departure for the study has been an effort to enhance language skills of the students of the Faculty of Social and Economic Relations at the Alexander Dubček University of Trenčín related to the challenges of multicultural environment and understanding of important aspects of the obstacles occurring in the intercultural communication.

Keywords: cross-cultural communication, cultural diversity, culture, intercultural competence, ESP

JEL Classification: Z19, M12

## 1. Introduction

Changes in the workplace composition resulting from globalization have led to practical concerns with the management of multicultural teams. With the increase in global activities of many companies, the need to understand different cultures has appeared to be profound. A diversified workforce creates cross-cultural differences leading to cross-cultural communication. Cultural backgrounds of the company staff influence their assumptions about how work, interactions and communication with other people should proceed. Managers would encounter numerous problems, conflicts as well as challenges to handle their employees coming from different cultures, habits and social background. Many organisations and their managers now believe that being interculturally competent is critical when working within multicultural teams.

One of the main objects of modern language learning is to prepare students to become not only competent to communicate in a foreign language, but also to be interculturally communicatively competent. Modern approaches are not only about learning grammatical, lexical and orthographic competence in a foreign language, but teachers must address culturally sensitive issues to ensure they are delivering language instruction their students will find useful in their future professions. If foreign language learners are to become effective cross-cultural communicators, it is essential to understand the role that culture plays within the multi-cultural settings.

## 2. Cross-cultural communication

For the purpose of conceptual clarification, we will first examine some of the concepts and terms that are used in this paper such as *culture*, *multinational organization*, *communication*, *cross-cultural communication*, *intercultural competence* and *ESP courses*.

As Solomon and Schnell (2009) point at, business cannot be separated from people and their cultural backgrounds. Understanding the culture promotes credibility and goodwill, inspires the workforce, and assists in effective management of the staff. First of all, let us look closely at the concept of culture. Culture as a dynamic and complex phenomenon is difficult to be encompassed in a single definition. Laroche (anthropologist) aims at fundamental human processes and sees culture as learned behaviour. These patterns of behaviour, the social practices that bind a group together include

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everyday life and interaction with others. Culture is traditionally defined as a system of values, beliefs, assumptions and norms, shared among a group of people. The group's cultural system is a general agreement among people about what is important and how things will get done. Adler (2002) talks about visible and invisible values and beliefs that are unique to each society and there is an effort to pass them on to younger members of the society. Some authors use very distinct visual samples like an onion (Hofstede, 1997; Trompenaars, 1993) or an iceberg (Hall, 1996).

Hofstede, whose dimensions of national culture theory appear to be a dominant theory in the area, compares the concept of culture to an onion, with several layers. The outer layer represents the explicated elements of culture, which can be observed, whereas the inner layers are implicit, residing in people's minds. Hofstede (2004) refers to culture as the *software of the mind* which distinguishes members of one group from another. The differences cover notions such as culture shock, national culture, perception and cultural awareness. However, there are more cultural differences lying below the surface of one's cultural awareness.

After outlining the concept of culture, let us look at dimensions of culture that represent the way a culture handles fundamental problems of the society, such as human inequality. Hofstede (2001, 2004) discussed the degree of interdependence a society maintains among individuals. This dimension is referred to as *Individualism versus Collectivism*. The second dimension is *Power Distance*, which can be large or small. Hofstede defines *Large Power Distance* societies as those where hierarchy and inequalities are accepted by the people. In *Small Power Distance* societies, there is the enhanced desire for power equalization (Hofstede, 2001). The third dimension – *Uncertainty Avoidance* – represents the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. Hofstede's fourth dimension refers to *Masculinity versus Femininity*. While the concept of masculinity represents a society focused on achievement, heroism, assertiveness and material success, a feminine society prefers relationships, modesty, caring for the weak and the quality of life (Hofstede, 2001). Hofstede later added also *Long-term Orientation* dimension that is linked with thrift and perseverance. *Short-term Orientation* is based on tradition and fulfilling social obligations (Hofstede, 2004).

Trompenaars' (1993) view of culture in terms of dimensions represents seven dimensions, some more or less similar to Hofstede's dimensions. These dimensions include the following aspects:

- a) universalism versus particularism
- b) individualism versus communitarianism
- c) neutral versus emotional
- d) specific versus diffuse
- e) achievement versus ascription
- f) sequential versus synchronic (passage of time)
- g) internalist versus externalist (natural environment) (Trompenaars, 1993).

Multinational organization is defined by Business dictionary as an enterprise operating in several countries but managed from one (home) country. As mentioned earlier, the companies who extend their business abroad have to face a challenge of cross-cultural communication. It follows that frequent communication and sufficient understanding for organizational goal is necessary. Communication is a purposeful activity of exchanging information and meaning across space and time using various technical or natural means, whichever is available or preferred (Harper, 2013). Companies need skilled people with ability to communicate the ideas and the information of the company. The communication within a company is divided by Riel and Fombrun (2007) into three theoretically defined areas: 1) management communication, 2) marketing communication, 3) organizational communication. However, in practice, it is not possible to make a clear cut between the three types of communication. In this research, we are focused on the cooperation and mutual support and understanding between different communicating parties in multicultural company context.

Owing to the growth of global business, technology and the Internet, the concept of cross-cultural communication has become strategically important to companies. This type of communication involves an understanding of how people from different cultures speak, communicate and perceive the world around them. The factors that can most affect cross-cultural communication include language differences, high-context vs. low-context cultures, nonverbal differences and power distance. The concept of high-and low-context culture is rooted in the above mentioned Hofstede's work. According to Hunt and Weintraub, the influence of context involves the degree to which protocol and tradition dictate how communication should proceed. In high-context cultures, greater emphasis is placed on protocol, and communication tends to move from the general to the specific. In low-context cultures, communication tends to be more to the

point, an approach that can come across to individuals from high-context cultures as rude. Nonverbal communication – gestures and eye contact – are also utilized differently across cultures. Employees should be trained in the correct way to handle nonverbal communication as to not offend other cultures. Power distance relates to how power is distributed within an organization. Companies with high power distance are often very hierarchical in nature and have severe differences in authority.

English language teachers are fully aware of the importance of culture in language classrooms which is justified by political and societal conditions. Globalization has found its way into schools and one of tasks of language education is to prepare students for this globalized world. An intercultural approach to language teaching gives one outlook on how to reach its desired outcome – intercultural competence. The aim of teaching English for specific purposes (ESP) at the Faculty of Social and Economic Relations of Alexander Dubcek University of Trenčín is to develop students' language competences and skills they will need for academic purposes as well as in the target situations related to their professions. Though the course syllabus is tailored to the needs of the students of the faculty, there is a constant need to educate not only creative, knowledgeable specialists, but specialists with a good command of several foreign languages, who are able to make decisions and work observing traditions of different cultures. Future Human resources managers must possess good communication skills and a high level of intercultural competence as they have to use language in different sociocultural contexts. Therefore, with the growth in requirements for language competence, the requirements for the development of intercultural competence have arisen. Hammer et al. (2003) defined intercultural competence as the ability to think and act in interculturally appropriate ways.

The best known model of intercultural competence is supplied by Byram. According to Byram (1997), intercultural competence includes five fundamental elements — attitude, knowledge, interpretation and relating skills, discovery and interaction skills, and critical awareness of culture or political education. Needless to say that developing intercultural competence is a rather slow learning process, which includes learning a foreign language, intercultural training and gaining experience from meeting people of other cultures. Foreign language proficiency is repeatedly emphasized as an indispensable means for the development of intercultural communication skills. Some authors point at misunderstandings in intercultural communication that predominantly result from limited proficiency in a foreign language of the participants in culturally diverse encounters (Birkner, Kern, 2000; Humphrey, 2007; Kramsch, 1986; Roberts, 2000). According to Lim (2002), language constitutes a system of representation for perception and thinking and could thus, to some extent, determine the nature of our thinking. In this view, ESP courses play an important role in improving students' intercultural competences, as well as teaching them the target language.

## 3. Research results

We carried out a small scale research in order to determine the communication ways and potential communication barriers in multinational company. Research was conducted in three multinational companies. The participants of the research filled a questionnaire that consisted of four parts. The first part involved questions about participants' gender, age, position and education. The second part included questions about the ways of communication in the multinational company. The third part dealt with the communication problems in multinational environment. The questions in the fourth part were designed with the aim to find ways to overcome communication barriers in multinational companies.

Table 1. Participants' (n=44) background information

Gender	#	%	Participants position	#	%
Male	22	50	Key staff (senior management)	2	4,5
Female	22	50	Middle management	30	68,2
			Office staff	8	18,1
Age			Technician	4	9,2
21-30	17	39			
31-40	18	41	Education		
41-50	6	13	High school diploma	6	13,6
51-60	3	7	Associate's/vocational degree	2	4,5
			Bachelor's degree	8	18,1
			Master's degree or higher	28	64,4
			Other		

Source: Own work

Forty-four employees of the three companies participated in the survey. The majority of the participants was under the age of forty, worked at the middle management level, and achieved at least Master's degrees.

Table 2. Types of communication

What type of communication do your managers prefer?

			Ma	le	Fem	ale	21-	30	31-	40	41-	50	51-	60
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
e-mails	9	20	6	14	3	6	4	9	2	4	2	4	1	2
phone calls	15	34	6	14	9	21	4	9	9	21	2	4	0	0
face-to-face meetings	14	32	9	21	5	11	3	7	8	18	2	4	1	2
video conferences	6	14	2	4	4	9	1	2	3	7	2	4	0	0
online communication	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Own work

Phone calls and face-to-face meetings appear to be the most preferred types of communication in the multinational companies representing over 85 per cent of communication encounters between managers and their subordinates. While men prefer face-to-face meetings, women favour phone calls. E-mail communication accounts for 9% and video conferences make up 6% of communication. The participants at the age of 21 to 40 give priority to phone calls (21%) and face-to-face meetings (19%). Online communication does not play an important role in communication in the three surveyed multinational companies.

**Table 3. Communication misunderstandings** 

Have you ever been in a cross-cultural communication which ended up in misunderstanding?

				ale	Fen	Female		21-30		31-40		41-50		-60
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
No	11	5	5	11	6	14	2	2	5	11	3	7	1	2
Yes, I misunderstood the person I talked to.	19	43	9	20	10	23	3	7	9	21	5	11	1	2
Yes, I was misunderstood.	14	32	8	19	6	13	3	7	7	16	3	7	1	2

Source: Own work

As the research figures show, 75% of the people working in multinational environment have been involved in a cross-cultural communication which ended up in misunderstanding.

Table 4. Causes of misunderstandings

In cross-cultural communication, have you ever misunderstood someone and/or been misunderstood due to the causes indicated below?

				;	Fema	ıle	21-30	0	31-40	0	41-50	0	51-	60
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Verbal misunderstandings	30	68	12	27	18	41	14	32	16	36	12	27	2	4
Vocal misunderstandings	8	18	3	7	5	11	2	4	6	14	0	0	0	0
Non-verbal misunderstandings	6	13	4	9	2	4	2	4	1	2	3	7	0	0

Source: Own work

According to the participants' responses, misunderstandings in cross-cultural communication are mostly caused by misinterpretation of words used (68%). The tone of voice (18%) and the body language (13%) can also play an important role in causing misunderstandings in cross-cultural communication. Women (41%) have more often to deal with verbal misunderstandings than men (27%). Non-verbal misunderstandings occur at the age of 41–50 most frequently.

**Table 5. Communication barriers** 

When there are communication barriers, what do you think the main reason(s) is/are?

				le	Fen	nale	21-30		31-40		41-50		51-60	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Language differences	17	39	9	21	8	18	4	9	9	21	3	7	1	2
Proximity to cultures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Educational diversity	6	14	3	7	3	7	2	4	4	9	0	0	0	0
Status	7	16	2	4	5	11	2	4	3	7	2	4	0	0
Nonverbal differences	2	4	0	0	2	4	0	0	1	2	1	2	0	0
Level of expertise	12	27	8	18	4	9	6	14	4	9	2	4	0	0

Source: Own work

According to our findings, language differences (17%) and level of expertise (12%) account for the most frequent communication barriers. Both, men and women, consider language differences similarly important. Men rank level of expertise higher than women. Educational diversity (14%) and status (16%) also play a significant role. Non-verbal differences account only for 4% of communication barriers.

Table 6. Suggestions on how to improve understanding in multicultural context

A great opportunity to improve your ability to communicate in multicultural environment is:

			Ma	le	Female		21-30		31-40		41-50		51-	60
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Talking about each other's cultures	17	39	6	14	11	25	2	4	11	25	3	7	1	2
Asking about ways to communicate better	7	16	2	4	5	12	1	2	3	7	3	7	0	0
Inviting someone to have dinner	2	4	1	2	1	2	0	0	0	0	1	2	1	2
Asking to be included in cultural celebrations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Giving a presentation about your culture	3	7	0	0	3	7	0	0	3	7	0	0	0	0
Sharing stories of childhood experiences	3	7	0	0	3	7	0	0	3	7	0	0	0	0
Showing pictures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Explaining customs	7	16	2	4	5	12	3	7	7	4	0	0	0	0
Bringing snacks typical of your culture	3	7	0	0	0	0	0	0	0	0	0	0	0	0
Presentations about co- workers cultures	2	4	0	0	. 0	. 0	0	0	0	0'	0	0	0	0

Source: Own work

As we can see in the Table 6, 39 % of participants involved in the survey believe that the best way to improve the ability to communicate in multicultural environment is to talk about each other's cultures. A total of 16% state that explaining customs and asking about ways to communicate better also represent good possibilities to increase one's communication ability in multicultural environment. Although a large percentage of women (24%) rate these two opportunities as relatively important, men (4%) consider them less important. Showing pictures and asking to be included in cultural celebrations are not reflected as a suitable opportunity for improving communication skills.

In order to measure the strength of a linear association between some variables we have calculated the Pearson correlation coefficient. First, we calculated the correlation between verbal misunderstandings, vocal misunderstandings and non-verbal misunderstandings. We have found out that there is a high correlation between verbal and vocal misunderstandings (0,873030547) and lower correlation between vocal and nonverbal communication (0,554063074). We also calculated the correlation between different communication barriers and we found out that there is a high correlation between education diversity and language barriers (0,973329699), and between language diversity and level of expertise (0,84123293). According to these figures, we can state that there is a very strong relationship between educational diversity and language barriers.

## 4. Conclusion

Working in a global team and dealing with business partners across cultures increases challenges and calls for new attitudes and skills. Our small scaled research has indicated that without the right approach, cultural differences can reduce effectiveness in communication. Individuals who encounter people from other cultures on daily basis at work should learn how to improve their performance through improving their communication skills. As the findings of the survey implies, the foreign language proficiency appears to be a crucial means for the progress of intercultural communication skills. Though the statement is supported by a number of experts in the field of cross-cultural communication (Birkner & Kern 2000; Humphrey 2007; Kramsch 1986; Roberts 2000), there are some other important aspects that need to be taken into consideration in cross-cultural communication such as educational diversity, status, and level of expertise.

There is obviously a constant need to overcome any barriers to conflict-free cross-cultural business communication. Therefore, teachers at higher education institutions preparing students for their future jobs within multinational environment should pay a great deal of attention to the development of their students' foreign language skills with the focus on using the language in diverse socio-cultural situations. Since the participants have emphasized the importance of phone calls and face-to-face meetings as the most preferred types of communication in the multinational companies, the teaching process should account for this fact and these types of communication should be regularly practised. Research findings have also pointed at the lack of expertise as one of the most often occurring communication barriers (12%). We suggest inclusion and development of foreign language terminology relevant to the future profession into teaching process as one of the effective means assisting in improvement of cross-cultural communication.

## References

Adler, N. (2002). International Dimensions of Organisational Behavior. 4<sup>th</sup> ed. McGill University: South Western, 2002.

Birkner, K., & Kern, F. (2000). Impression Management in East and West German Job Interviews. *In H. S. Oatley, Culturally Speaking: Managing Rapport in Talk Across Cultures* London: Continuum. pp. 255-271.

Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Clevedon: UK: Multilingual Matters, 1997.

Hall, E. T. (1976). Beyond culture. New York: Anchor Press, 1976.

Harper, N.M. (2013). The process and effects of communication. Urbana, Illinois: University of Illinois Press, 2013.

Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, 2<sup>nd</sup> ed. Thousand Oaks, CA: Sage Publications, 2001.

Hofstede, G. (2004). Cultures and Organizations: Software of the Mind, 2<sup>nd</sup> ed. Boston; McGraw-Hill, 2004.

Humphrey, D. (2007). *Intercultural Communication Competence: The State of Knowledge*. London: CILT: The National Centre for Languages, 2007.

Hunt, J. M., Weintraub, J. R. (2010). *The Coaching Manager: Developing Top Talent in Business*. 2nd ed. Sage Publications, 2010.

Kramsch, C. (1986). From Language Proficiency to Interactional Competence. *The Modern Language Journal*, vol. 70, iss. 4, pp. 366-372.

Lim, T. S. (2002). Language and Verbal Communication across Cultures. In W. B. Gudykunst, & B. Mody (eds.). *Handbook of International and Intercultural Communication*, 2nd ed. London: Sage Publishers, pp. 69-89.

Roberts, C. (2000). Professional Gatekeeping in Intercultural Encounters. In S. Sarangi, & M. Coulthard (eds.), *Discourse and Social Life* Harlow, UK: Pearson Education, pp. 102-120.

Riel, C. B. M. van & Fombrun, C.J. (2007). Essentials of Corporate Communication. London: Routledge, 2007.

Solomon, C. M. & Schell, M. S. (2009). *Managing Across Cultures – The Seven Keys to Doing Business with a Global Mindset*. New York: Mcgraw Hill, 2009.

Trompenaars, F. (1993). Riding the waves of culture: Understanding diversity in global business. New York: Irwin, 1993.

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## THE TRANSFORMATION OF LEAN MANAGEMENT INTO MODERN PRODUCTION INDUSTRIES – A SCIENTIFIC EVALUATION FRAMEWORK FOR LEAN MANAGEMENT METHODS

Abstract: Lean management is an important, heterogeneous and viable management model for efficient production, production development and process optimization. Today, many companies all over the world employ Lean Management (LM) methods. The history of LM begins with the well-structured development of the Toyota Production System (TPS) in the 1950s which has its roots in the 1920s when Toyota was still a loom manufacturer. In the 1950s and 1960s, Total Productive Maintenance (TPM) was developed and led to the more holistic Total Quality Management (TQM) approach in the 1980s and 1990s. The steady evolution of these concepts was primarily driven within the highly competitive automotive industry. Subsequently, LM methods were adapted, transformed and optimized for the machine-building industry and were applied increasingly therein. The aim of this paper is to elaborate and present a research method to evaluate if the diverse tools of lean manufacturing are also applicable to other producing industries. This research method will be applied in practice in the near future. The technology specifications and the human way of working, which are the foundation of a lean shop floor, result in distinct requirements per company and industry. To evaluate the possibility to adapt lean management methods for modern producing industries, a multi-level analysis framework with explorative, qualitative, and quantitative research components was elaborated. Based on the evaluation framework, the authors plan to analyse the appropriateness of identified LM methods from the semiconductor industry, for other modern production industries in future research activities.

Keywords: lean management, lean production, transformation, implementation, mixed-methods

JEL Classification: C18, L23, L60, M11

## 1. Introduction

The term lean management was introduced by Womack et al. (1990) and represents a set of individual but complementary management methods. The main topic covered by the authors' research activities is to review, translate, and transform traditional lean management methods into modern producing industries such as the micromechanical or the pharmaceutical industries. The goal is to elaborate and present a scientific evaluation framework which can be used without restrictions for the transformation of lean management methods into modern industries.

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The expected results of the ongoing research activities in this field should help to identify best practices in various producing industries. The scientific and empirical research, including practical experiences of diverse industries, concerning the LM methods in use, will help to evaluate the potential of translating and supporting the implementation of LM methods into industry sectors or industries where a distinct method has not yet been employed.

The core challenges for the scientific research, the practical use and transformation of methods in the field of lean management are both the technical characteristics of each production type and site as well as bringing the exposure of the employees in line with the optimization through the structured application of lean (Gorecki, Pautsch, 2013).

## 2. Transformation of lean management methods

The transformation of the traditional lean methods should be customized to the automated and modern production processes of modern producing industries. The lean methods have been developed in the automotive and machine building industry, which often allows them to be applied, under certain conditions, to modern technologies.

The methods of lean management have to be applied as a foundation to the entire supply chain. At this point, there is a conflict between automated production, the classic one-piece flow (Weiß et al., 2015), and the pull-strategy. With the proposed explorative, quantitative, and qualitative research based evaluation framework, LM methods which are applicable to all industries should be identified. This should support the transformation of existing best practices from one industry sector to another.

For instance, in the semiconductor industry, the companies handle large batches in the amount of more than 20 wafers and up to one million microchips per carrier. Considering further that in a large semiconductor manufacturing, a lot of different types of chips / products are manufactured and through these a huge sum of process steps (Globisch, 2011) have to be carried out, this leads to an extensive and almost unmanageable amount for the organization of production and logistics. The currently unavoidable, challenging process flow results from high product variability and the used intermediate storages. Due to the optimized production processes and the efficient use of lean methods, the most important production goals, e.g. lead time reduction, inventory reduction, just-in-time, just-in-sequence, reduction of inventory costs, savings of variable and fixed costs of production (Hofer et al., 2012), delivery performance of suppliers and time to market, could be optimized.

The scientific sources at hand are mainly focusing on a single industry. The optimized LM production processes are still mainly developed (Saheb, 2014) and performed by automotive and subsequently by machine building companies (Chiabert et al., 2014). However, through preliminary literature review (D'Andreamatteoa et al., 2014; Hicks et al., 2015; Robinson, Kirsch, 2015), the authors identified a trend in recent studies, which evaluate the transformation of LM methods into the health care sector. In industries handling automated lot production, the semiconductor industry is the benchmark regarding complexity. Within this sector, LM methods are already implemented (Doolen, Hacker, 2005) to a certain degree. As a result of the presented evaluation framework, the authors plan to analyze and rank the LM methods regarding their applicability. By using the proposed mixed model analysis with explorative, qualitative and quantitative data acquisition, the transformation capabilities of LM methods can be examined with statistical, scientific certainty. Later recommendations for their implementation and potential for shop floor optimization could be presented. Know-how and references could be transformed from other industry sectors (Yang et al., 2010) and be adapted to other modern industries.

## 2.1. Lean management methods - a short introduction

In daily business, there are problems to transfer the methods of LM to modern technologies and production processes, like the pharmaceutical or semiconductor industries. In former studies (Čiarnienė, Vienažindienė, 2015) however, the intention to do so was expressed on a strategic level. A lot of companies identify their own corporate strategy with the lean management setting, but in the operational usage of these methods, the individual conditions of each production floor impede the exhaustive use and implementation of LM methods. The traditional TPM model provides a potential for an optimized sequence for these industries. The plurality of products, the high number of process steps and the lot production system are an adversary for the implementation of the pull strategy and

lean techniques. The variant and mass production in semiconductor companies is not supported by traditional lean production (Deflorina, Scherrer-Rathjeb, 2012).

One challenge is to identify individual methods which are suitable for variant and mass production. The transformation of parts or the whole production floor into a lean production might be possible on a basis of an individual set of LM methods and their distinct application. Particularly methods like Hanedashi, Chaku-Chaku-Line, Jidoka, Heijunka, value mapping (Lindner, Becker, 2010), Kanban, Low Cost Intelligent Automation (LCIA) and "supermarket" (lean, 2015) are methods which result in large and continuous cost-cutting effects. A rapid process flow, stock reduction and optimized logistic manufacturing processes are of highest priority (Brunner, 2011). With these methods, it is difficult to optimize the methodology of workpiece production in the batch and mass production of more than 20 wafers per batch in the semiconductor industry. Problems arise primarily in the fault management and the optimization of the production sequence.

## 2.2. Research methodology

The main emphasis of this paper is to elaborate and to present a research method to evaluate if the diverse tools and methods of lean manufacturing are transformable and applicable to modern producing industries. Upstream research activities involving industrial lean specialists show challenges using LM methods like value stream mapping (Henrique et al., 2016) in modern industry sectors. E.g. Doolen and Hacker (2005) examined the degree of the implementation of lean management in general. It is to evaluate a research methodology for a deeper analysis confirming respectively rejecting the applicability of 51 LM methods in different industries.

With the acknowledgement to design science research aspects (Hevner et al., 2004) a mixture of explorative, qualitative and quantitative methods is combined to form an evaluation framework for LM methods, the artifact. The explorative research is carried out through an online survey involving 15 lean experts from different industries and academic researchers to identify the personal experience regarding the presented and described LM methods, their general applicability and the expected potential of LM methods in production and process development in different industries. The participants are asked to explain their decisions via free text fields. The questionnaire of the quantitative analysis is identical for the most part to the questionnaire used in the explorative phase. The difference to the explorative stage is that only the personal experience and the applicability for the own sector is questioned. To reach statistically valid results the distribution of the survey is supported by the German, and Austrian Chamber of Commerce. Based on the explorative and quantitative results a mixed-model-analysis will be carried out to identify recommendations regarding the applicability of the LM methods in various industries and to identify differences between explorative and quantitative results. In the final stage those differences will be further analyzed in a workshop with lean, industry and scientific experts. Additionally the evaluation framework for LM methods itself will be critically discussed and evaluated.

## 2.3. Evaluation of transformation potential

The proposed explorative and quantitative research activities represent the basis to evaluate 51 different LM methods and their potential application in different industries. Later, the LM methods which are suitable for the production and production development of companies in the semiconductor industries have to be tested and evaluated by representatives of this sector via expert workshops. For the overall evaluation, a mixed methods research (Kuckartz, 2014; Flick et al., 2015; Flick, 2011, p.15) approach is chosen.

The main hypothesis for this work is that not all LM methods are useable in all industry sectors. With this research the main goal for a first scientific recommendation for using the LM methods will be given. The statistically results should be an orientation for each company which methods are good practicably in their industry sector. Based on the explorative research, the quantitative research is derived from the same set of questions and includes the possibility to receive feedback for each single LM method from the experts' point of view and industry. The classification into "applicable methods", "non-applicable methods", "partially applicable methods" and "methods with significant differences between the explorative and quantitative results" is the objective of this approach. The transformation and implementation potential (Schultz, 2009) of the LM methods per industry will be accomplished by qualitative expert workshops. The following paragraphs present the research action in detail.

The explorative research is carried out through a survey of 15 lean experts from different industries and academic researchers (Fig. 1). Initially, all existing relevant LM methods were identified and classified. Methods which are similar have been merged. The identified 51 LM methods were described in detail. These descriptions are implemented in the interview guidelines to deliver lean managers indications for unfamiliar methods. The explorative survey will be conducted with lean experts to identify problems in the application environment more precisely. In addition to the production floor management tools the employment system is to be honored (Bortolotti et al., 2014) for the transformation of the lean methods into other industries. The explorative survey is carried out in three dimensions. All identified LM methods are presented to and evaluated by 15 LM specialists. For each method, a decision must be made whether the application in the distinct professional environment of the specialists is conceivable to implement, if the method has already been applied, and in which other industries the application is conceivable to implement based on the expert's judgment. The decision is to be expressed on a Likert scale between one and ten.

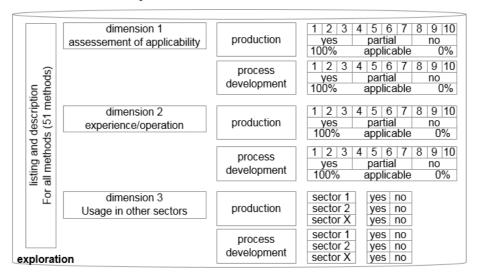


Figure 1. Explorative research

Source: Own work

"1" represents a 100% possibility of applicability/experience and "10" 0%. Checkboxes are used to rate whether a LM method is applicable for other sectors, from the expert's point of view, or not. Additionally, a free text field is appended to each method to give the possibility to place individual feedback. The illustrated three-dimensional survey is used for the areas production and process development. The expert team consists of people from the semiconductor and microsystems industry, other variant and mass production industries with high LM skills, and researchers.

In a first step, significant differences, the median and the mean value are calculated for each LM method. Extreme values or statistical outliers are gathered for later analyses. Additionally, the standard deviation is calculated to get an impression how varied the ratings are. Further, hypotheses for the later qualitative workshops are formulated by the authors. The expert teams for the workshops should consist of several lean specialists with practical experience in established traditional production industries, specialists with experience in modern producing industries, and researchers. This setting ensures that "best of class" industries, "learning" industries and academic staff are represented equally since practical as well as scientific perspectives should be considered. The expert workshops and the free text fields provide the data for the content analysis conducted with the methods of Mayring (2010). The qualitative content analysis serves as the input for the mixed model analysis which is carried out at the end of this research approach. The qualitative results are subsequently pooled and processed together with the results of the quantitative survey.

The questionnaire of the quantitative analysis is identical for the most part to the questionnaire used in the explorative phase. The only difference is that the third dimension and the free text fields were eliminated. The distribution of the survey is supported by the German, and Austrian Chamber of Commerce. That way it is expected to reach a high number of companies in all relevant industries respectively sectors (Figure 2).

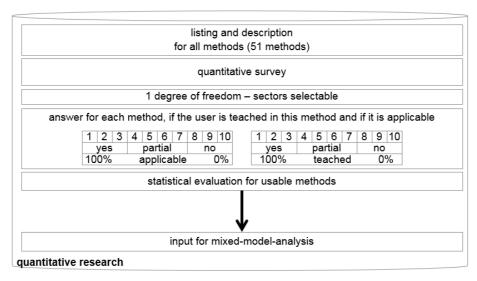


Figure 2. Quantitative research

Source: Own work

The analysis of the quantitative survey is carried out statistically. For this purpose, the standard statistical methods for Gaussian distribution and not Gaussian distributed samples are tested in order to identify the distribution correctly and to identify deviations. The sample size is expected to be large enough to provide valuable values for the means, medians and the standard deviations.

Because of the widespread distribution of the questionnaires within the different industrial sectors, a sufficiently large sample size, to evaluate the applicability of the LM methods with scientific certainty, is expected to be achieved in most industry sectors. Thus, the individual sectors can be compared with each other after the relevant statistical tests have been carried out. The quantitative analysis is applied as a second input for the mixed methods analysis.

The main purpose of the quantitative phase is to identify, for each method, the sector in which the method is successfully employed and to identify the sectors with a weaker implementation capability. For the practical use, the presented evaluation framework of LM methods could additionally be enriched with self-assessment tools (Urban, 2015) which help companies to identify their own lean status.

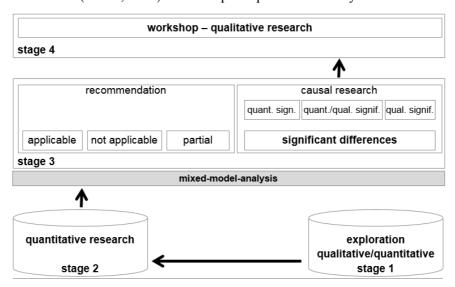


Figure 3. Mixed methods research approach in a multi-level evaluation framework

Source: Own work

Figure 3 illustrates the flow of the mixed methods analysis presented by the authors. Based on the exploration (stage 1) and quantitative analysis (stage 2), a classification of the LM methods is presented and recommendations per LM method can be formulated. This helps to decide on the applicability of each LM method in general and per industry. There are several possible outcomes of the mixed methods research approach in stage 3:

- Stage 1 and stage 2 analyses show an applicability of the LM method without significant variation;
- Stage 1 and stage 2 analyses show no applicability of the LM method without significant variation;
- Stage 1 and stage 2 analyses show partial applicability of the LM method without significant variation;
- Stage 1 and stage 2 analyses show significant differences.

Subsequent expert workshops (stage 4) and the content analysis within stage 1 and stage 4 are carried out to validate the results (recommendations) and to provide explanations for significant differences regarding the results of the analyses. The expert workshops have to be carried out for each individual industry. Within the research activities of the authors, at least one expert workshop will be carried out for the semiconductor industry. It is proposed to use brain storming techniques, Ishikawa diagrams (Kern, 2008, p.5), SWOT analyses (Gabler, 2014) and the "5 x Why" questioning technique (tqm, 2016).

It is expected that further research has to be carried out for those LM methods which are partially applicable in general and per industry. Through qualitative laboratory experiments, per LM method and industry, in the "best in class" companies, a deeper understanding of the transformation and implementation possibilities can be achieved.

## 3. Conclusion

The presented multi-level evaluation framework for LM methods based on a mixed method research respectively multimethodology approach, as a well-established pluralistic scientific research movement (Kuckartz, 2014), is expected to help transforming and implementing LM methods in modern production industries taking the relevance of different human ways of working, production types and the need for growing production efficiency (Nguyen, Do, 2016) of companies under consideration. Lean management is acting on the border of machine handling and human logistics. Doolen and Hacker (2005) presented an exploratory study of lean practices. They defined factors of successful implementations like standardization or cycle time reduction. In the presented paper the limitation to success factors is avoided by a meta-level view on the applicability of major lean methods in modern industries from LM and industry experts' points of views. Thus, it is difficult to find a practicable research method that respects both domains equally. Therefore, the described research methodology enables researchers to examine all industry sectors accordingly. This includes explorative evaluations, qualitative and quantitative research methods. During the qualitative research stages, it is possible to work with expert teams and identify global problems with LM methods in general and distinct industries. The quantitative research helps to confirm or refute the results of the explorative research through statistical models. For future validation of the presented methodology, a more detailed literature review will be carried out alongside the aforementioned quantitative and qualitative research activities. This will allow one to compare the findings to previously published papers and their authors' opinions as well as to indicate advantages, limitations and possible applications based on the differences and similarities. Identified challenges in applying LM methods can be researched further through subsequent expert workshops per industry and experiments (De Kogel, Becker, 2016).

Additionally in future research activities the authors will further follow the guidelines of design science research (Hevner et al., 2004) to iteratively adapt the presented evaluation framework for LM methods and conduct further evaluation phases with peer groups in distinct industries. This may also include integrating success factors for the successful implementation of specific LM methods per industry. On the long run this could result in a holistic lean management evaluation framework.

#### References

Bortolotti, T., Boscari, S., Danese, P. (2014). Successful lean implementation: Organizational culture and soft lean practices. *International Journal of Production Economics*, vol. 160, pp. 182-201.

Brunner, F. J. (2011). *Japanische Erfolgskonzepte*. 2<sup>nd</sup> ed. München: Carl Hanser Verlag, 2011.

Chiabert, P., D'Antonio, G., Inoyatkhodjaev, J., Lombardi, F., Ruffa, S. (2014). Improvement of powertrain mechatronic systems for lean automotive manufacturing. In 9th CIRP Conference on Intelligent Computation in Manufacturing Engineering - CIRP ICME '14, The International Academy for Production Engineering, vol. 33, pp. 53-58.

Čiarnienė, R., Vienažindienė, M. (2015). An empirical study of lean concept manifestation, *Procedia - Social and Behavioral Sciences*, vol. 207, pp. 225-233.

D'Andreamatteoa, A., Iannia, L., Legab, F., Sargiacomo, M. (2015). Lean in healthcare: A comprehensive review. *Health Policy*, vol. 119, iss. 9, pp. 1197-1209.

De Kogel, W., Becker, J. M. J. (2016). Development of design support tool for new lean production systems. In *Procedia CIRP. Research and Innovation in Manufacturing: Key Enabling Technologies for the Factories of the Future - Proceedings of the 48th CIRP Conference on Manufacturing Systems*, pp. 596-601.

Deflorina P., Scherrer-Rathjeb M. (2012). Challenges in the transformation to lean production from different manufacturing-process choices: a path-dependent perspective, CIRP Annals - Manufacturing Technology, vol. 61, iss. 2, pp. 587-609.

Doolen, T. L., Hacker, M. E. (2005). A review of lean assessment in organizations: An exploratory study of lean practices by electronics manufacturers. *Journal of Manufacturing Systems*, vol. 24, iss. 1, pp. 55-67.

Flick, U. (2011). Triangulation: Eine Einführung. 3<sup>rd</sup> ed. Wiesbaden: VS Verlag für Sozialwissenschaften, 2011.

Flick, U., von Kardoff, E., Steinke, I. (Hg.). (2015). *Qualitative Forschung*. Hamburg: Rowohlt Taschenbuch Verlag. Reinbek bei, 2015.

Gabler Wirtschaftslexikon. (2014). 18<sup>nd</sup> ed. Wiesbaden: Springer Gabler Fachmedien, 2014.

Globisch, S. (2011). Lehrbuch Mikrotechnologie. München: Hanser Verlag, 2011.

Gorecki, P., Pautsch, P. (2013). Lean Management. 3<sup>rd</sup> ed. München: Carl Hanser Verlag, 2013.

Henrique, D.B., Barberato, D., Rentes, A.F., Freitas, A., Godinho, M., Esposto, K.F. (2016). A new value stream mapping approach for healthcare environments, *Production Planning & Control*, vol. 27, iss. 1, pp. 24-48.

Hevner, A., March, S., Park, J., Ram, S. (2004). Design Science in Information Systems Research. *MIS Quarterly*, vol. 28, no. 1, pp. 75-105.

Hicks, C., McGovern, T., Prior, G., Smith, I. (2015). Applying lean principles to the design of healthcare facilities. *International Journal of Production Economics*, vol. 170, iss. B, pp. 677-686.

Hofer, C., Eroglu, C., Rossiter Hofer, A. (2012). The effect of lean production on financial performance: The mediating role of inventory leanness. *International Journal of Production Economics*, vol. 138, iss. 2, pp. 242-253.

Kern, J. (2008). Ishikawa Diagramme. Ursache-Wirkungsdiagramme-Diagramme als Qualitätswerkzeuge. Norderstedt: Grin Verlag, 2008.

Kuckartz, U. (2014). Mixed Methods. Methodologie, Forschungsdesigns und Analyseverfahren. Wiesbaden: Springer VS, 2014.

Lean (2015). Supermarket [online]. [cit.2015-12-28]. Available: https://www.lean.org/lexicon/supermarket.

Lindner, A., Becker, P. (2010). Wertstromdesign. München: Carl Hanser Verlag, 2010.

Mayring, P. (2010). Qualitative Inhaltsanalyse. Weinheim und Basel: Grundlagen und Techniken. Beltz Verlag, 2010.

Nguyen, M.-N., Do, N.-H. (2016). Re-engineering assembly line with lean techniques. In *Procedia CIRP. 13th Global Conference on Sustainable Manufacturing - Decoupling Growth from Resource Use*, vol. 37, pp. 591-596.

Robinson, S. T., Kirsch, J. R. (2015). Lean strategies in the operating room. *Anesthesiology clinics*, vol. 33, iss. 4, pp. 713-730.

Saheb, K. (2014). Lean administration schritt für schritt. Aachen: Shaker Media, 2014.

Schultz, V. (2009). *Basiswissen Controlling*. München: Beck-Wirtschaftsberater im dtv. Deutscher Taschenbuchverlag, 2009.tqm (2016). *5 x Warum* [online]. [cit.2016-01-11]. Available: http://www.tqm-services.de/leistungen/methoden-und-tools-1/5-x-warum.

Urban, W. (2015). The lean management maturity self-assessment tool based on organizational culture diagnosis. *Procedia - Social and Behavioral Sciences*, vol. 213, pp. 728-733.

Weiß, E., Strubl, E., Goschy, W. (2015). *Lean Management. Grundlagen der Führung und Organisation lernender Unternehmen.* 3<sup>rd</sup> ed. Berlin: Erich Schmidt Verlag, 2015.

Womack, Jones, Roos. (1990). The machine that changed the world. LaJolla: Simon & Schuster, 1990.

Yang, M., Hong, P., Modi, S. B. (2010). Impact of lean manufacturing and environmental management on business performance: An empirical study of manufacturing firms. *International Journal of Production Economics*, vol. 129, iss. 2. New York. USA. pp. 251-261.

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# 10. IMPACT OF FOREIGN DIRECT INVESTMENT ON EXPORT COMPETITIVENESS IN LITHUANIA

**Abstract:** Foreign direct investment (FDI) is recognized as one of the key factors for economic development of the country by stimulating foreign trade, technology transfer and etc. Foreign direct investments have quite a significant impact on export volumes, because some multinational corporations in order to increase their profitability, are investing in other countries, where labor and other factors of production is cheaper. Products produced in those countries are often exported to other countries where it can be sold more profitably. The aim of the article is to research the impact of FDI in host countries for international trade insights of the Lithuanian example. The empirical part of the paper examines the relationship between FDI and export from Lithuania, examines the effects of foreign direct investment on the competitiveness of home-country export, using data for the period 2004 to 2014. The methods of the research include systematic and comparative analysis of the scientific literature, correlation and regression analysis. The results of the research have revealed that the most intense impact to Lithuanian exports creates FDI to financial and insurance sector, because it is the biggest sector which gets investments.

Keywords: economic growth, export, foreign direct investment (FDI), Lithuania

**JEL Classification:** F21, F23, O52

## 1. Introduction

Foreign Direct Investment (FDI) is considered to be one of the key drivers for economic growth. Due to this fact, a number of studies have been done to determine its' impact on the country's economic development. Many authors (Liu, Johnson, Beijnen, Agrawal, Khan, Levine, Graham, Waga and others) agree that FDI has a positive impact on the host country's economic growth in the following ways: promoting new jobs, increasing the local country's capital, introducing new technologies and technical experience, promoting export.

Problem of the research. There is a lack of the studies to analyse how FDI influence export volumes in Lithuania case and if the increase of FDI in separated economic branches determines the growth of export as well.

This article is aimed at researching the impact of FDI in host countries for international trade insights of the Lithuanian example. The aim has been detailed into the following objectives: 1) with reference to the scientific literature, to assess the impact of foreign direct investment on export; 2) to perform comparative analysis of Lithuanian investment during period 2004-2014; 3) empirically evaluate impact of FDI on Lithuanian exports, using methods such as correlation and regression analysis. Methods of the research include systematic and comparative analysis of the scientific literature, correlation and comparative data analysis.

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# 2. Theoretical background of the impact of FDI on export competitiveness

Foreign companies transfer modern management, production management, technology engineering solutions, organisational management experience while implementing in the local market of the country. In this way, local business and country's manufacturing productivity are being promoted to grow up and develop (Kuliavienė, Solnyskinienė, 2014).

Capital is exported and imported in international (foreign) investment form. According to foreign investments it can be decided about size of the country's attractiveness for the international market, the country's economic relations with other countries (Davulis, 2003). So one of the country's economic integration into the global market indicators is foreign direct investment. However, some authors argue that the FDI positive impact on the economy of the country has only on a short period (Miyagawa, Ohno, 2009), and the distinction between the short-term level effect and long-term rate effect of FDI on the productivity of domestic firms is important. If resources must be expended in order to learn from foreign-invested firms, it is possible that the spillovers have a negative effect on the productivity of domestic firms in the short run yet a positive effect on the productivity of domestic firms in the long run, because such learning helps enhance the firm's future productive capacity (Liu, 2008).

There is a considerable amount of theoretical treatments of the FDI-export linkage, and since the end - 1990s some relevant empirical analyses have been carried out (Beijnen, 2007). There is a wide theoretical base which sustains the existence of a positive relation between FDI, export and economic growth. Dunning (1977) proposed the Eclectic Paradigm in order to explain the existence of FDI alternative to other entry modes in a foreign market, such as exports and licensing. There are relevant for their theoretical role the benign model of FDI (Moran, 2005), but especially the models of endogenous economic growth that belong to Barro (1997), Borensztein, De Gregorio, Lee (1998), Graham, Wada (2001). The impact of FDI on host country exports is not only direct, through the exports of the foreign affiliates, but there may be important side-effects, which may influence the export performance of domestic producers indirectly.

FDI is an important factor in the globalization process as it intensifies the interaction between states, regions and firms. Growing international flows of portfolio and direct investment, international trade are all parts of this process (Agrawal, Khan, 2011).

Multinational enterprises (MNEs) generate the global flows of FDI but they are also extremely important for global trade flows. UNCTAD (2004) estimates that MNEs account for around two-thirds of world exports. Since MNEs are responsible for a large proportion of world trade, one may conjecture that there is a close relationship between flows of FDI and trade (Johnson, 2006). The theory of multinational enterprise examines conditions under which firms may undertake foreign direct investment and become MNEs. Such decisions may have consequences for host country's exports and it is a goal of this section to review parts of this theory which predict effects of inward FDI on host country's exports (Kutan, Vukšić, 2007).

The entry of an MNE in one sector of the host economy increases the intensity of competition in this sector, which may force some domestic companies to leave the market (Markusen, Venables 1999; Barrios et al. 2005). Such an effect is less pronounced with export-oriented MNEs and domestic producers, but, in the case of exporting domestic companies, this may lead to negative effects of inward FDI if the loss of exports by domestic companies is not compensated for by new exports of the MNE's local affiliate. However, MNEs entry may also have positive indirect effects on the export performance of domestic companies. For example, an additional channel through which productivity of local firms may be increased is the so-called forward linkages, which occur when foreign affiliates sell goods or services to domestic firms. Improved products and services (and/or lower prices) in the downstream sector of a domestic firm may improve the domestic firm's own productivity and competitiveness as well (Radulescu, Serbanescu, 2012).

Although it is stated that the FDI has positive effect on exports, it is important to determine whether this effect exist on all economic branches.

# 2.1. Methodology of the research

The empirical research was based on the methods of regression and correlation analysis. For the evaluation of the FDI impact on export volumes, the data showing FDI and export in Lithuania during the period 2004 - 2014 was engaged.

Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate together. A positive correlation indicates the extent to which those variables increase or decrease in parallel; a negative correlation indicates the extent to which one variable increases as the other decreases.

The correlation coefficient indicates whether there is a connection between variables. The more value is closer to 1, the more the connection is stronger. It is important to note that the strongest correlation is when the correlation coefficient is from 0.7 till 0.99 value. The results are presented showing their statistical reliability. The levels of reliability are as follows: if p>0.05 – it is statistically unreliable; if p<0.05 – it is statistically reliable.

## 2.2. FDI and export dynamics analysis in Lithuania

In recent years more and more companies have started to trade on international markes. At the same time, the internationalization of developed economies has taken a new direction through outward foreign direct investment (FDI). This dramatic increase in the exchange of goods and services – within a progressive liberalization of international economic relations – has generated considerable interest in the dynamics of trade and investments.

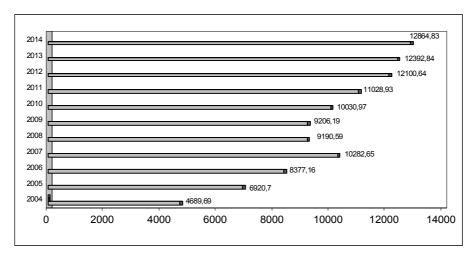


Figure 1. Foreign direct investment, million EUR

Source: Statistics Lithuania

The analysis of foreign direct investment and export indicates noticeable changes. The investment volume during the analysis period increased from 4,689.69 million euro to € 12,864.83 million euro, so their volume increased by 2.7 times. Integration into the European Union, accelerated growth of FDI as well. The figure shows that the largest increase in FDI recorded in 2006, because FDI in the beginning of 2007 was - 10,282.65 million euro (an increase of 1,905.49 million euro), while the largest and the only decrease of FDI recorded in the period under review - in 2008, when FDI amounted to 9,190.59 million euro (Figure 1). FDI decrease was primarily due to the difficult economic situation worldwide, company's share capital and reinvestment reduction. Lithuania's FDI decrease is a signal to illustrate the steady decline in the country's competitiveness, deteriorating business situation. Summing up the FDI dynamics during the analyzed period, it can be stated that the overall development shows the growing investment attractiveness of Lithuania.

Lithuania has most attracted FDI in manufacturing, trade, transport, financial intermediation and real estate sectors. In these areas during the period invested on average about 70% of all incoming FDI in Lithuania.

The manufacturing industry is a branch which attracts largest amount of FDI. In 2004, investment in this area amounted to 1.5 billion euro, or even 33,17% of the total FDI in Lithuania received. Most of this area has attracted investments in 2007, when investment reached 3.6 billion euro limit, or even 35.4% of total FDI (Figure 2). It may be noted that FDI in the manufacturing industry increased especially after Lithuania's accession to the EU. The opening up of the EU's border led to reduced barriers and facilitated trade with other EU countries. In Lithuania made items has become easier to export to other Community countries. Investors considered that possibility and trusted Lithuanian market.

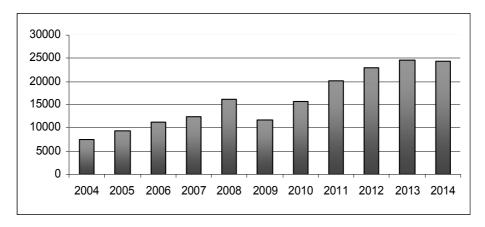


Figure 2. Lithuanian export (million EUR)

Source: Statistics Lithuania

During the analyzed period, the export volume increases, decrease was recorded only in 2009 and 2014. Comparing FDI and export volume trends, it is noted that exports grew faster than investment. During the analysis period, exports increased by 3.25 times. Along with FDI typically comes and trade partnership to help penetrate new markets, and this was particularly true in Lithuanian companies. Completely different image is visible analyzing the export of goods in Lithuania investing countries such as the United States, Denmark, Finland and Sweden. Here, the share of exports is increasing at a relatively fast pace. Measured by foreign direct investment impact on Lithuanian exports ratio, stands out much in Lithuania investing, but showing different trends such countries as Estonia and Germany. Since investments in Lithuania attributable to Estonia are more sources of Nordic origin, it may be that additional trade flows, bypassing Estonia, moving directly to other countries.

In order to justify the assumption that FDI has an impact on export volumes it was performed correlation and regression analysis.

Table 1. Export and FDI in individual sectors of the economy

Years	Export (million €)	Electricity, gas, steam and air conditioning supply (million €)	Financial and insurance activities, (million €)	Manufac- turing (million €)	Wholesale and retail trade; repair of motor vehicles and motorcycle (million €)			
2004	7477,74	347,19	682,2	1555,27	743,82			
2005	9490,05	866,18	857,83	2701,3	763,54			
2006	11262,83	881,69	1336,21	3282,72	890,89			
2007	12509,38	927,79	1719,09	3606	1146,1			
2008	16077,09	679,72	1545,26	2060,5	1300,83			
2009	11796,8	483,26	1716,18	2339,29	1316,32			
2010	15650,73	618,08	1877,76	2682,58	1305,75			
2011	20150,85	583,35	2156,99	2931,17	1418,66			
2012	23047,36	647,44	2337,95	3115,22	1415,39			
2013	24544,6	607,96	3005,61	3059,09	1264,81			
2014	24361,3	280,81	3797,46	2584,87	1505,15			
Corr. coeff. R	0.920488	-0,30481	0,9135	0,316215	0,811893			
P-value	0.000058	0.3620744	0.0000849	0.343451	0.002404245			

Source: Statistics Lithuania

The estimated correlation coefficient between exports and FDI of 0.920488 (p-value <0,001) shows that between the indicators is a strong linear relationship (Table 1). By calculating the correlation coefficient can be calculated slope of the regression equation: the sign means "dependency direction", and size - changes the scale of what it is, the more changes the dependent, the independent amount of change at the same pace.

Using Microsoft Excel function Slope, this factor is 2.3. This means that FDI increased by 1 euro, exports will increase by 2.3 euro.

Examining the impact of FDI on Lithuania export volumes were calculated correlation coefficients between exports and FDI in individual sectors of the economy which are the most important Lithuania.

According to contents of table is clear that, there is a very strong and significant direct connection between foreign direct investment and export, but the calculation analysis of indicators by economic branches shows that the results are a little bit different. In this paper it was identified four economic branches with the largest FDI. Correlation coefficient showed that in Financial and insurance activities and Wholesale and retail trade branches exist a direct link between FDI and export (0.9135 and 0.811893).

The result of correlation between FDI and export proves arguments of Levine (1996) that financial systems facilitate trade. Concentrating on financial-sector foreign direct investment, there are two directions in which the repercussions can go: while foreign bank entry can lead to increased trade, a higher level of trade may stimulate bank expansion.

In summary, that despite the fact that foreign direct investment and export volumes have a very strong direct link, not all economic sectors felt the same connection.

## 3. Conclusion

- The analysis of the scientific literature has revealed that the increase of FDI leads to the increase of international trade. This tendency is mostly determined by the fact that international companies that directly invest in foreign markets are more export-orientated.
- The volume of FDI during the period 2004 2014 in Lithuania altered in accordance with the economic cycle: in 2008, FDI in the country decreased by more than 10% in comparison to 2007 as a result of the difficult economic situation worldwide, company's share capital and reinvestment reduction; from 2009 to 2014, the volume of FDI in Lithuania increased by almost 28,5% as a result of the recovery of developed economies and investment promotion inside the country during the post-crisis period;
- During the analyzed period, the export volume increases, decrease was recorded only in 2009 and 2014. Comparing FDI and export volume trends, it is noted that exports grew faster than investment. During the analysis period, exports increased by 3.25 times and FDI increased by 2.7 times;
- The estimated correlation coefficient between exports and FDI of 0.920488 shows that between the indicators is a strong linear relationship;
- Correlation coefficient showed that in Financial and insurance activities and Wholesale and retail trade branches exist a direct link between FDI and export (0.9135 and 0.811893).

## References

Agrawal, G., Khan, A. (2011). Impact of FDI on GDP: A Comparative Study of China and India. *International Journal of Business and Management*, vol. 6, iss. 10, pp. 71-79 [online]. [cit. 2015-11-26]. Available: http://dx.doi.org/10.5539/ijbm.v6n10p71.

Barrios, S., Görg, H., Strobl, E. (2005). Foreign direct investment, competition and industrial development in the host country. *European Economic Review*, vol. 49, pp. 1761-1784.

Barro, R. J., (1997). *Determinants of Economic Growth: A Cross-Country Empirical Study*. The MIT Press, Cambridge, Massachusetts; London, England, 1997.

Beijnen, R. (2007). FDI in China: Effects on Regional exports [online]. [cit. 2015-11-29]. Available: igiturarchieve.library.vu.nl/student-theses.pdf.

Borensztein, E., De Gregorio J., Jang W. (1995). *How does foreign direct investment affect economic growth?* NBER working paper series [online]. [cit. 2015-11-29]. Available: http://www.nber.org/papers/w5057.

Davulis, G. (2003). Ekonomikos teorija. V.: Lietuvos teisės universitetas, 2003.

Dunning, J. H. (1993). The globalization of business. London, Routledge, 1993.

Dunning, J. H. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. In Ohlin B., Hesselborn P., Wijkman M. (Eds.). *The international allocation of economic activity* London: Holmes & Meier, 1977, pp. 395-418.

Graham, E. M., Wada, E. (2001). Foreign direct investment in China: Effects on Growth and Economic Performance. Achieving High Growth: Experience of Transitional Economies in East Asia, Oxford University Press [online]. [cit. 2015-11-28]. Available: http://www.mi.iie.com/publications/wp/01-3.pdf

Johnson, A. (2006). Effects of FDI Inflows on Host Country Economic Growth, No 58. Working Paper Series in Economics and Institutions of Innovation, Royal Institute of Technology, CESIS - Centre of Excellence for Science and Innovation Studies, 2006.

Kuliavienė, A., Solnyskinienė, J. (2012). The evaluation of the impact of foreign direct investment on Lithuanian economy using Lag-analysis. *Economics and Management*, vol. 19, iss.1, pp. 16-24.

Kutan, A. M., Vukšić, G. (2007). Foreign Direct Investment and Export Performance: Empirical Evidence. *Comparative Economic Studies*, vol. 49, iss. 3, pp. 430-445.

Levine, R. (1996). Foreign Banks, Financial Development, and Economic Growth. *International Financial Markets: Harmonization vs. Competition*, AEI Press, Washington, pp. 225-254.

Lithuanian Department of Statistics. (2015) [online]. Available: http://osp.stat.gov.lt/statistiniu-rodikliu-analize1

Liu, Z. (2008). Foreign direct investment and technology spillovers: *Theory and evidence // Journal of Development Economics*, vol. 85, pp. 176-193.

Markusen, J.R., Venables, A.J. (1999). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, vol. 43, pp. 335-356.

Moran, T.H., Graham, E.M., Blomström, M. (2005). *Does Foreign Direct Investment Promote Development?* USA: Institute for international economics, 2005.

Miyagiwa, K., Ohno, Y. (2009). Multinationals, Tax Holydays, and Technology Transfer. *Japanese Economic Review*, vol. 60, iss. 1, pp. 82-96.

Rădulescu, M., Şerbănescu, L. (2012). The impact of FDIs on exports, and export competitiveness in central and eastern European countries. *Journal of Knowledge Management, Economics and Information Technology*, vol. 2, iss. 1, pp. 132-168.

UNCTAD. (2010). World Investment Report. New York: United Nations, 2010.

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# 11. TYPOLOGY OF HOUSEHOLD OF SELF-EMPLOYED BEHAVIOUR ON FINANCIAL MARKET IN POLAND

**Abstract:** Households are one of the main actors of the market economy, and their importance is growing. Despite this, as a subject of research, they remain in the background of scientific field of interest. This is particularly noticeable in the area of finance, which undergoes extensive testing operation of enterprises and government sector, but marginalizes the importance of household finances. Aim of this article is to verify, if financial behaviour of households of self-employed is highly diversified and if it differs significantly from behaviour of households of workers. The result is presentation of 3 types of behaviour on financial marked for each group. The data were obtained by using an on-line survey. Clusters of households were isolated by using k-means method. Profiles of types were created on basis of classification trees CART outcomes.

**Keywords:** financial market, households of self-employed, households of workers, typology

JEL Classification: D12, D14

## 1. Introduction

Households are one of the main actors of the market economy, and their importance is growing. Despite this, as a subject of research, they remain in the background of scientific field of interest. This is particularly noticeable in the area of finance, which undergoes extensive testing operation of enterprises and government sector, but marginalizes the importance of household finances. Transformation of economic, social and cultural changes in Poland contributes to the increasing diversity and heterogeneity in households behaviour on the financial market. Since year 1993 GUS separated a group of households of the self-employed that is one of the best equipped with durable goods, receives the highest level of income and spends the highest amount on consumer goods. Behaviour of this group in the area of consumer spending structure is well seen and can be recognized as a kind of ahead behaviour. Aim of this article is to verify, if financial behaviour of households of self-employed is highly diversified and if it differs significantly from behaviour of the remaining groups of households. Tue to this, the main objective of this work is to present different types of household behaviour on financial market – on comparison of two groups: households of workers and of self-employed. The result will be presentation of 3 types of behaviour on financial marked for each group.

## 2. Households as an economic entity

Household is the oldest and most stable economic entity (Duda et al., 1998, p. 43). It can be assumed that the economy begins and ends in the household (Bywalec 2010, p.45). The breakdown of households can be carried out due to different criteria. For this study the most important is type of socio-economic<sup>2</sup> development, according to which they are divided into households of workers, farmers, the self-employed, pensioners and maintained from non-earned sources (Bywalec, 2010, pp. 49-52).

Households of the self-employed have been identified in Poland by the Central Statistical Office (GUS) as a distinct social group in 1993, due to the economic transition (Podkaminer, 2003, p.757), similarly as in Czech (Bartošová, 2005; Bartošová, Bina, 2009).<sup>3</sup> This was due to socio - economic

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<sup>&</sup>lt;sup>2</sup> The main criterion is the source of household income.

<sup>&</sup>lt;sup>3</sup> In Czech this group was separated as a result of Velvet Revolution (in year 1996 it was less than 7% of the society and in fallowing years its share in the society increased up to almost 9% in year 2005).

changes that occurred in the early 90's of the twentieth century. As defined by the GUS, the household of the self-employed is one in which the primary source of income comes from self-employment, excluding a private farm in agriculture, or practicing a profession (GUS, 2012).

Households of self-employed compared to the other groups distinguish several important characteristics, among others:

- income derived from economic activities is often identified by entrepreneurs with personal remuneration; this results in low preciseness of the need of self-financing operations of the firm;
- if a household member conducting its business activities benefits from joint property of the family, so is due to household income, which receives also a common household income;
- due to a common share of income and expenses in the household, there may occur conflict of interest between members of the household income distribution in the area and on the purpose of savings, consumption and investment in the company's business activities, which supplies the prevailing income; in extreme cases it can lead to download cash from the business for personal purposes of the owner and his household in excess of the net profit, leading to consuming the entire capital;
- conducting business at an early stage may require significant financial resources, which bank financing is significantly limited due to the high level of risk, and therefore may require liquidate savings accumulated by households (Dragunowicz, Heropolitanska, Sterniak-Kujawa, Sendek, 2001, p. 313).

Households are an important player on financial market, even though researches outcomes presented in literature focus mainly on corporate financing decisions (Ambrose, Agarwal, 2007, p.7). There is a growing interest in household finance, however the focus point is stressed on the stock market, while is still very little known about different aspects of household finance (Gaou, Fok, 2015, pp. 194-196), even though there is no agreement about their rising debt for monetary policy (Nucu 2012, p. 890). Household finance indicates on how households (Choe, 2010, p. 41)<sup>4</sup> and individuals use financial market for their own needs. Until recently, they were not the essential object of interest due to the lack of comparable and sufficiently accurate data on finance and financial behaviour of households (Bogacka-Kisiel, 2012, p. 9; Barembruch, 2012).<sup>5</sup> The main field of interest of this paper is financial behaviour of self-employed households.

# 2.1. Methodology of research

According to the "Household budget survey", the share of the self-employed households in the total population was rising between 1993<sup>6</sup> -2012 (from 5% to 6.92 %). In the following years there was a slight decrease in the share of this group in the sample. Invariably, in the years 1993-2014 the largest share in the population have households of employees (on average nearly 50%) and were therefore they were chosen as the reference group.

The data were obtained using an on-line survey that was anonymous in order to maintain secrecy in the area as delicate as saving and borrowing and to ensure objectivity of answers. The questionnaire was available during from 09.03 to 06.30.2015. During the study, 167 071 emails were sent with an invitation to participate, which benefited 1 801 respondents who filled the 642 questionnaires. As a result of the verification of the correctness and reliability of the collected material to further analysis 570 questionnaires were taken into consideration.

In order to carry out the typology, it is necessary first to classify households in terms of typology criteria and then to set up description due to the characteristics of the respondents. First, clusters were isolated using k-means method, wherein an arbitrary number of classes are assumed equal to three. The next step was profiling segments (clusters) with classification trees CART using the following variables: the essential factors for saving, attitude to saving, essential factors when taking loans and attitude to borrowing. On the basis of the adopted methodology there were three types of employees household and three types of the self-employed households identified.

<sup>&</sup>lt;sup>4</sup> Households treated as consumption unit.

<sup>&</sup>lt;sup>5</sup> In literature there is underlined information on underestimation of importance of personal finance and household finance.

<sup>&</sup>lt;sup>6</sup> In year 1993 Polish main statistical office presented information on households of self-employed, as separate group.

## 2.2. Typology of workers households

The first of type of workers household according to their behaviour in the financial market can be named as "carefree households" (25.96%). Representatives of these households think that it is a must first to meet basic needs, and then save. They rather do not agree with the opinion that households should always first determine the amount they want to save from wages/salaries, and the remaining part to spend on purchases and charges. Investing for such households is not important. They rather believe that developing and maintaining own business requires a lot of financial sacrifices. Hence, it is difficult for them to identify, whether saving is as important as investing in own business or whether it is worth spending the savings on to development of the business in order to reap the greater benefits in the future. This type of households includes both these, which have problems with budgeting and regular saving, as well as those who do not agree with the opinion that they do not plan spending, and therefore do not have a plan to manage household finances. In this type there are also households that do not agree with the opinion that save irregularly, inter alia, when they receive some extra money. These households perceive the habit (routine) as little or even unimportant factor when choosing how to save; they perceive the significance of short-term administrative procedures in choosing how to save ambiguously, as well as the importance of the brand when taking out credit/loan. These behaviours are typical for households in which main source of income is a full-time job and the best earning person is a woman. It should be noted, however, that the sample in the group of workers is dominated by women (54.4%) as members of the top earners in the household. In addition, this type of behaviour is found in households where the highest-paid person in the age of 36-45 years or 26-35 years old and has a university degree. The households are inhabitants of towns with population of over 100 thousand, is a 2- or 4-person, and the average monthly net income per household member amounts from 1.001 to 2.000 PLN or from 2.001 to 3.000 PLN.

The second type of workers household in the financial market is a type of "comfortable household" (36.14%). They agree with an opinion that households should first meet their basic needs, and then save. At the same time they believe that the wage or salary should be always separate, no matter how much household members earn, some part to be spent on shopping and fees, and some to save. Partly they appreciate the essence of investing in starting own business, but do not have an explicit opinion whether it is better to accumulate savings on deposit or to invest in a business. Partially they agree with the opinion that developing own business should not be done at the expense of their needs but do not take a firm position on the issue of savings dedication to the development of their own business, that in the future may bring the greater benefits. They note, however, that developing and maintaining own business requires a lot of financial sacrifices. Typical of these households are either planning or unplanned expenses. They have different approaches to regular savings. Some of them are not able to do that, and therefore incurs loans, of which repayment is imposed by the discipline. Part admits that they save irregularly - when they receive some extra money, for example from the premiums. Representatives of these households do not have an opinion or disagree with the opinion that they do not take out loans or debt because they prefer to use their own funds. In addition, these "comfortable households" perceive the brand of financial institution as an important factor in the process of incurring a financial liability, as well as short administrative procedures in choosing how to save, while they treat habit or routine in choosing a financial institution as not very important when deciding on the method of saving. These behaviours are typical household, workers households, in which the best-earning person is a young woman (26-35 years old) with higher education. Her household has two or three members, lives in a large city (over 100 thousand inhabitants), and its average monthly net income per person is between 1.001 and 2.000 PLN or between 2.001 and 3.000 PLN.

The largest types are "prudent" households (37.89%). They appreciate the importance of investments, partially agreeing with the opinion that saving is just as important as investing in setting up and running own business and that it is worth spending savings and developing own business in the future to reach greater benefits. They also agree that to develop and maintain own business requires a lot of financial sacrifices. These households tend to agree with the opinion that it should be considered always to spend a part of income on consumption and to save the remaining part. Forethought of these households is also reflected in the fact that they do not take out loans and credits because they prefer to use their own funds. But they do not plan expenditures and therefore do not have any specific plan on how to manage their home finances. They do not agree with the opinion that they save irregularly,

including when they receive extra money. Some of them are strongly opposed to opinion, that saving is unprofitable, among others due to low interest rates. They do not consider habits as an important factor in choosing how to save, they do not have unequivocal perceptions on the brand of a financial institution impact on taking out a loan or credit. This type consists of workers households, in which the best earns a young woman (26-35 years old) with higher education. Her household is a 2 -person, living in a big city, and the average net income per household member is between 2.001 PLN and 3.000 PLN.

## 2.3 Typology of households of self-employed

The first type of household of the self-employed in the financial market can be defined as "gamblers households" (28.4%. Representatives of these households believe that they should first meet their basic needs, and then save. They rather not also agree with the opinion that they should always first determine the amount they want to save from wages, and only the remaining part spent be spent on purchases and charges. Saving is more important for them than investing. They are rather of the opinion that it is worth spending savings and develop own business to receive greater benefits in the future. Partially do not share the opinion that it is better to accumulate savings on deposit rather than invest in business. They do not have an opinion on spread of incomes including always consumption and savings. They can not also specify whether saving for them is just as important as investing in own business. Simultaneously form them developing and maintaining own business is only partially associate them with the need of many financial sacrifices. This type covers both households, according to which saving is worthwhile, among other due to the low interest rate, and those who do not agree with this opinion. In addition, this type includes households which save only what they failed to spend without special purpose, but also those who would rather not share this opinion. This is confirmed by the fact that this type comprises households that did not save regularly, but also those who would rather do and treat saving as a habit. Gamblers households consider as relevant price promotions in the choice of saving, and penalties for early repayment of the borrowings or loans. They do not rely on the opinion of the majority choosing financial products. These behaviours are typical for households, which mainly source of income is the self-employed and the best earning person is a man. It should be noted, however, that in the sample in the group of the self-employed households were men (66 %) as members of the top earners in the household. In addition, these types of behaviour are found in households where the best earning person is aged 46-55 years, and has a higher education. The household inhabits town with a population of over 100 thousand residents, is mainly 3-, 2- or 4-person, and the average monthly net income per household member is more than 5.000 PLN.

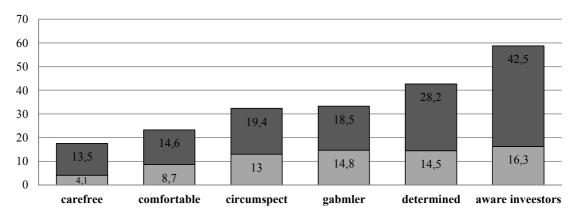
The second type of household in the financial market is a type of "determined households" (43.5%). Partially they agree that it should be first to meet basic needs of households members, and then save, while partially agreeing that saving is just as important as investing in own business. Moreover, they tend to agree that it appropriate to separate income always, no matter how much they earn, some to spend on consumption, and some to save. They tend to be able to spend their savings on own business development. Determined households perceived importance of simple administrative procedures and possible penalties for early repayment of the borrowing and price promotions in choosing how to save in a differential ways. They choose financial products used by many people, basing on the principle that most can not be wrong. However, taking out a credit or loan they do not rely on the opinion of friends and family. This type includes households that do not save regularly, but also those who would rather treat saving as a habit. This type also includes households having of a different approach to the part of income saved - some of them save only what they can not give up and some that save without any special purpose. Households of this type do not agree with the opinion that saving is worthwhile, among other due to the low interest rate. These behaviours are typical for households of which the main source of income is self-employment, and the best earning person is a man. In addition, this type of behaviour are found in households where the best earning person is aged 36-45 years old and 46-55 years old and has a university degree. The household is inhabited town with a population of over 100 thousand residents, counts 2 people, and the average monthly net income per household member is more than 5.000 PLN.

The third type of household in the financial market is a type of "aware investors household" (28.1%). These households can be characterized as holding submitting investment over consumption and savings, but appreciating the importance of saving. They agree that the received income should be

so separate always into savings and consumption, no matter how much they earn, and also with the opinion that saving is just as important as investing in own business. They strongly disagree with the opinion that a higher standard of living in the moment is more important than developing own business and reaching higher benefits in the future, nor of opinion that it is better to accumulate savings on deposit rather than invest in business. While expanding own business they are willing to do it at the expense of their needs and are aware that developing and maintaining own business may incur many financial sacrifices. This type of households considers as important the opinion of friends and family when choosing credit offer, but has extreme opinion on the selection of financial products that are selected generally on the principle that most can not be wrong. These households do not have unequivocal opinion on the significance of simple administrative procedures when taking out a credit or loan and do not agree that price promotions are important for them when choosing how to save. Definitely do not agree with opinion that saving should be connected only with the part of income that was not consumed or spend on a chosen propose. These behaviours are typical for households, which mainly source of income is the self-employment, and the best earning person is a man. In addition, this type of behaviour is found in households where the best earning person is aged 36-45 years old and has a university degree. The household inhabits town with a population of over 100 thousand residents, counts 2 people and the average monthly net income per household member is more than 5 000 PLN

## 2.4 Discussion

The increasing sophistication of financial services in recent years affects the increase in the importance of knowledge in finance for the financial security of individual consumers and their households. Better informed people are more able to make decisions good for their family, and thus increase economic security and social status of their household. Financial secured entities are able to significantly support the economic development of the lower level of financial education households (Hilgert, Hogarth, Beverly, 2003). They are better prepared to adapt to the changing conditions in the financial market (Boersch-Supan, Bucher-Koenen, Coppola, Bettina, 2014, p. 807). Households not only have different levels of knowledge of finance, but also exhibit different levels of interest in this area of life. Prudent households, that is the most knowledgeable type of workers households is much less involved in following up on the events in the financial market, than an type of the self-employed households. The share of households in which at least one member is an expert in the area of finance is not significantly different between types. Households of the self-employed are better orient in the market situation and have a greater knowledge of its products (Figure 1).



- The share of households tracking up to date market and new products on the market
- The share of households that have expertise in the area of finance and financial market according to household type

Figure 1. Share of households tracking up to date financial market and share of households with an expert in the area of finance according to household type [%]

Source: Own research outcomes

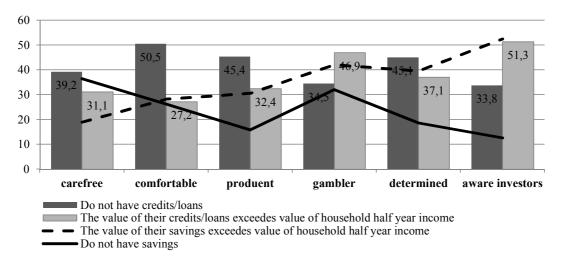


Figure 2. Share of households having liabilities or savings with respect to their value according to household type [%]

Source: Own research outcomes

The least indebted households are comfortable and determined - share of households that do not own a credit or loan at all is the highest among all types, as well as the value of their liabilities is the lowest. The most indebted are prudent, gambler and aware investors. The debt level exceeding the level of semi-annual income of the household in the case of households belonging to determined households is greater than in the case of the most indebted households of employees, i.e. prudent (Figure 2). This raises the conclusion that households more indebted poses a higher level of savings at the same time, that gives them a higher level of security, rather than more conservative households benefiting from the offer of the financial market in terms of borrowing (prudent households – 64.8%, carefree – 63.5%, comfortable – 58.3%, aware investors – 63.8%, determined 60.5%, gambler – 53.1%).

Considering these outcomes it need to be taken into consideration by market players that households of self-employed should be treated as more active both on credit and saving financial market segments as well as more educated and by this the offer dedicated to them should be more sophisticated, including services that demand higher financial knowledge and higher level of engaged assets.

## 3. Conclusions

Researches carried out on typology of consumers on financial market in Poland were conducted so far among individuals, not considering their households as entities (Kieżel, Smyczek, 2011, p. 117; Kołosowska, Nicholls, 1999, p. 22; Smyczek, 2001; Smyczek 2004, p. 215; Smyczek, 2007, p. 261; Smyczek, 2010, pp. 383-384; Smyczek, 2012, p. 206; Zalega, 2012, pp. 234-235). Moreover there is not a typology of consumers on financial market including as dividing them according to socioeconomic type (main source of income criterion). Thus to this a desk research on financial behaviour in Poland of a chosen group - households of self-employed is not possible to be carried on. This article is an attempt to fill this gap by indicating main types of two socio-economic groups of households workers and the self-employed. Achieved results were mainly focused on selected areas of the market, connected with two aspects - saving and borrowing. The remaining areas need to be completed in following researches. Among main limitations of researches attempt to households of self-employed should be mentioned, that share only about 6% of the population.

Results of this article can be implemented by financial market institutions into their marketing policies to respond better to the needs and requirements of their current and potential customers (inter alia due to an interest rate) (Flamini, Frasso, 2009). They show that there is an important difference among households according to socio-economic groups that has been disregarded so far by many of researchers. Its better recognition may result in delivering valuable data to market players, also for the government, that may be interested in the strengthening of selected financial behaviour of households in Poland.

In the authors opinion differences in both groups behaviour indicate on a niche in household finance market offer. Researches outcomes are not a surprise since working on their own show more engagement when considering their role on the market, including financial market. This results in gaining more knowledge on different aspects of running a business and at the same time also household - as it is underlined by many authors high financial knowledge leads to increasing entities wealth. This could be an argument in dispute on how to improve financial behaviour of households in the area of saving and gaining debt. Probably it could be defined what is the desirable pattern and found out which socio - economic group fallows. Basing on outcomes a social campaign could be prepared. In author opinion probably households of self-employed could be considered, however more researches should be conducted in this area. From the financial market operators point of view households of self employed should be treated as more demanding and wealthier segment, where customised offer may be implemented.

## References

Ambrose, B.W., Agarwal, S. (2007). *Household credit usage, Personal Debt and Mortgages*, New York: Palgrave MacMillan, 2007.

Barembruch, A. (2012). Zarządzanie finansami osobistymi - teoria i praktyka, *Zeszyty naukowe Uniwersytetu Szczecińskiego*, *Finanse Rynki finansowe*, *Ubezpieczenia*, vol. 50, iss. 689, Szczecin: Wydawnictwo Uniwersytetu Szczecińskiego, pp. 239-248.

Bartošová, J., Bina, V. (2009). Modeling of income distribution of Czech households in the years 1996-2005, *Acta Oeconomica Pragensia*, vol. 4/2009, [online] [cit. 2013-12-25]. Available:

 $http://www.google.pl/url?sa=t&rct=j&q=\&esrc=s&source=web\&cd=1\&ved=0CDEQFjAA\&url=http%3A%2F%2Fwww.vse.cz\\ \%2Fpolek%2Fdownload.php%3Fjnl%3Daop%26pdf%3D275.pdf&ei=ZmPAUqb3EcuGhQen8oHgCg&usg=AFQjCNHEF3Kx lcbbZNM6jrTDgpAypr6MrQ&bvm=bv.58187178,d.ZG4.$ 

Bartošová, J. (2005). Logarithmic - Normal Model of Income Distribution in the Czech Republic, *Austrian Journal of Statistics*, vol. 35, iss. 2-3, pp. 215-221.

Boersch-Supan, A., Bucher-Koenen, T., Coppola, M., Bettina, L. (2014). Saving in times of demographic changes: lesson from the German experience, *Journal of Economic Surveys*, vol. 29, iss. 4, pp. 807-829.

Bogacka-Kisiel, E. (ed) (2012). Finanse osobiste. Zachowania - produkty - strategie, Warszawa: Wydawnictwo Naukowe PWN, 2012.

Bywalec, Cz. (2010). Konsumpcja, a rozwój gospodarczy i społeczny, Warszawa: C.H. Beck, 2010.

Choe H. (2010). Review of Research in Personal Finance: Based on Journal Papers between 2000-2009, *Journal of Consumer Studies*, vol. 21, iss.2, pp. 41-64.

Dragunowicz, M., Heropolitańska, I., Sterniak-Kujawa, J., Sendek, W. (2001). Kredytowanie działalności gospodarczej małych przedsiębiorców (z uwzględnieniem zagadnień majątkowo - małżeńskich), Warszawa: Twigger, 2001.

Duda, D., Mamcarz, H., Pakuła, A. (1998). Ekonomia, Lublin: Morpol, 1998.

Flamini, A., Fracasso, A. (2009). Household's Preferences and Monetary Policy Inertia, *Sheffield Economic Research Paper Series SERP*, no 2009002, pp. 64-67.

Gaou, M., Fok, R. (2015). Demographics, family/social interaction, and household finance, *Economics Letters*, vol. 136, pp.194-196.

GUS (2012). Statistics [online]. [cit. 2012-12-27] Available: http://www.stat.gov.pl/gus/definicje\_PLK\_HTML.htm?id=POJ-3105.htm

Hilgert, M.A., Hogarth, J.M., Beverly, S. G. (2003). Household Financial Management: The Connection between Knowledge and Behaviour; *Federal Reserve Bulletin*, vol. 89, iss. 7, pp. 7-14.

Main Statistical Office, *Household budget survey 2014* [online]. [cit. 2015-12-27]. Available: http://www.stat.gov.pl/gus/definicje PLK HTML.htm?id=POJ-3105.htm.

Nucu, A.E. (2012). Emerging Markets Queries in Finance and Business. Household sector and monetary policy implementations. Evidence from Central and Eastern European countries, *Procedia Economics and Finance*, vol.3, pp. 889-895.

Kieżel, E., Smyczek, S. (2011). Zachowania polskich konsumentów w warunkach kryzysu gospodarczego, Warszawa: Placet, 2011.

Kołosowska, B., Nicholls, R. (1999). *Bankowość - podręcznik dla studentów*. In Głuchowski, J., Szambelańczyk, J. (eds), Poznań: Wydawnictwo Wyższej Szkoły Bankowej, 1999.

Podkaminer, L. (2003). A note on the evolution of inequality in Poland, 1992-99. *Cambridge Journal of Economics*, vol. 27, iss. 5, pp. 755-768.

Smyczek, S. (2001). Zachowania konsumentów na rynku usług bankowych. Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach, 2001.

Smyczek, S. (2004). Zachowania konsumentów indywidualnych na rynku bankowości internetowe. *Acta Universitatis Lodziensis, Folia Oeconomica*, vol. 179, pp.211-217.

Smyczek, S. (2007). *Modele zachowań konsumentów na rynku usług finansowych*, Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach, 2007.

Smyczek, S. (2010). Wirutualizacja zachowań konsumentów na rynku usług finansowych, *Problemy zarządzania, finansów i marketingu*, vol. 15, no 608, Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, pp. 375-385.

Smyczek, S. (2012). Nowe trendy w zachowaniach konsumentów na rynkach finansowych, Warszawa: Placet, 2012.

Zalega, T. (2012). Konsumpcja w wielkomiejskich gospodarstwach domowych w Polsce w okresie kryzysu finansowo – ekonomicznego, Warszawa: Wydawnictwo Naukowe Wydziału Zarządzania Uniwersytetu Warszawskiego, 2012.

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# 12. MANAGEMENT IN SHARED SERVICES CENTER

Abstract: The article provides an overview about Polish shared service industry as the area where international investors are seeking savings and quality improvement for their processes. The aim of this article is to present Poland as the fast growing market in Europe in development of modern business services. The authors analyses the most recent reports from different fields of industry in order to gather necessary information for evaluating current market situation. The following factors speak for the staked thesis: Polish human capital and its education, labor costs, Polish law, transportation infrastructure and the environment, as well as living conditions in Poland. What is more, authors present information about major investment incentives in the shard services industry in Poland. The second part of this article is devoted to management in these entities. Shared services center (SSC) is formed of processes that are characterized by the lack of physical attachment to one place and that's why they are able to be moved to any location globally. Management of this entity is exposed to asymmetry of information that comes from different operational levels. These levels are related to internal and external environment but amongst one capital group. In the last paragraph the authors point out areas where asymmetry of information can appear and give some actions (from their industry experience) which need to be taken into consideration when the SSC is set up.

Keywords: Globalization, Modern Business Service Sector, Shared Service Center, Process Management

**JEL Classification: M13** 

## 1. Introduction

Globalization is an occurrence that interferes in all areas of current life. Undoubtedly, it supports foreign direct investment, research and development focus, technology diffusion, system transformation, manufacturing and export of processed goods, but also intervenes in the lives of ordinary citizens. (Yip, 2004, pp. 27-28) The internal and external environment has been constantly changed through the following factors: (Sheridan, 1998, pp. 18-20)

- 1) Intensity of global competition, increasingly from second and third worlds. Domestic operations had to deal with different time zones, culture and language;
- 2) New opportunities and risk;
- 3) Increasingly onerous regulatory and environmental pressure;
- 4) Shareholder and stakeholders' activities influencing corporate governance;
- 5) A new attitude to quality and services;
- 6) Duplication of management effort and infrastructures.

Because of above factors there were established new entities such as shared services center (SSC) that supports internal function of the organization on the global level. The specialization and division of labor skills in the provision of shared service centers is a trend that began in the early 1990s. It was a new management concept developed to address low staff service level, low productivity, high cost and poor use of technology. Shared service center became a form of internal outsourcing with the focus to provide services to customers and individual business units (Hammer, Champy, 1994, p. 145).

As the processes are not physically attached to one place and they could be moved to any other location that gives added values (Zorska, 2007, p.20). The aim of this article is to present Poland as one of the most likely chosen location for establishing the new shared services centers within

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European continent. Moreover, the added value of the article are recommended approaches for managing of shared services center that based on business experiences and the management studies.

## 2. Shared Services in Poland

## 2.1. Research methodology

Researches have been divided into review of secondary data (most recent reports and literatures), that give in-depth analysis of the modern business service sector in Poland and allow to designated the current trend in this sector. What is more, the analysis have been particularized by the interviews with industry representatives. Combination of collected data shows that the Polish shared services industry is one the fastest growing market globally. Based on this research's authors point out these factors that are the evidence of Polish superiority on the global market.

#### 2.2. Characteristic of Shared Service Center

The concept of shared services refers to the idea of consolidating a support service and providing it from one central location rather than duplicating the role across the organization. A business may choose to take this approach with one, many or all of the support services it requires (Ślusarczyk, Kot, 2012, p.45). The service is provided by an independent unit specializing in the support service being provided. The aim is to reduce costs and increase efficiency and effectiveness whilst providing high quality and reliable services. The most comprehensive definition of shared services center has been presented by Martin Wenderoth: "Shared services are collaborative strategy in which a subset of existing functions are concentrated into a new, semi-autonomous organizational unit that has a management structure designed to promote effectiveness, efficiency, value generation, cost savings and improved services for the internal and/or external customer, like a business competing in the open market" (Wenderoth, 2013, p. 40).

Figure 1 presents the changes in the creation of SSC. At the infant stage, every organizational unit has their own supporting function that are called "back offices". These functions include: finance, human resources, information technology and supply chain. On the other hand, shared services combine all of these activities into one unit, and treat other entities as an internal client.

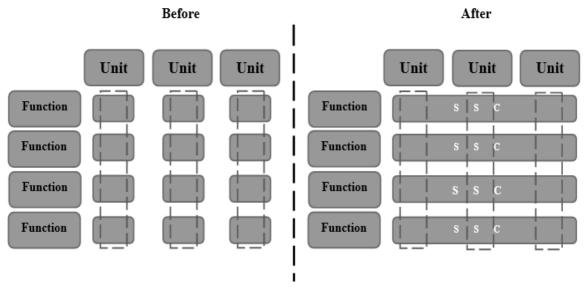


Figure 1. Transformation of SSC

Source: Own study based on previous research

When the back office is being built, there are two options to consider: in-house SSC or business process outsourcing (BPO) (Swientozielskyj, 2015, pp. 22-25). Shared services center evaluated at the same time as outsourcing, so many companies have to determine which solution fits better for back office services. Figure 2 compares typical drivers for both, SSC and outsourcing approached.

## SSC set-up drivers

- Willingness to keep process knowledge in house;
- Concern of loss of company process knowledge to third party;
- Perspective to develop owned SSC offering in the market through professionalization;
- Opportunity to improve internal operations before considering outsourcing activates;
- Fear to lose flexibility and efficiency with BPO.

## **BPO** set-up drivers

- Decision that back office activities are non-core and would be better handled by a third party specialist;
- Business is under intense costs pressure and needs to deliver immediate results:
- Internal capabilities are missing to set up and run a captive SSC;
- Investments and changes are too high to be achieved internally;
- Outsourcing can provide a direct route to process improvements and technology, but brings its own location and cultural challenge.

Figure 2. Establishing drivers for shared industry

Source: Capgemini Consulting, 2013

There is no typical choice between these two approaches. Decision depends on organization situation, footprint, strategy and experience in centralization. The only thing that has to be remembered is that the savings cannot be the only element in the arbitrage between Shared Services Center and Outsourcing model. Culture, strategy and scalability must also be considered.

# 2.3. Poland as a prefer location for foreign shared services center

Poland is a major player for the location of the shared services investment. According to the latest research, Poland is number 3 worldwide and number 1 in Europe in developing innovative business services. Table 1 presents the CEE countries that have been included to the Top 100 Outsourcing Destinations report provided by Tholons (researching company).

**Table 1. Top 100 Outsourcing Destinations** 

Country	City	Ranking 2014	Ranking 2015				
Poland	Krakow	9	9 -				
Czech Republic	Prague	16	15 ↑				
Hungary	Budapest	26	25 ↑				
Czech Republic	Brno	29	29 -				
Poland	Warsaw	32	30 ↑				
Romania	Bucharest	40	39 ↑				
Slovakia	Bratislava	47	49 ↓				
Bulgaria	Sofia	52	51 ↑				
Estonia	Tallinn	53	52 ↑				
Slovenia	Ljubljana	54	53 ↑				
Poland	Wroclaw	65	62 ↑				

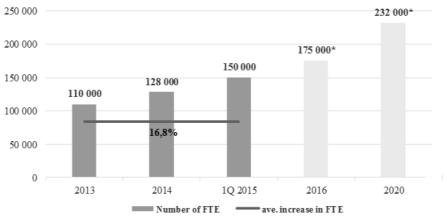
Source: Tholons, 2014

Report contains 11 cities from CEE, where 3 of them are located in Poland. It give us undisputed advantages among the investors. Krakow took the 9<sup>th</sup> place (flat compared to previous year) among the most attractive SSC locations globally. There are also Warsaw (30<sup>th</sup> place) and Wroclaw (62<sup>th</sup> place).

Enterprises from the USA selected mainly large cities, traditionally associated with business services and have their seat in Warsaw and Krakow. Wroclaw is mainly chosen by German companies or companies that are doing business in German language. UK and French companies are more dispersed. Apart from the main cities, most of them select different locations e.g. Katowice, Opole, Lublin etc. (Chojnowska-Hopniak, Jasińska, 2015, p. 20).

The Polish market is a place where, over the last few years, foreign investors in the business service sector have been most active (outsourcing industry in this part of Europe has grown constantly since 2008-09). Till now, more than 500 centres have opened up in Poland, owned by global brands such as: UBS, RBS, CityBank, P&G, IBM, Shell, Credit Suisse, Accenture, etc. (Panczyj et al., 2015, p. 39).

This trend is confirmed by employment growth in business service centers with foreign capital in Poland. Figure 3 presents number of employees working in service sector in particular years.



\* Forecast based on average increase of FTE between 2013 and 2015

Figure 3. Employee growth in business sector in Poland

Source: Own study based on Dzierań et al., 2015, p. 11

If the rate growth in sector continues, according to the forecast, there will be around 230 000 employees in 2020. It means over 100 000 people employment increase in business service centers in Poland since 2013.

The following factors distinguish Poland on the European map of outsourcing. Authors filtered it out – in their opinion – starting from the most important one:

- 1) Economic stability since 2004 the ration of public debt to GDP has been less than 60%. Local currency (PLN) has been stable over the long term, where fluctuations have been less than 15% versus euro. What is more, there is uninterrupted growth from 26 years where finance and macroeconomic results are moving forward (at the different rates), even during the global crisis (Eurostat, 2015);
- 2) Strategic location Poland is a member of the European Union and Schengen structures, which creates a broad framework of stability and secure environment for conducting businesses. What is more, time zone is almost the same as in the whole European Union, it also optimalises hours to meet clients from APAC and Russia and in the same time provide services to the American region (Panczyj, Harrington, Puch, 2015, p. 7);
- 3) Low cost the average hourly wages in Poland are 80% lower than in the EU-15 (Polish worker stands at \$5, whereas workers from Western Europe/USA earn on average around \$25 per hour). Labor costs are also associated with working equipment, office space and maintaining a whole lot of infrastructure. Comparing renting price in Warsaw and London, there is around 75% difference in office price (UBS, 2012, p. 27);
- 4) Supply of high-quality labor most of academic centers in Poland are located in large urban conglomerations (like more SSC in Poland) that provide sufficient number of potential employees and also ensure their education and skills development. Because of free higher education, there are dozens of students who start their education each year. In 2013/2014 the number of graduate students reached 455 000. One of the most noticeable achievements of the higher education system in Poland is the number of various languages that the students / graduates are able to use. Over 90% of people with tertiary education have command of English language. The two other most popular languages are German (39%) and Russian (12%). The German language is often taught as a second language alongside English. Other popular languages are French (8%), Spanish (6%) and Italian (4%) (Chojnowska-Hopniak, Jasińska, 2015, pp. 60-63);
- 5) Attitude of Polish governance the service sector in Poland is one of the priority sectors of economic policy. There are several initiatives for business services sectors like: tax allowances in Special Economic Zones, direct budgetary subsidies for a new investment / employments (from PLN 3 200 to PLN 15 600 for 1 FTE), support of R&D activities (grands up to: 50-65% of the eligible costs for industrial research and 25-40% of the eligible costs for experimental development) (Dzierań et al., pp. 55-59);

- 6) Transport infrastructure because of Polish accession to the European Union and its grands for various modes of transportation, this infrastructure has developed a lot. There are 13 international airports that facilitate access to major cities in Poland. What is more, the regional and local roads were significantly improved. In 2012 governance managed to open 630 km of new express ways. Also rail way has become a major means of communication among different Polish cities (Ministerstwo Transportu, Budownictwa i Gospodarki Morskiej, 2013, pp. 12-17);
- 7) Life quality in Poland there is no persecution on religious or ethnical background. Poland is not engaged in armed conflict on the large scale, which could cause a spike on security in the terrorist conflict. What is more, the number of monuments, shopping malls, art galleries, theaters, sport festivals, recreation activities increases every year. The education in bigger cities is adjusted to international environment, so more and more foreigners decide to live in Poland (OECD, 2014, p. 5).

There is one more factors emphasising uniqueness of Polish Nation on the global scale. This is sustainable innovation which means improving existing products / services constantly. That is why Poland in recent years has been transforming from back offices location towards middle office or even research centers locations (R&D), taking more and more demanding processes from all over the world (Ciesnowski, 2014, p.12; Duening, Click, 2005, p.8).

# 3. Managing of Shared Services Center

On the one hand, shared service center is the way to reduce costs and improve services quality in global economy, but on the other hand, the creation, management and maintain of this entity required a lot of experience, resources and determinations.

Shared services operations occur as a big project that needs a lot of assumptions at the beginning. Apart from business case it requires a lot of planning and structures design to fill in all gaps between SSC and local entities. Important thing here is to keep in mind the original business requirements through a systematic and objective look at the ongoing processes. Most of the processes are moved from completely different location (different culture, country, people), so these processes will not work the same as they do in a local office. In this example changes are needed and have to take place at once rather than be divided into smaller phrases and extended in time. Make sure that every communication is clearly understood not only by stakeholders but also by users' community.

Changes are difficult, especially if the status quo has been achieved once. But without changes, organization is not growing anymore. To make these changes easier, every transition and process movements should start by comprehensive training for both business users and SSC labour - to present full picture of process and explain how it will impact of each task. The good idea is to create contact matrices on how to reach each other including business and SSC part. What is more, implement communication tool that enables to see each other during conference call or individual conversation. You can also create an organizational chart that includes pictures of particular person and their function. Personal recognition helps with better communication.

Regarding the organizational order, auditing and control purposes establish a decision tree that clearly presents the responsibility of a particular team player. It is important to form the access perspectives (IT division) – access to system structures, bank statements, share-drives, share-points, etc. (Benedetti, Albino, Cavenaghi, 2010, pp. 98-106).

Teams that own processes always want to improve them to reduce their work and stress related to daily or monthly tasks. Unfortunately, it is always related to resistance with business side and also managers, who do not know what a particular task looks like. The frustration caused by this stagnation led to turnover and unestablished the whole process. This situation required radical changes of thinking by business side, managers, team leaders and particular employees. There should always be a cross-matrices training to secure the process in different circumstances. From the very beginning there should be also a back-up plan created for all key processes. Besides, the clue is to create a procedures and auditing it once a while.

Services level agreement (SLA) and key performance indicator (KPI) are the key tools / instructions that help company to understand how well they are performing in relation to their strategic goals and objectives. Start measuring five or so areas to simply convince everyone that it helps to better adjust business requirements. Once these areas are controlled, choose the next set of KPI. Do not rush the things - if you start measuring everything at once, it gives you unreliable results (Marciniak, 2013, pp. 187-194).

The last but not least advice is to be present in your team life. Between management task there should always be time for meeting and discussion about current issues and major problems.

## 4. Conclusion

Globalization has become a major factor that forced companies to create a more and more demanding system for better usage of their resources. One of these forms is shared services center and over the year it has led to the creation of a separate business service sector. The greatest location for the new entity is Central and Eastern Europe, and undoubtedly Poland as the country with: economic stability, strategical location in the middle of Europe, very well-educated labor, lower working and infrastructure costs, excellent communication solutions, good life conditions and governance attitude.

As it turns out, SSC is so far one of the best solutions for reducing costs and increasing the quality of product and services. But just like any investments there is also a risk associated with establishing particular entity. There are several actions that have to be taken into consideration in line with setting up SSC. These actions are related to better understanding of cultures, countries and people, even as you learn about you, your country and your company. Appropriately implemented SLA and KPI help to better understanding of how company is working and what a performance level is.

#### References

Benedetti A., Albino J.P., Cavenaghi V. (2010). A Proposal for System Performance Evaluation for an ERP Knowledge Extraction Model, *Proceedings of the 11th European Conference on Knowledge Management*, vol. 1 and 2, pp. 98-106.

Capgemini Consulting (2013). Shared Services Center. The next generations, pp. 6. [online] [cit.2015-12-21]. Available: https://www.fr.capgemini-consulting.com/resource-file-access/resource/pdfshared-services-centers-next-generation-capgemini consulting.pdf.

Ciesnowski, J. (2014). Investing in Poland 2015 featuring trendbook. *Warsaw Business Journal*, p.12. [online]. [cit.2015-12-21]. Available: http://www.pwc.pl/pl/publikacje/assets/investing\_in\_poland\_2015.pdf.

Chojnowska-Hopniak, I., Jasińska, M. (2015). 10 years of business service sector in Poland, Invest in Poland & Hays, p. 20.

Duening, N.T., Click, L.R. (2005). Essentials of Business Process Outsourcing, New Jersey: John Wiley & Sons, 2005.

Dzierań, A., Górecki, J., Kapusta, E., Karpiesiuk, Ł. Polkowski, M., Raychaudhuri, S., Srivastava, A. (2015). *Business services sector in Poland 2015*, ABSL, pp. 55-59.

Eurostat, (2015). Statistics. [online] [cit.2015-12-18]. Available: http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes.

Hammer, M., Champy J. (1994). *Reenginering the Corporation. The manifest of business revolution*, New York: HarperCollins, 1994.

How life in Poland? (2014), OECD [online] [cit.2015-12-18]. Available: http://www.oecd.org/statistics/BLI%202014%20Poland%20country%20report.pdf.

Marciniak R. (2013). Role of new IT Solutions in the Future of Shared Service Model, *Pollack periodical: an international journal for engineering and information sciences*, vol., 8, iss. 2, pp. 187-194.

Panczyj, P., Harrington, D., Puch, T. (2015). 2015 Rising Stars. CEE Investment Report, ABSL / Colliers International / Capital Markets JLL, 2015.

Prices and earnings (2012), UBS, pp. 27. [online] [cit.2015-12-21]. available: http://81.47.175.201/ETMS/rankings/2012 UBS Prices earnings.pdf.

Sheriden, T. (1998), The changing shape of the finance function, *Management Accounting Journal*, vol. 76, iss. 2, pp. 18-20.

*Strategia rozwoju transportu do 2020 roku* (2013), Ministerstwo Transportu, Budownictwa i Gospodarki Morskiej, Warszawa, pp. 12-17. [online] [cit.2015-12-21]. Available: https://www.mr.gov.pl/media/3511/Strategia\_Rozwoju\_Transportu\_d\_2020\_roku.pdf

Ślusarczyk, B., Kot, S. (2012). State aid for foreign direct investment in Poland, *The Business Review Cambridge*, vol. 20, no 1, pp.130-137.

Swientozielskyj, S. (2015). Certificate in Global Business Services – the fundamentals of the main operating models, Londyn: CIMA, 2015.

Tholon (2014), 2015 Tholons Top 100 Outsourcing Destinations: Regional Overview, pp. 2-6. [online]. [cit.2015-12-21]. http://www.tholons.com/nl\_pdf/Tholons\_Whitepaper\_December\_2014.pdf.

Wenderoth, M., H. (2013). *Four-Phase-Model for the implementation of shared services*, University of Pece, p. 40. [online] [cit.2015-12-21]. Available: http://ktk.pte.hu/sites/default/files/mellekletek/2014/07/Martin\_Wenderoth-tezisek.pdfz.

Yip, G. S. (2004). Strategia globalna. Warszawa: PWE, 2004.

Zorska, A. (2007). Korporacje transnarodowe. Przemiany, oddziaływania, wyzwania, Warszawa: PWE, 2007.

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# 13. INTERDEPENDENCE OF CORPORATE SOCIAL RESPONSIBILITY INITIATIVES AND INDICATORS OF LIVING STANDARDS

Abstract: The purpose of this study is to identify relationships between social oriented forms of corporate social responsibility initiatives and current living standards based on some countries' practice. Living standards indicators used in this study include infant mortality, poverty and child poverty rates, availability of education to children and female employment rates. The main social oriented forms of corporate social responsibility initiatives are associated with supporting rights of workers, consumers and local population in general. This study uses comparative analysis of statistical indicators for two groups of countries; the first group includes pioneers and leaders of corporate social responsibility initiatives such as the United States, European countries and Japan, the second group consists of countries that follow business practices of developed countries, including post-socialists countries. The results of this analysis can be used to detect economic contradictions as well as to substantiate practical recommendations in order to realize the potential of corporate social responsibility as a mechanism to overcome existing social problems.

Keywords: corporate citizenship, corporate social responsibility, social responsibility of business

**JEL Cassification:** M14

## 1. Introduction

Corporate social responsibility (CSR) or social responsibility of business (SRB) is defined as the practice of business that takes into account economic, legal and social needs of the population in the form of providing social protection to employees, customers, partners and society in general. This practice has two effects: CSR provides a competitive advantage, which leads to an increase in demand for goods and services of companies; CSR is improving the working conditions of workers, protecting the rights of consumers, support for vulnerable people, as well as actions aimed at protecting and restoring the natural environment, which in turn increase the standard of living in general.

Analysis of the scientific literature on these issues shows that considerable attention is given to the relationship between CSR and financial profitability. Analysis of CSR in the context of financial activities conducted by Wang and his colleagues (2015) confirmed a direct influence of the amount of implemented CSR projects on brand value and the financial effectiveness of companies. C.Stellner and coauthors (2015) have performed an empirical analysis on the impact of CSR on credit risk, proved the existence of the relationship between the implementation of CSR projects and a reduction in credit risk of the company. A.Fatemi (2015) focused on CSR as a mechanism for increasing the value of the company. Based on empirical data, it is proven that the company's costs related to the implementation of CSR projects increase its financial value.

Many of the publications in the theory and practice of CSR are also dedicated to the research on the relationship between CSR and corporate political strategies, due to global expansion of the geographical boundaries of international corporations and emergence of political conflicts. An

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important contribution to the study of these problems was made by Rehbein et al. (2015), who analyzed the relationship between CSR and corporate political efficiency of the company. Conclusions drawn from the authors' model confirmed that the implementation of CSR projects contributes to escalating human and organizational capital, which in turn increases the efficiency of corporate political activity of the company as a whole. Hadani with coauthors (2012) explored the role of CSR in the forming of corporate political strategy (also under conditions of political uncertainty) and proved that the activities of the company in the form of social philanthropy reduce political conflicts within unstable political situations.

In the post-socialist countries, problems of formation and implementation of CSR were the subject of scientific debate that started in the late twentieth century within the new transitology. The studies of Bazylevych (2007), Bayura (2009), Belyaeva, Eskindarov (2008), Blagov (2004), Kolot (2013), Ritvo (2015), Zinchenko, Saprykina (2010), Spukiene (2011), Stremikiene (2007), Suprun (2013) and others reflected the essence of the problems and the mechanisms of CSR implementation in post-socialist countries.

The problem of the relationships between CSR implementation forms and standards of living in certain countries or regions are now scarcely explored. In a broad sense it refers to the practice of implementing CSR projects to cope with global social problems (e.g., child labor, poverty, discrimination), to achieve sustainable development goals (e.g., protection and restoration of the environment), to overcome the crisis of the welfare state caused by rising budget deficits and debts etc.

# 2. Methodology of research

This study is based on the analysis of the relationships between global practices of the CSR projects and current living standards of the population. Comparative analysis of the problem is linked to the differentiation of the developed countries (United States, European Union and Japan) and post-communist states, including Latvia, Lithuania, Estonia and Ukraine. The experience of developed countries in implementing CSR is particularly useful for post-communist states and for Ukraine, which is now experiencing great difficulties due to the aggravation of social problems under present radical socio-economic transformations aimed at forming civilized market relations and integration into the world economic system.

At the beginning of the article the authors analyze the stages of formation and common features of Western and Eastern models of CSR, which are associated with determining priorities based on certain indicators of living standards in the US, EU and Japan. Later, successful experiences and priorities of CSR in the developed world are compared with the experience of implementing CSR in post-socialist countries (the Baltic countries and Ukraine), that have chosen the European direction of development. This comparison reveals the specific features of CSR implementation practices in post-socialist countries and key barriers to the formation of civilized market relations and proves practical recommendations for the further development of CSR in the national economy to address acute social problems.

## 3. Results of research

It is known that the United States, European countries and Japan are the world leaders in terms of CSR projects. This is confirmed by a number of recent studies, Fujii (2012) performed analysis of CSR features in Japan and the impact of the Western economy; the survey made by Welford (2005) covers the implementation of CSR practices in Europe, North America, Asia and specificity of each region, individual countries in the area; the key areas for further development of CSR in European countries and the United States are proved by Forte (2013) etc. Analysis of regions under a wide range of indicators, from the context of CSR establishment, findings of current social issues, CSR practices and their purpose, that enable to distinguish the specific features of each region still remains relevant.

First of all, it is necessary to take into account that the formation and implementation of CSR in the developed world has passed through two stages: 1) Establishment of CSR influenced by worsening of domestic social problems of individual states in order to provide social protection for vulnerable groups; 2) Further development of CSR by external factors, largely in response to international organizations and to enhance the competitiveness of companies within the global economic system.

Analyzing the differences in the formation and assigned priority of CSR in the developed world, single out its two models: the Western inherent in EU countries and the United States and the Eastern reflecting features of CSR in Japan. First, note that the specific forms and tools for CSR

implementation within the Western model vary depending on the sector in which the company operates. Analysis of scientific publications and practices of companies in these countries allows us to distinguish the following key areas of CSR: 1) Protection of the environment: 1.1) Reducing pollution of soil, water and air; 1.2) Minimizing the negative effects of climate change; 1.3) More efficient use of natural resources. 2) Protection of human rights: 2.1) Women's promotion, increasing the share of female workers; 2.2) Improving business ethics; 2.3) Reduction of child labour; 2.4) The fight against corruption.

The companies working in the food production industry, in addition to these areas seek to fight poverty and hunger. These projects are implemented in two ways: 1) Financing social programs; 2) Transfer of own products to the regions that are needed such assistance (based on published reports on CSR (Kraft Heinz, 2014; Nestle, 2014)). Companies that design software and computer equipment are directing special attention to the development of education among children from poor families and in third world countries. The main mechanism of implementation of these projects is to provide computer equipment to education institutions or free software and to conduct free courses, workshops for gifted children (based on published reports on CSR (IBM, 2014; Microsoft, 2014)). Pharmacological companies, in turn, focus their projects on the health of population, especially in third world countries where there is a need for vaccines and other essential drugs (based on published reports on CSR (Sanofi, 2014)).

Comparing the Western and the Eastern models of CSR, we can conclude that the scope of implementation of CSR by private companies depends on the cultural and historical specificity and the standards of living. To confirm this we use four indicators: infant mortality, percentage of population and children living below the poverty line, the proportion of children with access to the necessary means of training, the level of employment among women and women with children.

According to the data presented in Fig. 1 infant mortality in Japan is much lower compared to the average of this index among OECD (Organization for Economic Co-operation and Development) countries. The data shows that the problem of public health and recovery is relatively more important for the Western model than the Eastern model. In addition, the data obtained by analyzing the official published reports of companies (Table. 1), confirms that. According to the Western model of CSR 66% (4 out of 6) of companies decided to improve working conditions and the health of workers and in the Eastern model - only 33% (1 out of 3).

As for the proportion of the population and children, that is living below the poverty line, according to data in Fig. 1, there is a significant prevalence of poverty among children in Japan (0.6%) and the US (3%), which respectively affects the orientation of actions towards poverty reduction, from the state and from the corporate sector in the form of CSR.

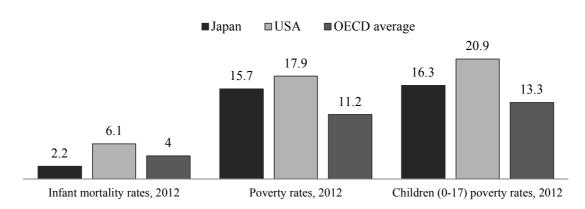


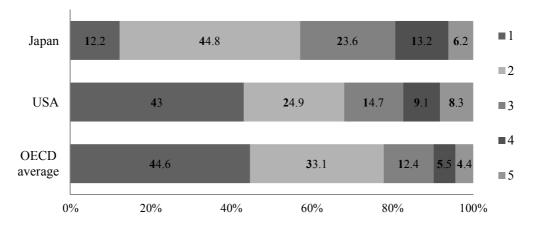
Figure 1. Infant mortality rates, poverty rates (%), child poverty rates (%) in the US, Japan, and the average for OECD countries, 2012

Source: OECD, 2015; Anonymous, 2015

High levels of poverty and child poverty in particular, causes child labor (especially in the US), which is why for the Western model combating child labor is a priority, that is confirmed by the data in Table 1. In the countries of the Western model of CSR 33% (2 out of 6) of companies focus their efforts on decreasing child labor, whilst for the Eastern model it is not a priority at all.

Data concerning equal access to learning tools among OECD countries varies (Fig. 2), in the US with 43% of children having access to all necessary training facilities, the average level for OECD countries is 44.6% and for Japan - only 12.2%. According to this data, priorities with implementing CSR in Japan are associated with higher levels of education for children and the youths, in preserving and spreading the national culture and traditions. Meanwhile, in the US and the EU problems of training facilities for children are not dire, so this trend of implementing SCR is mainly focused on improving the situation rather than on coping with actual social problem.

According to the data presented in the statistical database for the OECD in 2011, the average level of female employment (with children up to 15 years) among OECD countries was 65.2%, in the US – 65.2%, in Japan – 52%. These figures indicate that for the Eastern SCR model employment of women is a more pressing problem than for the Western CSR model. The data in Table 1 shows that all companies are trying to increase the share of female employment.



The share of children that have access to all educational resources (1), the share of children that don't have access to (2) a desk to study, (3) a quiet place to study, (4) a computer for school work, (5) educational software, internet connection, a dictionary and school textbooks

Figure 2. Material deprivation based on access to educational resources, 2012

Source: OECD, 2015

Thus, the focus of both models is on combating child poverty. The Eastern model priority projects of SCR are to provide social protection of vulnerable groups (e.g., children and women). For the Western model, the social protection of women and children is not extremely important, because companies equally direct their CSR projects on social protection of employees, customers, partners and society in general.

Another approach based on the comparative analysis of published reports by reputable companies enables the assessment of social areas that are attracting the attention of private companies while choosing the priorities for implementing CSR programs or projects (Table 1). The table shows that the practice of CSR projects of international companies in Japan is largely focused on the social protection of employees. CSR projects that are oriented on coping with corruption and preventing discrimination in the activities of these companies are absent, due to the low severity of the problems in the region and significant advances of the state aimed to solve such problems. Japan projects designed to support society are a priority and oriented towards improving children and youth education, as well as funding some cultural and sporting events. Some social projects are directed towards protecting the population from natural and man-made disasters is implemented "directly" from the government without any assistance from charities that is typical for the Western model of CSR.

The Western model of CSR is different from the Eastern by its equal distribution of projects between two areas: social protection of employees and society in general. Under such conditions, important areas for businesses are: reducing child labor (including the Third World, where production capacity is allocated), employment of people with disabilities, fighting against corruption and preventing discrimination among employees, all of the above enable further improvement of living standards for society in general. Noteworthy that mentioned priority areas were largely caused by the second phase of CSR development within the global economic system.

Table. 1 Comparative analysis of the priority areas of social protection implemented within the individual companies of eastern, western models of CSR and Ukrainian companies

	Eastern model			Western model				Ukrainian companies with Ukrainian capital				Ukrainian companies with foreign capital			
Orientation of Social Protection	CASIO	SONY	TOSHIBA	IBM	MICROSOFT	KRAFT	NESTLE	COCA-COLA	P & G	PLATINUM BANK	DTEK	ViDi GROUP	KPMG UKRAINE	SAMSUNG UKRAINE	KYIVSTAR
Society as a whole:															
Educational activities for children and youth	++	+		+	+			+	+	+		+	+	+	+
Financial support of sporting and cultural events	+			+				+		+			+	+	+
Improvement of consumer products quality						+	+	+							+
Assistance to the population affected by natural disasters	+ +		++			+			+						
Reduction of child labor					+		+				+	+			
Charity					+			+		+	+		+	+	+
Employees:															
Fight against corruption – Business Ethics					+		+			+	+	+	+		+
Training and education of employees	+	+	+		+		+	+	+	+	+	+	+	+	+
Support health workers – improved working conditions		+		+			+	+	+	+	+	+	+	+	+
Prevention of discrimination					+			+			+	+	+		
Employment of people with disabilities	+	+	+				+					+			
Raising the level of female employment	+	+ +	++	+	+	+	+	+	+	+		+	+		

Source: Casio, 2014; Sony, 2014; Toshiba, 2015; IBM, 2014; Microsoft, 2014; Kraft Heinz, 2014; Nestle, 2014; Coca-Cola, 2015; P&G, 2014; Platinum Bank, 2013; DTEK, 2013; ViDi Group, 2013; KPMG Ukraine, 2014; Samsung Ukraine, 2015; Kyivstar, 2014

The process of formulation and implementation of CSR policies in less developed countries, particularly in post-socialist countries, started during the second phase of CSR. Therefore, the most important causes of it were not connected to solving internal social problems (e.g., unemployment, discrimination, corruption, etc.), but enforced by external demands mostly from international organizations (UN Global Compact, The International Labour Organization, UNICEF, UNIDO, The Council of Europe, The European Organization for Quality, The International Organization for Standardization) and, to some extent, by the task to improve the domestic companies competitiveness in the international market.

To study the specific features of CSR implementation in post-socialist countries we divide them into two groups: Central European countries (e.g., the Baltic States) and Eastern Europe (former Soviet countries, e.g., Ukraine). Analyzing the CSR development in the Baltic States, it should be noted that this process is disproportionate amongst these countries. Taking into account the number of companies that have joined the United Nations Global Compact, we can conclude that Lithuania is a leader in terms of implementing CSR policy, since 45 Lithuanian companies joined the UN Global Compact, as opposed to 15 Latvian and none from Estonian companies.

Key features of CSR projects and barriers faced by Lithuanian companies mostly describe the specific regional model of the Baltic States. The scientific works devoted to the study of CSR in Lithuania, enable us to identify the specific features: 1) The higher level and greater interest in

implementation of CSR projects are among companies with foreign capital compared to companies with predominantly Lithuanian capital, which shows "outdated" methods of doing business are still used by national companies; 2) Lack of interest and willingness of private companies to increase the openness and transparency of their business, including reporting on its financial activities to the public; 3) Lack of understanding about the nature and principles of CSR and a low level of social demand to businesses enforce companies to implement social oriented projects; 4) The absence of adequate institutions and methods to encourage SCR by the state, that transforms socially responsible activities in the private initiative of individual companies. (Laurinavicius, Vaiciulis, 2014; Vilke, 2011).

To study the specific priorities of CSR in Ukraine we used the official companies' reports on implementation of CSR projects, we divided companies that operate in Ukraine into two groups: Ukrainian companies with national capital and Ukrainian companies with foreign capital (multinationals) (Table 1). Practice of CSR policy implementation in Ukraine helps to establish the following specific features: 1) Companies that hold to CSR policy in Ukraine are mainly subsidiaries of international companies such as: Microsoft Ukraine, Nestle Ukraine, Kyivstar, Samsung Ukraine etc., so their priorities are international standards that do not always agree with Ukrainian realities; 2) Strategic European-oriented priorities encourage Ukrainian companies to follow CSR principles such as reduction of negative impacts on the environment, meeting international standards of product quality and protection of vulnerable populations (e.g., children and women) that sometimes are only declared and not implemented in practice; 3) Absence of legislation on formulation and implementation of CSR in Ukraine, evaluation methods of its effectiveness, reporting practices, weak public support of CSR due to ignorance or distrust of large national companies (e.g., perception of CSR projects as a form of "money laundering" or other forms of corruption), all mentioned above don't encourage companies to participate in social projects actively.

Thus, the Ukrainian model of CSR has a weak correlation between the priority areas in its implementation and current social problems in the country. The main reason for this discrepancy is the direct "transfer" of experience from developed countries into developing countries, at the same time excluding current realities, priorities of Ukrainian business environment and the level of social protection.

Significant changes took place in relations between the state, business and society, that were influenced by the events of 2013:1) "Revolution of Dignity" was the decisive step towards the definition of the development vector for Ukraine towards integration into the European Economic Community, approaching European standards of quality of life, harmonization of Ukrainian and European institutional environment, development of trade and economic connections with the EU; 2) The process of social capital increase has begun together with the formation of civil society, whose main goal is to protect fundamental rights and freedoms of citizens; 3) while combat operations are taking place in eastern Ukraine, we can notice some growth of charitable activities of private companies, aimed to help the victims of the hostilities, to rebuild destroyed towns and villages.

## 4. Conclusion

Research on the relationships between the different approaches of CSR implementation and current living standards in some countries allows us to formulate the following conclusions:

Living standards greatly affect the features of CSR policy implementation in different countries. Thus, despite the existence of common features, the Eastern model of CSR implementation in the developed world aims to provide education to children, youth, cultural and sporting events, as well as the rights of women and women with young children at their workplaces, which greatly improves living conditions for society in general. The Western model of CSR largely focuses on the fight against corruption, promotion of business ethics, rejection of child labor in the production process, etc.

Specific characteristics of CSR implementation practices in post-socialist Baltic countries are: 1) A higher level of participation in CSR projects from companies with foreign capital; 2) Lack of interest of private companies in the "open" and "transparent" conduct of business and reporting to the public on its financial activities; 3) Lack of understanding of CSR among the population and appropriate requirements to the business from the society; 4) Absence of appropriate institutional support and state mechanisms to encourage socially responsible business activities; 5) CSR is largely focused on improving and restoring the environment and less on improving the social situation of population.

The formation of a national model of CSR requires consideration on the specifics of the present economic stage of development and the historical, cultural features of post-socialist countries. In this context, effective development of CSR in Ukraine envisages the following priorities: 1) Institutional support for CSR practices by creating an appropriate legal framework; 2) Promote "openness" in the actions of private businesses and the state to reduce the level of distrust in society; 3) Encourage private businesses to implement CSR priorities of state social policy objectives by providing certain tax benefits and advantages; 4) Information support and image promotion of companies that hold to the principles of CSR.

Limitations in this study are incomplete statistical bases and the lack of a unified method of evaluating the effectiveness of CSR projects implemented by individual companies in various regions of the world. Used in the paper studies and information submitted in the form of rating lists, reports, and based on expert assessments led to some subjectivity in the comparative analysis of the implementation of CSR practices within its regional and national models.

Further research can be directed to study methods for determining the socio-economic efficiency of CSR policies in developed countries and in transition economies, determining its impact on improving the global competitiveness of countries.

#### References

Anonymous. (2015). *Saving children from poverty. The Japan Times*. [online] [cit. 2015-12-05]. Available: http://www.japantimes.co.jp/opinion/2015/05/12/editorials/saving-children-from-poverty/#.VvD6f3pcIg5.

Bayura, D. (2009). Corporate social responsibility in the corporate governance. Ukraine: aspects of labor, vol. 1, pp. 21-25.

Bazylevych, V. (2007). Indicators of social efficiency. In Bazylevych, V. at al.(eds.) *Economics: Political Economy*. Kyiv: Znannya Press, 2007.

Belyaeva, I, Eskindarov, M. (2008). Corporate Social responsibility: Management dimension. Moscow: Knorus, 2008.

Blagov, Y. (2004). The concept of corporate social responsibility and strategic management. *Russian Management Journal*, vol. 3, pp. 17-34.

Casio (2014). Sustainability report. [online]. [cit.2015-12-12]. Available: http://world.casio.com/file/csr/pdf/report 2014/2014report casio en all.pdf.

Coca-Cola (2015). Corporate responsibility and sustainability report 2014/2015. [online]. [cit.2015-12-10]. Available: http://www.coca-colacompany.com/content/dam/journey/us/en/private/fileassets/pdf/2015/07/2014-2015-sustainability-report.15 080415.pdf.

DTEK (2013). Integrated report. [online]. [cit.2015-12-10]. Available: http://www.dtek.com/library/file/annual-report-2013-pdf-13-mb.pdf.

Fatemi, A. et al. (2015). Valuation effects of corporate social responsibility. Journal of Banking & Finance, vol. 59, pp. 182-192.

Forte, A. (2013). Corporate Social Responsibility In The United States And Europe: How Important Is It? The Future Of Corporate Social Responsibility. *International Business & Economics Research Journal*, vol. 12, No. 7, pp. 815-823.

Fujii, T. (2012). Japanese corporate social responsibility from a Global Perspective. *Nikkei CSR study meeting*, vol. 10. [online]. [cit.2015-12-12]. Available: http://www.nikkei.co.jp/gsr/global/report/10.html.

Hadani, M. et al. (2012). Complementary Relationships Between Corporate Philanthropy and Corporate Political Activity: *An Exploratory Study of Political Marketplace Contingencies. Business&Society*, vol. 54, iss. 6, pp. 859-881.

IBM (2014). Corporate responsibility report. [online]. [cit.2015-12-13]. Available: http://www.ibm.com/ibm/responsibility/2014/downloads/IBM 2014 CR report.pdf.

Kolot, A. (2013). Corporate social responsibility: the evolution and development of theoretical views. *Economic Theory*, vol. 4, pp. 5-26.

KPMG Ukraine (2014). Social report. [online]. [cit.2015-12-13]. Available: http://www.kpmg.com.

Kraft Heinz (2014). Annual report. [online]. [cit. 2015-12-13]. Available: http://ir.kraftfoodsgroup.com/annuals.cfm.

Kyivstar (2014). Sustainability and social initiatives report. [online]. [cit. 2015-12-10]. Available: http://www.kyivstar.ua.

Laurinavicius, A., Vaiciulis, M. (2014). Corporate social responsibility in foreign and Lithuanian capital companies. *Business systems and economics*, vol 4, No 1. pp. 53-63.

Microsoft (2014). Citizenship report. [online]. [cit.2015-12-12]. Available: https://www.microsoft.com/about/csr/transparencyhub/citizenship-reporting/.

Nestle (2014). *Nestle in society. Creating shared value and meeting our commitments (report)*. [online]. [cit.2015-12-12]. Available: http://www.nestle.com.

OECD (2015). Database. [online]. [cit.2015-12-12]. Available: http://www.oecd.org.

P&G (2014). Sustainability report. [online]. [cit.2015-12-14]. Available: http://www.pg.com.

Platinum Bank (2013). Sustainability report. [online]. [cit.2015-12-05]. Available: http://ua.platinumbank.com.ua.

Rehbein, K et.al. (2015). Linking Corporate Community Programs and Political Strategies: *A Resource-Based View. Business & Society*, vol. 54, No. 6, pp. 794-821.

Ritvo, R.A., Feldmane, A. (2015). Corporate social responsibility in Latvia: building partnerships on public support for NGOs. *Journal of management policy and practice*, vol. 16(2), pp. 26-37.

Samsung Ukraine (2015). Sustainability report. [online]. [cit.2015-12-06]. Available: http://www.samsung.com

Sanofi (2014). CSR report. Partnering to promote access to healthcare. [online]. [cit.2015-12-10]. Available: http://en.sanofi.com.

Sony (2014). CSR reporting. [online]. [cit.2015-12-14]. Available: http://www.sony.net.

Spukiene, R. (2011). Development of corporate social responsibility in Lithuania: present situation and future perspectives. *Economy Transdisciplinarity Cognition*, vol. XIV, iss. 1, pp. 81-88.

Stellner, C. et al. (2015). Corporate social responsibility and Eurozone corporate bonds: The moderating role of country sustainability. *Journal of Banking & Finance*, vol. 59, pp. 538-549.

Stremikiene, D. (2007). Corporate social responsibility in Baltic States. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, vol. 2 (9), pp. 285-293.

Suprun, N. (2013). Corporate social responsibility as a factor of social involvement. Ukrainian society. vol. 2, pp. 163-176.

Toshiba (2015). CSR report. [online]. [cit.2015-12-14. Available: http://www.toshiba.co.jp.

ViDi Group (2013). Annual report. [online]. [cit.2015-12-14]. Available: http://www.vidigroup.com.

Vilke, R. (2011). CSR development problems in Lithuania: evaluation of promoting and hindering factors. *Social Responsibility Journal*, vol. 7, iss. 4, pp.604-621.

Wang, D. et al. (2015). The effects of corporate social responsibility on brand equity and firm performance. *Journal of Business Research*, vol. 68, iss. 11, pp. 2232-2236.

Welford, R. (2005). Corporate social responsibility in Europe, North America and Asia. *Journal of Corporate Citizenship*, iss. 17, pp. 33-52.

Zinchenko, A., Saprykina M. (2010). Corporate social responsibility 2005-2010: Current situation and development prospects. Kyiv: Farbovanyi lys, 2010.

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# 14. THE ROLE OF HUMAN RESOURCE STRATEGIC MANAGEMENT IN DEVELOPING THE EMPLOYMENT POLICY

Abstract: Theoretical approaches to strategic human resource management point to the impact of the organization's external and internal conditions in the development of employment policy only marginally. As we live in a rapidly changing world, it is necessary to pay attention to everything that will affect the employment of people in an organization. In the present study, the authors shed light on the importance of strategic human resource management for the development of employment policy. In addition, the impact of external and internal conditions for the development of employment policy is analysed, and special importance of studying external conditions in the immediate vicinity of an organization is drawn attention to, i.e. the area in which the majority of employees of the organization reside. Moreover, internal conditions of an organization, which should be paid attention to in the development of employment policy strategy are defined. The authors compare four human resource (HR) strategic management approaches on which the development of employment policy may be based. Each type of business has its own peculiarities that need to be taken into account. That is why the development of a coherent employment policy should be based on an integrated management reflecting the core corporate values related to treatment of people. In the concluding section, the authors point to the Best Fit approach, i.e. continuous adaptation, which may be the most efficient way for the employment policy development. Additionally, it can also be instrumental for employers to make sure they have sufficient workforce that are suitably motivated and qualified.

Keywords: human resources, strategic management, employment policy

**JEL Classification:** O15

## 1. Introduction

In dynamic and competitive world, it has become evident that the success of an organization is consider to be the human capital, as their most important asset (Stanit, Todericiu, 2014). The human resources management has an essential role in helping the organization to achieve its objectives and thus should be an important part of its strategy. Strategic human resource management has emerged as the prominent designation of people management over the past three decades (Gannona et al., 2015; Kramar, 2014; Zheng, 2013).

Johnson and Scholes (1993) define strategy as the direction and scope of an organization over the long term: ideally which matches its resources its changing environment, in particular its markets, customers and clients in order to meet the expectations of all stakeholders. Strategic management relates to long-term planning and organization's direction, thus making sure that the course of events follows deliberate and long-term plans. It is used both to transfer owners' requests to the organization's managers and to organize, unify and guide the behaviour of people across the organization. The ultimate purpose of strategic management is to make sure that all workers know the organization's

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major goals and direct their behaviours and actions to achieve them. The result is a well-functioning and prosperous organization. Štefančíková (2015) maintains that it is the human capital that plays a major role in gaining competitive advantage.

We agree with several definitions (Armstrong, 2007; Boxall, 1994; Wright, Snell, 1989) only if the described processes take place in a stable external and internal environment of an organization. If, however, the environment is constantly changing, we argue that strategic human resource management must primarily address the readiness of people for changes, i.e. technological, economic and legislative ones.

Strategic human resource management has been defined as the planned pattern of human resource and human resource management deployments and activities intended to enable the organization to meet organizational goals and objectives (Wright, McMahan, 1992; Way, Johnson, 2005). Strategic human resource management research focuses on the contribution that HR practices can make to organizational performance and competitive advantage (Collins, Clark, 2003; Mitchell et al., 2013). Human resource professionals use the term "strategic HRM" broadly to signal their belief that effective HRM contributes to business effectiveness (Jackson et al., 2014). Growing empirical evidence supports the fact that human resource management practices have a direct impact on organizational performance (Jacobson, Sowa, 2015). The field of strategic HRM differs from traditional HRM in various aspects. It focuses on organizational performance rather than individual employee performance, emphasizes the role of HR systems instead of individual HRM practices (Krenn, 2013).

Strategic personnel planning represents a tool for strategic management of human resources. Problems related to strategic management of human resources must be looked at in the context of the problems associated with organizational strategy and strategic management of the organization. In principle, strategic management refers to a logical sequence of various issues that need to be addressed, such as what business philosophy an organization is going to establish, what positive and negative factors influence an organization, what the strengths and weaknesses of an organization are, what objectives an organization aims to achieve and how.

Thus, strategic management of human resources is to address the following issues:

- match between jobs and workforce of an organization that the organization intends to achieve in the future.
- match between the level of labour productivity and personal satisfaction of the workforce.
- changes in personnel-related policies and practical activities to achieve enhanced quality of the workforce.

For the above reasons, we defined the concept of employment policy as we think that it reflects to a greater extent the strategic approach to employing people in an organization as an integrated and coherent approach in human resources management.

## 2. Research mathodology

The paper shows the importance of strategic human resource management for the development of employment policy. In addition, the impact of external and internal conditions for the development of employment policy is presented, and special importance of studying external conditions in the immediate vicinity of an organization is drawn attention to, i.e. the area in which the majority of employees of the organization reside.

The main aim of the study is to analyze approaches to strategic human resource management and to define internal and external conditions affecting the development of employment policy.

In the paper, literature review method, as well as comparative analysis were employed. The article is theoretical in character, based on relevant international literature. Research papers considered for inclusion in this literature review are: written mostly in English, from peer-reviewed journals or monographs, and accessible through electronic management databases.

# 3. The impact of internal and external conditions on the employment policy formation

Under the defined approach, careful attention should be paid not only to internal factors affecting the organization, but also the external ones. External environmental factors include mainly demographic development and its influence on the reproduction of labour resources and manpower, labour market developments, and in particular developments in relationship between labour supply and demand (in

terms of both quantity and quality), technological changes being used or employable in an organization, changes in the value system of people, mainly changes in career orientation, changes in preferences related to education, family, social needs, etc. It is of special importance to take into consideration the degree of stability, type of education, and/or family model, spatial mobility of population, labour resources and workforce (including trans-national mobility), obstacles to free mobility (administrative, residential, social, psychological), migration attractiveness of regions and places, labour and social legislation and employment policy (Vojtovic, 2013; Belas et al., 2015).

Other external environmental factors, however, should also be taken into consideration, e.g. stages of the economic cycle; changes in the demand for products manufactured or services provided by an organization, changes in the competitive environment related to goods and services, possible changes related to raw materials and energy; changes in the degree of openness of the national economies, political and legal stability required for the operation of an organization. As stated by Havierniková (2014), economic success of a region can be achieved by knowing its comparative advantages.

The examination of a great majority of these factors in the immediate vicinity of an organization - the area where the majority an organization's employees reside - is of great significance. The remaining regions, however, cannot be ignored. (Havierniková, 2012)

There is workforce with high spatial and occupational mobility in countries with developed market economies. Thus, organizations operating in such countries do not depend only on the manpower residing in their vicinity. In the Slovak Republic, spatial mobility of the workforce is largely limited by the housing possibilities.

Regarding internal conditions, it is necessary to explore the conditions related to the size of an organization, its organizational structure, spatial structure, equipment and technology available, production, personnel policy, corporate culture etc. Moreover, it is necessary to address the nature and content of work, variety and complexity of work, work health and safety risks, levels and forms of work organization, quality of the workforce, staff development potential, mobility, turnover, personal value orientation. Currently, there are four approaches to strategic human resources management that can serve as a basis for the employment policy formation.

## 3.1. High-commitment management

High commitment management emphasizes high-commitment employee behaviour, regulation of oneself and involvement in attaining an organization's objectives. Beer (1984) and Walton (1985) emphasized the development of career ladders, trainability and commitment as highly valued characteristics of employees. According to this approach, an organization promotes a high level of functional flexibility and eliminates rigid job descriptions. Moreover, the approach uses horizontal coordination of employees who are treated equally. In addition, team work is placed emphasis on. Wood and Albanese (1995) complemented the high-commitment management practices by employee high involvement in quality control.

A drawback of this approach may be the attitude of the Generation Y employees who generally lack a strong sense of loyalty to the employer and work for more than one employer at the same time in order to remain independent.

# 3.2. High performance management

High performance management develops a performance culture which support high performance in areas such as productivity, quality, levels of customer service profits, etc. Armstrong (2007) provides an example of the high-performance strategy as formulated by the Corporation of London, which underscores the existence of a clear line of sights between the strategic aims of authority and those of its departments and its staff at all levels. Management defines what is required in the shape of performance, sets goals for success and monitors performance in order to make sure that the goals are attained. Top leadership demonstrate a shared belief in the significance of continuing improvement. The main focus is on promoting positive attitudes leading to a committed and motivated workforce. Performance-related management processes are aligned to the authority's goals to ensure that people are engaged in attaining agreed objectives and standards. Abilities of people are developed through learning at all levels. Employees are assessed and awarded according to their contribution, and are given opportunities to make full use of their skills and abilities.

In our opinion, this approach is based on the willingness and level of employee engagement in the organization and the ability of management to motivate. The bottleneck principle which deals with certain limiting elements of the system may occur and cause major problems.

# 3.3. High-involvement management model

According to this approach, employees are treated as partners in the organization whose interests and say are respected on matters that concern them. The goal is to create a climate of continual dialogue between management and the members of their teams, respect and achieving one's goals. In principle, the approach is concerned with the creation of team work and atmosphere. This, however, requires an effective communication process. In relation to the characteristics of this approach, the organization has to share strategic, tactical and operative information focused on defining and implementing the goals. Quantity and quality of shared information are of high importance. In terms of high-involvement work practices, "on line" work teams are important (Pil, McDuffie, 1999).

In our opinion, the limiting factor will be the ability of management to use the existing applications in communication among employees as well as employees' ability to use the applications.

# 3.4. Resource-based view of strategic human resources management

Resource-based view of strategic human resources management aims to enhance the competence of employees, achieve strategic balance between resources and opportunities, and last but not least to gain value added from effective distribution of resources. Barney (1991) maintains that resource-based strategy can help build a strategic ability of an organization, and thus reach a competitive advantage. As stated by Šíkýř (2014, p.60), competent and motivated employees are considered to be a source of sustainable competitive advantage for an organization. Moreover, the human resource management in line with the competitive strategy and environment in favour of all the stakeholders of an organization are emphasized. Šíkýř (2014) also writes that human-resource based approach suggests that human resources are unique when compared to other resources.

It should, however, be noted that this approach should be based on the scope of activity of an organization. If value added is generated by technology operated by employees in an organization, resources other than human ones may be important for an organization. In such case, human resources will not be the primary resources.

## 4. Current approaches to the creation of employment policy

Approaches to formation of employment policy stem from the human resource management concept. There is no employment policy universally applicable as each enterprise operates under unique conditions that have to be taken into account. Therefore, a coherent employment policy should be based on an integrated management mode. Peters and Waterman (1982) wrote that if they were asked for one all-purpose piece of advice for management, one truth that they could distil from their extensive research on what makes an organization excellent, it would be figuring out the organization's value system and deciding what the organization stands for.

Armstrong (1999, p.186) specifies the following areas of interest in terms of employment policy:

- human resource planning,
- work-life balance,
- promotion.
- equal opportunities,
- managing diversity,
- employee development,
- age and employment,
- redundancies,
- discipline,
- grievances,
- sexual harassment,
- smoking,
- substance abuse,
- approach to people with contageous diseases.

Should we divide each area into two categories, i.e. the one directly affecting efficiency and labour productivity and the one relating to the employee social policy, which is currently not implemented in many enterprises, we find that two-thirds of such defined areas are not included in the models currently employed in organizations.

New concepts of employment policy represent a coherent employee-related philosophy which is based on the overall strategies of an organization. It should, however, be noted that employees do not always generate value added. In many cases, employees only provide operating services and technology is more important than the human factor for enterprises.

In our opinion, the most important areas related to employment policy as a coherent philosophy include personnel planning, recruitment and selection, performance management and monitoring, competence-based management, corporate culture, and teamwork.

Employment policy should reflect and promote the values of an organization regarding the manner of dealing with people. It must stem from company strategies and visions. A thoroughly developed employment policy can help an organization to have the necessary, motivated and well-performing workforce. (Vojtovič, 2013; Grenčíková, Španková, 2014; Katou, Budhwar, 2006)

Armstrong (2007) defines employment policy as human resources policy or personnel policy, in brief he refers to firmly established guidelines for human resource management approach. In the paper, the term employment policy is used as it is more specific in terms of individual approach of an organization to human resources and reflects the specific conditions of the company, i.e. internal and external conditions of the environment.

#### 5. Conclusion

Šikýř (2014, p.10) distinguishes two approaches to the formation of employment policy. The first refers to the existence of universally applicable principles and selection procedures, assessment, remuneration and training, the implementation of which enhances the performance of an organization and is referred to as the "Best Practice". The second approach is referred to as the "Best Fit". The approach argues there are no universal policies and procedures for the formation of employment policy. The approach emphasizes the importance of achieving consistency between the policies adopted in the people management and prevalent circumstances that define and affect their implementation as well as performance of an organization.

We consider the latter to be a more appropriate model. Continuous adaptation to and continuous monitoring of the changing conditions of the external and internal environment can be far more effective than the application of established practices. We live in a world of innovations that must also be used in working with people.

Employment policy should be consistent with the economic goals of an organization. The mission of human resource management is to find an acceptable balance between economic and social goals, i.e. between optimum ways of attaining organization's goals and satisfying people's needs since the employment of only social tools makes an organization inefficient.

An organization hires employees to get the required work done and to achieve strategic objectives of an organization. They are usually regular employees performing dependent work pursuant to the labour-law regulations. It is the labour law regulations (applicable laws, government regulations, ministerial decrees) governing the labour-law relations that significantly limit the people management activities and options.

## References

Armstrong, M. (2007). *Řízení lidských zdrojů*. Praha: Grada Publishing, 2007.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, vol. 17, no 1, pp. 99-120.

Beer, M. (1984). Managing Human Assets. New York: Free Press, 1984.

Belas, J., Kljucnikov, A., Vojtovic, S., Sobekova-Majkova, M. (2015). Approach of the sme enterpreurs to financial risk management in relation to gender and level of education. *Economics & Sociology*, vol. 8, iss. 4, pp. 32-42.

Boxall, P. F. (1994), Placing HR Strategy at the Heart of Business Success. *Personnel Management*, vol. 26, no. 7, pp. 32-35.

Collins, C. J., Clark, K. D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal*, vol. 46, pp. 740-751.

Gannona, J.M., Roperb, A., Doherty L. (2015). Strategic human resource management: Insights from the international hotel industry, *International Journal of Hospitality Management*, vol. 47, pp. 65-75.

Havierniková, K. (2012). Cluster and their efficiency in regions of the Slovak republik. In 13<sup>th</sup> International Scientific Conference on International Relations - Contemporary Issues of World Economics and Politics, Smolenice Castle, Dec. 05-07, 2012, pp. 65-74.

Havierniková, K. (2014). The analysis of industrial branches in the Trenčín region suitable for the cluster creation. In *Metal* 2014: 23<sup>rd</sup> International Conference on Metallurgy and Materials. Brno: Tanger, VSB TU Ostrava. May 21-23, pp. 1697-1702.

Jackson, S.E., Schuler, R.S., Jiang, K. (2014). An aspirational framework for strategic human resource management, *Academy of Management Annals*, vol. 8, iss. 1, pp. 1-56.

Jacobson, W.S., Sowa, J.E. (2015). Strategic human capital management in municipal government. An assessment of implementation practices, *Public Personnel Management*, vol. 44, pp. 317-339.

Johnson, G., Scholes, K. (1993). Exploring Corporate Strategy. Hemel Hempstead: Prentice-Hall, 2013.

Katou, A., Budhwar, P. (2006). Human resource management systems on organizational performance: A test of mediating model in the Greek manufacturing context. *International Journal of Human Resource Management*, vol. 17, iss. 7, pp. 1223-1253.

Kramar, R. (2014). Beyond strategic human resource management: is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, vol. 25, iss. 8, pp. 1069-1089.

Krenn, M. (2013). Strategic Human Resource Management in Emergent and Developing Small Entrepreneurial Firms, Franklin Business & Law Journal. vol. 2013, iss. 4, pp. 29-48.

Mitchell, R., Obeidat, S., Bray, M. (2013). The Effect of strategic human resource management on organizational performance: The mediating role of high-performance human resource practices, *Human Resource Management*, vol. 52, iss. 6, pp. 899-921.

Peters, T., Waterman, R. (1982). In Search of Excellence. New York: Harper & Row, 1982.

Pil, F.K., MaCDeffie, J.P. (1999). Organizational and environmental factors influencing the use and diffusion of high-involvement work practices, In: Capelli, P. (ed.) *Employment Practices and Business Strategy*. New York: Oxford University Press, 1999.

Šikýř, M. (2014). Nejlepší praxe v řízení lidských zdrojů. Praha: Grada Publishing, 2014.

Španková, J., Grenčíková, A. (2014). Remuneration and motivation of employees in transport undertakings. In *International Multidisciplinary Scientific Conferences on Social Sciences and Arts (SGEM 2014)*, Albena, Sep. 01-10, 2014, pp. 495-502.

Stanit, A., Todericiu, R. (2014). Globalization implications for strategic human resource management. In Boldea, I. (ed.) *Globalization and intercultural dialogue: multidisciplinary perspectives - economy and management*, 2nd International Conference on Globalization, Intercultural Dialogue and National Identity, Romania, pp. 240-246.

Štefančíková, A. (2015). Investície do rozvoja ľudského kapitálu v kontexte ekonomického myslenia. *Sociálno-ekonomická revue*, vol. 2, pp. 33-41.

Vojtovic, S. (2013). The Impact of Emigration on Unemployment in Slovakia. *Inzinerine Ekonomika-Engineering Economics*, vol. 24, iss. 3, pp. 207-216.

Walton, R.E. (1947). Towards a strategy of eliciting employee commitment based on principles of mutuality, In Walton R.E., Lawrence P.R. (eds.), *HRM Trends and Challenges*, Boston: Harward Business School Pres Weber, M. The Theory of Social and Economic Organisation. Fair Law Oxford University Press, 1974.

Way, S.A., Johnson, D.E. (2005). Theorizing about the impact of strategic human resource management, *Human Resource Management Review*, vol. 15, pp. 1-19.

Wood, S., Albanese, M. (1995). Can we speak of a high commitment management on the shop floor? *Journal of Management Studies*, vol. 32, iss. 2, pp. 215-247.

Wright, P. M., McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, vol. 18, pp. 295-320.

Wright, P.M., Snell, S.A. (1989). Towards an Integartive View of Strategic Human Resource Management. *Human Resource Management Review*, vol. 1, no. 3, pp. 203-225.

Zheng, C., (2013). Critiques and extension of strategic international human resource management framework for dragon multinationals, *Asia Pacific Business Review*, vol. 19 (1), pp. 1-15.

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# 15. USAGE OF BITCOIN CRYPTOCURRENCY IN INTERNATIONAL SETTLEMENTS

Abstract: The article covers the analysis of Bitcoin usage opportunities in international settlements. Although the frequencies of Bitcoin usage for daily payments have significantly increased, imperfections of the legal framework still create the barriers to treat this cryptocurrency as an alternative to fiat currencies that are employed for settlements all over the world. Considering its legal framework, Germany can be treated as the country, most advanced in the area of Bitcoin usage regulation: business people, who operate in the territory of the country, or those who serve German consumers without registration of their businesses in Germany are obliged to obtain the licence (authorisation) from German Federal Financial Supervisory Agency (GFFSA). Provision of financial services without GFFSA licence is considered as law violation with imposed fines or imprisonment. The results of the research propose that, due to the small number of the locations, where settlements in Bitcoins are available, treatment of Bitcoin as a criminal currency (Russia, China) as well as poor measures of consumer protection, Bitcoin can be treated only as an alternative to traditional measures of settlement, but not as a substitute to them.

Keywords: bitcoin, cryptocurrency, international payments

**JEL Classification:** E 40

## 1. Introduction

Intensive co-operation in international markets calls for introduction of new stable payment instruments that would be acceptable to customers and would allow fast payments for products or services. Efficient money management requires adjustment and verification of a wide range of payment methods. This way, selection of an appropriate payment method or instrument facilitates financial decision-making since the most attractive, cheapest or fastest payment method can be employed.

Technological advancement of the 20<sup>th</sup> century has contributed to the development of innovative payment methods, such as debit cards or e-money, which accelerated the appearance of cryptocurrencies. A cryptocurrency refers to a medium of exchange, with the basic function similar to that of fiat money. However, contrary to the latter, the issuance of cryptocurrencies is not assigned to any financial institutions. In the last few years, Bitcoin has become the most widely used cryptocurrency that ensures anonymous and extremely fast payments with lower money transfer costs in comparison to those generated while using traditional bank cards. Usage of Bitcoins is not regulated either by Lithuanian laws or the EU directives. Hence, customers are the subjects that bear all the responsibility for Bitcoin usage and possible losses. Considering its current legal framework, Germany

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can be treated as the country, most advanced in the area of Bitcoin usage regulation. Following German laws, established for all Bitcoin using parties, both individual customers and business enterprises are obliged to pay direct and indirect taxes, estimated as a percentage of the earned revenue or profits. Swiss government have announced the report with introduction of the overall legal framework that regulates the usage of cryptocurrencies whereas Chinese financial institutions strictly limit both Bitcoin purchase and sale. In Russia, any Bitcoin-related activities are treated as manifestation of terrorism. As a result, ununiformed regulation of Bitcoin usage raises barriers to businesses and individuals to use Bitcoins for their financial activities. What is more, this problem is increasingly discussed by central banks and other financial institutions.

Bitcoin history, usage and available payment methods have only recently gained some scientific attention (Ciaian et. al., 2015; Yelowitz, Wilson, 2015; Polasik et. al., 2015; Boehm, Pesch, 2014).

Considering the problematics of Bitcoin usage as well as the lack of the scientific studies on this topic, the problem of this research can be formulated as a question: can Bitcoins be considered as a reliable currency while making international settlements? The aim of this article is to research the opportunities of Bitcoin usage in international settlements on the basis of price fluctuations. In order to fulfil the defined aim, the following objectives have been raised: 1) to analyse the theoretical aspects of Bitcoin usage in international settlements; 2) to research the statistical data on exchange rate fluctuations between Bitcoins and US dollar; 3) to present the locations where settlements in Bitcoins are available.

The methods of the research include systematic and comparative literature review and statistical data analysis.

# 2. The origins and concepts of Bitcoins in international settlements: theoretical background

Cryptocurrencies are a subset of the alternatives to fiat currencies. With reference to Cocco et al. (2014), cryptocurrency is an Internet currency that emerged on the basis of cryptography principles, followed while confirming transfers and generating new money. The majority of cryptocurrencies have been gradually developed to introduce new currencies that would enable to fix the maximum amount of circulation and would allow to escape the impact of inflation, incurred while dealing with fiat currencies.

By their scopes in the finance market, Bitcoins can be treated as the most widely spread cryptocurrency. With reference to the definition, proposed by the European Central Bank (2012), Bitcoin is an unregulated digital currency, i.e. a kind of a virtual currency. To a certain extent, it resembles electronic money, in particular, software money, which in contrast to hardware money, can be used on the Internet. Bitcoins were created by a computer professional, known as Satashi Nakamoto, whose real name has not been disclosed so far. As the other kinds of cryptocurrencies, Bitcoins employ crypto techniques, and the software of the open code allows to control and change Bitcoin codes. Bitcoin network is composed of numerous computers linked by the Internet. This network allows to perform the number of sophisticated mathematical procedures that influence the demand for Bitcoins in the market and promote the certainty of transfers (Cocco et. al., 2014). According to Poderskis (2014), a potential owner of Bitcoins has to employ additional IT powers so that the software could deal with special mathematical problems, the solution of which earns Bitcoins for the owner. Circulation of Bitcoins is limited, i.e. it must not exceed 21 million units. It means that central banks may never reduce the value of Bitcoins by increasing their supply, which eliminates the risk of inflation. With reference to Galdikienė (2013), due to the reasons explicated above, Bitcoins are gaining their popularity in the countries with high inflation or strict restrictions of capital movement. Following the data of the European Bank (2013) and the results of the research, carried out by Eyal and Sirer (2014), usage of cryptocurrencies in international settlements is linked to particular risks, such as loss of money in cryptocurrency exchange, steals of money from the digital wallet, lack of protection while using a cryptocurrency as a payment method, fluctuations of value which may significantly drop and even reach zero, obligations to comply with particular tax regulations, etc. The findings of the European Bank have been confirmed by Simser (2015), who states that the usage Bitcoins is linked to higher risks of steals and losses. Nevertheless, the author disproves anonymity as one of the features attributable to Bitcoins. With reference to Simser (2015), "every Bitcoin transaction is published online, although this does not make the transaction public. Users are identified by a "pseudorandomly generated Bitcoin address" and the level of anonymity depends on the user. Internet Protocol (IP) addresses are associated with each transaction. Users can choose an anonymous IP address if they do not want their physical location identified. Users can enhance anonymity through a number of techniques: creating a new Bitcoin address for each payment; routing Bitcoin traffic through an anonymizer; using third-party e-wallet services to consolidate addresses" (p. 165).

Summarising, thus far, the theoretical studies on the issue of Bitcoin usage have been performed in three following directions:

- 1) the analysis of particular technological features, such as cryptocurrency appliance problems, weak system protection and threats of attacks;
- 2) the analysis of the legal framework that reveals how Bitcoin is treated in different jurisdictions, including tax obligations rising from Bitcoin trade and investment, and money laundering;
- 3) the economic analysis, i.e. the research on whether Bitcoins are suitable for international settlements and investment. This group also covers the studies on absence of Bitcoin transaction costs, and distribution of risk and reliance between the contract parties.

# 3. The methodology of the research

An increasing share of commercial activities transferred to electronic space determines the need for innovative/virtual money. More intensive co-operation in international markets enables to develop new stable instruments that are acceptable to customers, and speed-up settlements for goods and services. An efficient money management calls for adaption and verification of a number of different methods of settlement, which facilitates payment decision making and allows to select the method or technique that is the most convenient, cheapest or fastest.

Purchase of material goods/products by the Internet is similar to making orders from catalogues with the difference that the Internet provides much wider assortment, ensures lower prices, more comprehensive information, etc. Nevertheless, employment of a single criterion of materiality for verification of different methods of e-payments is unreasonable, in particularly when it concerns digital products. Completion of a transaction in e-space is limited – in this case, a delivered product or service must have a digital form, and services have to be digitalised (e.g. provision of legal or financial assistance over the Internet when interference of a human factor is unnecessary). Some kinds of products with informational or entertaining contents (e.g. books, software, music, films, etc.) can gain an electronic shape, which makes it possible to deliver them directly to a customer by the Internet. Hence, absence of physical movement of products/services to be delivered determines transformation of traditional methods of payment.

Systematic and comparative literature review, selected as one of the methods for this research, has enabled to combine the results of both theoretical and practical insights in the origins and concepts of Bitcoin in international settlements, and has allowed to form the theoretical background for this research.

Statistical data analysis was employed to disclose the fluctuations in Bitcoin price/value changes and volatility in the number of Bitcoin daily transactions over the period of 2010-2016. It has also enabled to identify the locations (countries) that accept settlements in Bitcoin. The results of the research based on statistical data analysis will reveal whether Bitcoin market is stable and steady, and what price changes can be expected in terms of time.

## 4. Statistical data analysis on the trends of cryptocurrencies

## 4.1. Investment and settlement in Bitcoins

Bitcoins have been allowed as the main digital currency and an innovative measure of settlements in 44 countries all over the world (see Table 1).

Table 1. The countries that allow settlements in Bitcoins

American continent	European continent	Asian, African and Australian continents
	Norway, Ukraine, Czech Republic, Sweden,	
USA, Canada,	Poland, Germany, Finland, Slovakia, Denmark,	Turkey, Iran, Israel, Japan, South
Argentina,	Estonia, Hungary, Holland, Latvia, Croatia,	Korea, Taiwan, Philippines,
Greenland	Belgium, Lithuania, Slovenia, France,	Malaysia, Indonesia, Australia,
	Byelorussia, Austria, Great Britain, Ireland,	New Zealand, South Africa
	Switzerland, Italy, Spain, Portugal, Greece	

Source: Compiled by the authors with reference to CNN Money

When Bitcoins were introduced in 2009, their value was extremely low whereas in 2013 it exceeded 1000 US dollars. The earliest users gained the largest amounts of Bitcoins while those who joined the system later have increased the demand and Bitcoin value. Fluctuations of Bitcoin rate are hardly predictable and may cover a large amplitude. What is more, Bitcoin value is not supported with any assets. Hence, Bitcoin rate may rise or drop in accordance with demand changes. Bitcoins are used for international or domestic transfers due to their low value, absence of costs while accepting them into one's account, and the opportunities to make even the smallest transactions (The Economist, 2011). Figure 1 illustrates fluctuations of Bitcoin value during the period of 2010-2016.

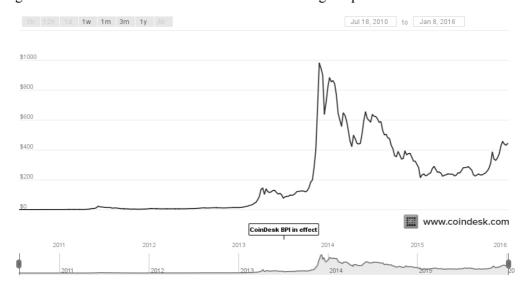


Figure 1. Bitcoin value fluctuations during the period of 2010-2016, in US dollars

Source: Compiled by the authors with reference to Bitcoin price index chart (2016)

Figure 1 reveals that the value of Bitcoins reached only a few cents at the time of introduction of this cryptocurrency in the market whereas by the end of 2013, it exceeded 1100 US dollars.

Significant Bitcoin value fluctuations all over the researched period as well as the factor of usage anonymity may promote speculation and the wish to act in illegal markets. According to Ciaian et al. (2015), at the end of 2014, Bitcoin value dropped to 250 US dollars, but immediately jumped again. "Such market volatility with huge price movements (±8000%) is not usual for traditional currencies, suggesting that there must be other determinants of price formation, which are specific to digital currencies" (Ciaian et al., 2015, p. 1). On January 1, 2015, Bitcoin market price reached 314 US dollars for a unit. A year later, i.e. on January 1, 2016, it composed 434.46 US dollars for a unit. Hence, the results of the analysis on Bitcoin value volatility propose that bitcoin market is extremely unstable, with possible hourly changes, which substantially diminishes the reliance in this cryptocurrency.

February 9, 2011, is considered an important date in the history of Bitcoin since on that day Bitcoin price reached the parity with US dollar. Although this value equalization can be hardly seen in Figure 1, in the course of history it determined a significant rise of Bitcoin market price.

Fluctuations of currency exchange rates are determined by the level of demand and supply, i.e. higher demand determines higher rates of currency exchange. Publically announced information also

contributes to the changes of Bitcoin market price: positive information promotes the demand for Bitcoins and vice versa. What is more, the larger number of companies accept payments in Bitcoins, the higher is the demand for this cryptocurrency. The stability of Bitcoin network determines the level of reliance in Bitcoins, i.e. network interferences and malfunctioning may significantly drive Bitcoin demand and price down. Bans on payments in Bitcoins can also determine instability of Bitcoin market price.

The analysis of the number of Bitcoin daily transactions during the period of 2010-2016 has revealed that the volumes of the transactions significantly increased in 2015, and have remained large up to now (see Figure 2).

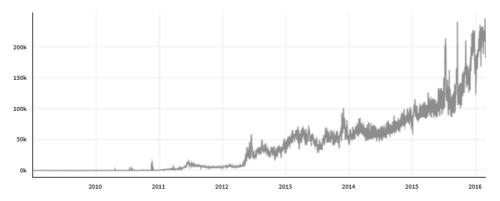


Figure 2. Volatility of the number of Bitcoin daily transactions during the period of 2010-2016

Source: Bitcoin number of transactions (2016)

#### 4.2. Opportunities of settlements in Bitcoins

Increasing popularity of Bitcoins has attracted a number of companies that have accepted this cryptocurrency as an efficient method of payments. Cost reduction has served as one of basic criterions for Bitcoin acceptance. As mentioned above, usage of cryptocurrencies has not been properly regulated in the number of countries, which forms favourable conditions for business to evade a part of the taxes that are commonly paid while trading in products or services.

The data presented in Table 2 shows the number of the locations in different continents where the settlements in Bitcoins are available.

Continent The number of the locations Share, per cent Europe 2467 39.24 North America 2808 44.66 331 5.26 South America 49 0.78 Africa 371 59 Asia 4.15 Australia 261

Table 2. The number of the locations where settlements in Bitcoins are available

Source: Compiled by the authors with reference to the data of the website http://coinmap.org/

Following the newest data, North America covers the largest share of the locations where settlements in Bitcoins are available. Hence, North America composes 45 per cent of the global Bitcoin network. Europe is the second continent in this respect, with 2467 locations, in which settlements in Bitcoins are available. The other continents do not possess any developed Bitcoin networks, which burdens the proceeding of international settlements. As a measure of international settlements, Bitcoin currency is available only in Europe and North America (with reference to the data, presented in Table 2). For this reason, it cannot be considered as a substitute to traditional measures of settlement, available all over the world. In both Europe and North America Bitcoin is available as a method of payment while trading in any types of products and services. Payments in Bitcoins are usually made ordering products/services from e-shops. The fact that Bitcoin currency is employed as a measure for international settlements between Europe and North America continents has been confirmed by Polasik et al. (2015). Their empirical research involved 34 per cent of

American, 8 per cent of German, 7 per cent of British, 6 per cent of French, and 5 per cent of Canadian respondents who admitted accepting Bitcoins as payments for products/services. In addition, the study (Polasik et al., 2015) revealed that "Bitcoin has a larger share of online vendors' sales in the countries with low GDP per capita, suggesting that it might play a role in circumventing government restriction and also provide a payment service to the unbanked".

The above-introduced findings propose that Bitcoin currency still exists only as an alternative to traditional and e-currencies, but cannot be treated as a substitute to them since its usage has been restricted by local standards and imperfections of the legal framework. The decentralized structure of Bitcoin system, which is free from the impact of any government and ensures anonymous usage of this currency, causes the risk of the development of illegal or criminal activities online. Germany is one of the European countries that has established the appropriate regulations for the smooth functioning of Bitcoin system. Ever since Bitcoins have been introduced as an alternative currency and individual usage of Bitcoins has increased, governments have started to perceive the necessity to regulate and manage Bitcoin system. This issue has turned out to be extremely topical after acceptance of the fact that each Bitcoin user is a potential taxpayer, and trade platforms earn money from Bitcoin transactions. With reference to Boehm, Pesch (2014), "in Germany, virtual currency regulation already exists and follows from § 32 Section 1 of the German Banking Act (Kreditwesengesetz). According to this rule, any person who conducts banking business or financial services for commercial purposes in Germany needs a written authorization by the German Federal Financial Supervisory Agency (further - GFFSA). The German Banking Act defines what falls under the category of financial services (§ 1 Sections 1a and 2). The Act specifically lists issuing and accepting of financial instruments as a financial service. Financial instruments include so-called "Units of Account" (Rechnungseinheiten). In consequence, the GFFSA has classified "digital currencies", in particular Bitcoins, as units of account in the sense of the German Banking Act" (p. 44). Summarising, it can be stated that business people, who operate in Germany, or those who serve German consumers without registration of their businesses in Germany are obliged to obtain the licence (authorisation) from GFFSA. Provision of financial services without GFFSA licence is considered as law violation with imposed fines or imprisonment. The current legal framework in Germany covers a wide range of financial operations, including regulation of new virtual currencies. Hence, at present, the country is not facing the necessity to establish new regulations on Bitcoin trade.

## 5. Conclusion

Technological advancement of the  $20^{th}$  century has contributed to the development of innovative payment methods. Although different currencies are commonly issued by particular states, contrary to this practice, issuance of Bitcoin as a global currency, developed for multipurpose usage, proves that the market and its self-regulatory processes are able to ensure appropriate functioning of the currency.

The analysis of Bitcoin price fluctuations has revealed that Bitcoin market price is extremely unstable, with possible hourly changes, which substantially diminishes the reliance in this cryptocurrency. Price fluctuations are determined by such factors as demand and supply levels, the contents of publically announced information, and network malfunctioning. What is more, the larger number of companies accept payments in Bitcoins, the higher is the demand for this cryptocurrency.

Usage of Bitcoins is not regulated either by Lithuanian laws or the EU directives. Hence, customers are the subjects that bear all the responsibility for Bitcoin usage and possible losses. Considering its current legal framework, Germany can be treated as the country, most advanced in the area of Bitcoin usage regulation: business people, who operate in the territory of the country, or those who serve German consumers without registration of their businesses in Germany are obliged to obtain the licence (authorisation) from GFFSA. Provision of financial services without GFFSA licence is considered as law violation with imposed fines or imprisonment.

Small number of the locations, where settlements in Bitcoins are available, treatment of Bitcoin as a criminal currency (Russia, China) as well as poor measures of consumer protection propose that Bitcoin can be treated only as an alternative to traditional measures of settlement, but not as a substitute to them.

#### References

Bitcoin number of transactions (2016). [online]. [cit. 2016-02-25]. Available: https://www.quandl.com/data/BCHAIN/NTRAN-Bitcoin-Number-of-Transactions.

Bitcoin price index chart (2016). [online]. [cit. 2016-02-25]. Available: http://www.coindesk.com/price/.

Boehm, F., Pesch, P. (2014). Bitcoin: A first legal analysis with reference to German and US-American law. *Financial Cryptography and Data Security*, vol. 8438, pp. 43-54.

Ciaian, P., Rajcaniova, M., d'Artis, K. (2015). ). [online]. [cit. 2016-02-25]. Available: The economics of BitCoin price formation. http://arxiv.org/ftp/arxiv/papers/1405/1405.4498.pdf.

CNN Money. Where is bitcoin legal? [online]. [cit. 2016-02-25]. Available: http://money.cnn.com/interactive/technology/where-is-bitcoin-legal/).

European Central Bank. Virtual Currency Schemes. Frankfurt am Main (2012). [online] [cit.2016-01-10]. Available: https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf.

Eyal, I., Sirer, E. G. (2014). Majority is not enough: Bitcoin mining is vulnerable. In Christin N., Safavi-Naini R. (eds.), *Lecture Notes in Computer Science*, vol. 8437, pp. 436-454.

Galdikiene, L. (2013). Bitkoinai – ateities valiuta ar vienadienė žvaigždė? [online] [cit.2016-01-13]. Available: http://www.delfi.lt/verslas/verslas/l-galdikiene-bitkoinai-ateities-valiuta-ar-tik-vienadiene-zvaigzde.d?id=63544394.

Poderskis, P. (2014). Kriptovaliutos – postūmis keistis. VŽ Verslo klasė, vol. 2, p. 36.

Polasik, M. Piotrowska, A. I., Wisniewski, T. P., Kotkowski, R., Lightfoot, G. (2015). Price fluctuations and the use of Bitcoin: An empirical inquiry, *International Journal of Electronic Commerce*, vol. 20, iss.1, pp. 9-49.

Simser, J. (2015). Bitcoin and modern alchemy: in code we trust. Journal of Financial Crime, vol. 22, iss. 2, pp. 156-169.

The Economist (2011). *Bits and Bob* [online] [cit. 2016-02-25]. Available: http://www.economist.com/blogs/babbage/2011/06/virtual-currency.

Yelowitz, A., Wilson, M. (2015). Characteristics of Bitcoin users: an analysis of Google search data, *Applied Economics Letters*, vol. 22, iss.13, pp. 1030-1036.

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# 16. EFFICIENCY INSURANCE COMPANIES IN TWO-STAGE DATA ENVELOPMENT ANALYSIS

Abstract: The aim of this article is the analysis of the production efficiency and investment efficiency of the life insurance of the Czech commercial insurance companies using a two-stage model of data envelopment analysis, in order to find out the specifics for the period of 2012-2014. DEA models use linear programming in order to transform multiple inputs to multiple outputs. Two stage DEA models enable assessment of the efficiency of the partial processes – subprocesses, which represent the decompositions of the complex process. The first subprocess of the insurance activities is intending to acquire the premium income with the attempt to minimalize the costs of the insurance claim and the operating costs. The second subprocess is focusing on the investment of the available financial resources with the aim to obtain the highest income from these investments. The total efficiency score in two-stage model is represented by the conjunction of both subprocesses' efficiency scores. The model thus enables assessing of the contribution of the efficiency of the two subprocesses within the complex process. Six commercial companies were efficient in the first subprocess in the years 2012-2014. In the second subprocess, none of the six efficient commercial companies from the first subprocess have had the minimum efficiency score in the second subprocess. An important change in the efficiency of the insurance companies in the first subprocess occurred in 2014, when the arithmetic mean together with the median of the efficiency scale dropped significantly and the standard deviation was the highest.

Keywords: two-stage data envelopment analysis, efficiency, insurance companies

JEL Classification: G22, C52

#### 1. Introduction

Insurance market in the Czech Republic belongs to dynamically developing national insurance markets. However, its performance does not reach the EU average level. In 2014, the insurance value, which represents the ratio of the specified premium rate to GDP, amounted to 3.7% in the Czech Republic, whereas the mean premium of the EU countries was around 8% (Czech Insurance Association, 2014). In 2014, the mean premium per capita reached the value of 505 Eur in the Czech Republic, whereas the EU average amounted to 2149 Eur. However, it was higher than in the Slovak Republic, Poland or Estonia. The share of life insurance in total premiums decreased to 45.1%. Whereas, the long-term segment ratio in developed European Countries remains fixed at 60:40 in favour of life insurance, the opposite trend with a slightly predominating non-life insurance share continues in the Czech Republic (Czech Insurance Association, 2014).

Commercial insurance market in the Czech Republic, as well as other national insurance markets are influenced by the globalization process, which was intensified after the Czech Republic joined EU and after the legislation adjustment, which intention was to create unified European insurance market. At the same time, the insurance market was influenced by the turbulences on the financial market. These processes resulted in the need to increase effort of the insurance companies to keep, respectively improve their position on the market. Insurance companies had to reevaluate many of their approaches. They were more careful in the risk assessment. When the crisis broke out and the claims

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for indemnification began to grow dramatically, commercial credit insurance companies all over the world were forced to tighten rules for new clients (Vávrová, 2014).

At the same time, insurance companies started to invest much more carefully and they focused mainly on the low-risk investments. The insurance market was also influenced by other factors. Last but not least, the development of the insurance market is also influenced by the legislative changes.

The main objective of the insurance companies is the long-term profit achievement. However, no less important there are also other objectives such as to keep the market position and efficient activity performance. The efficiency of the insurance companies is also evaluated with regard to other insurance companies, which operate on the market based upon their inputs and outputs. Insurance companies minimize their inputs. On the contrary, they maximize their outputs. The insurance companies with the best combination of their inputs and outputs are efficient.

The subject of our examination is to analyze the efficiency of the life insurance of the commercial insurance companies in the Czech Republic with the purpose of finding out the differences among insurance companies in terms of achieved marketability and profitability efficiency in the period of 2012-2014. In order to estimate the efficiency score and the specification of the differences, we use the Two-stage DEA model. In the discussion, we will be dealing with the possible reasons of the differences.

#### 2. Overview of the literature

The first DEA model has been published by Charnes et al. (1978). The model estimated the transformation efficiency of multiple inputs to multiple outputs providing constant returns to scale. Since the first model was published, the new DEA models have been developed and created gradually. These models have been used in insurance practice in many countries in the world. Already in 1999, Cummis, Tennyson and Weiss published the study, in which they described works dealing with the efficiency assessment of the financial institutions including also insurance companies. Besides efficiency assessment, some studies are dealing with factors which affect efficiency. Cummins, Rubio-Misas, Zi (2004) are dealing with the influence of the organizational structure in the Spanish insurance sector.

Färe, Grosskopf (1996), as well as Seiford, Zhu (1999) have published new approach based upon the idea that it is not important to assess only the efficiency of the complex process but also the efficiency of the particular subprocesses into which the complex process is divided. Seiford, Zhu (1999) have analyzed the efficiency of the banks and they have divided complex bank process into two subprocesses such as profitability and marketability. Zhu (2009) has pointed out that there is a possibility to use Excel application to express the efficiency score in Two-stage model. The efficiency model in Two-stage model has been published by Chen, Zhu (2004) and Hwang, Kao (2006). Both authors have built upon the "standard" DEA models. Their target is to compare efficiency contribution of each subprocess to the total efficiency. In the second subprocess assessment, outputs from the first subprocess are used as inputs in the second subprocess in both models. The total efficiency score is the result of the efficiency scores in both subprocesses. Kao, Hwang (2008) have applied Two-stage model in expressing the efficiency score of 24 non-life insurance companies in Taiwan. The inputs in the first subprocess were operating and insurance expenses. The outputs in the first subprocess were underwriting and investment profit. The outputs in the second subprocess were direct written and reinsurance premiums. The authors compare the results of Two-stage DEA model (relational) and "traditional" (independent) model.

The scientific works, which are dealing with the efficiency assessment of the insurance companies, have different approach to two subprocesses, into which the complex process is divided. Yang (2006), evaluates the efficiency of the life insurance companies in Canada. The first subprocess is called Production model. Its inputs are the basic costs of the insurance companies and its outputs are net specified premium and net income. The second subprocess is called Investment model of which outputs are investment profits in obligations and real asset. Kao, Hwang (2008) evaluate the efficiency of non-life insurance companies in Taiwan. The first subprocess is called Marketability model and the second subprocess Profitability model.

# 3. Goal, hypothesis and methodology

# 3.1. Goal and hypothesis

The subject of our analysis is 17 commercial insurance companies in the Czech Republic in 2012-2014. The aim of the paper is to analyze production and investment efficiency of the life insurance of the Czech commercial insurance companies using Two-stage model of data envelopment analysis (DEA) with the purpose of finding out specifics in the particular years of the period 2012-2014. At the same time, we will be finding out factors, which could cause the differences. Last but not least, we will be finding out whether difference between medians of the efficiency score in the particular years is statistically insignificant. We test null hypothesis:

 $1H_0$ : the difference between medians of the efficiency score in the life insurance in the first subprocess in 2012-2014 is not statistically significant compared to the alternative hypothesis  $1H_1$ : the difference between medians of the efficiency score in the life insurance in the first subprocess in 2012-2014 is statistically significant.

2H<sub>o</sub>: the difference between medians of the efficiency score in the life insurance in the second subprocess in 2012-2014 is not statistically significant compared to alternative hypothesis 2H<sub>1</sub>: the difference between medians of the efficiency score of the life insurance in the second subprocess in 2012-2014 is statistically significant.

We evaluate production and investment efficiency based upon indicators such as operating costs, costs of claims, earned premium and incomes from financial investments. We acquire data from individual results of Czech Insurance Association (2014) in 2012, 2013 and 2014.

In order to estimate the efficiency of both subprocesses, we use Two-stage DEA models providing constant returns to scale. Constant returns to scale are characterized by the equal proportional change of all outputs based upon proportional change of all inputs (Jablonský, Dlouhý, 2004).

# 3.2. Methodology

Two-stage model

We assume that we have n homogeneous DMUs and we monitor in the first subprocess m inputs  $x_i$  and D outputs  $z_d$  which are inputs of the second subprocess and in the second subprocess)we have n subjects with s outputs  $y_r$ , then assuming constant returns to scale model expressing efficiency of the k-th DMU has form

$$\min_{\alpha,\beta,\lambda_j,\mu_j,\widetilde{z}} \alpha - \beta \tag{1}$$

s.t.

1.subprocess

$$\sum_{j=1}^{n} \lambda_j x_{ij} \le \alpha x_{ik}, \ i = 1,...,m,$$
(2)

$$\sum_{j=1}^{n} \lambda_j z_{dj} \ge \widetilde{z}_{dk}, \ d = 1,..,D,$$
(3)

$$\lambda_j \ge 0,$$
 (4)

$$\alpha \le 1,$$
 (5)

2.subprocess

$$\sum_{j=1}^{n} \mu_{j} z_{dj} \leq \widetilde{z}_{dk}, \ d = 1,..,D,$$
(6)

$$\sum_{j=1}^{n} \mu_{j} y_{rj} \ge \beta y_{rk}, \quad r = 1,..,s,$$
(7)

$$\mu_j \ge 0, \quad j = 1, ..., n,$$
 (8)

$$\beta \ge 1$$
.

Source: Zhu, 2009

The efficiency score in the first subprocess is less than or equal to one. The efficiency score in the second subprocess is more than or equal to one. The advantage of Two-stage DEA models is that they enable to assess the efficiency contribution of two subprocesses within the complex process. However, traditional CCR model, compared to Two-stage model, enables easier interpretation of estimated efficiency scores.

In order to test hypothesis about median concordance of the efficiency scores in the particular years of the analyzed period, we will use non-parametric Friedman's test and Kendall Coefficient of Concordance for dependent data files. The values of described statistics, as well as test statistics and their p-levels are expressed in Statistica program.

#### 4. Results and discussion

In 2012-2014, the arithmetic mean of earned premium had a decreasing trend. However, the variability expressed by standard deviation from 2013 to 2014 increased. In 2012 and 2013, Česká poisťovňa a.s. reached the highest earned premium. In 2014, Pojišťovna České spořitelny, a.s., Vienna Insurance Group reached the maximum of earned premium. In 2012, MAXIMA pojišťovna, a.s. reached minimal values of earned premium, as well as Hasičská vzájemná pojišťovna, a.s. in 2013-14. Descriptive statistics of earned premium are in Table 1.

Table 1. Descriptive statistics of earned premium

	Mean	Minimum	Maximum	Standard deviation
2012	3684752	6239	11188082	3693099
2013	3526536	7302	10461151	3563904
2014	3518569	6296	9896903	3627641

Source: Own processing in Statistica

In 2012-2014, the arithmetic mean of costs of claims had an increasing trend. The variability expressed by standard deviation was increasing. In all observed years, Česká pojišťovna, a.s. had the highest costs of claims. In 2012, MAXIMA pojišťovna, a.s. had minimal values of costs of claims, as well as Hasičská vzájemná pojišťovna, a.s. which reached such values in 2013-2014. Descriptive statistics of costs of claims are in Table 2.

Table 2. Descriptive statistics of costs of claims

	Mean	Minimum	Maximum	Standard deviation
2012	2433189	2956	10810031	3157341
2013	2563703	11113	11365919	3215499
2014	2992181	9498	13919864	3759026

Source: Own processing in Statistica

In 2012-14, the arithmetic mean of operating costs had fluctuating course. However, the variability expressed by standard deviation was decreasing. In 2012, Česká pojišťovna, a.s. had the highest operating costs, as well as Kooperatíva pojišťovna, a.s. in 2013-14. Hasičská vzájemná pojišťovna, a.s. had minimal operating costs in all observed years. Descriptive statistics of operating costs are in Table 3.

Table 3. Descriptive statistics of operating costs

	Mean	Minimum	Maximum	Standard deviation
2012	819227	1834	2837958	789706
2013	763107	1695	2496773	778639
2014	765805	1156	2406122	736716

Source: Own processing in Statistica

In 2012-2014, the arithmetic mean of income from the financial investments had a decreasing trend. The variability, expressed by standard deviation was also decreasing. In 2012, Pojišťovna České spořitelny, a.s., Viena Insurance Group reached the biggest income from the financial investments, as well as Allianz pojišťovna, a.s. which reached such values in 2013-14. MAXIMA pojišťovna, a.s had minimal income from the financial investments in all observed years. Descriptive statistics of incomes from the financial investments are in the Table 4.

Table 4. Descriptive statistics of incomes from the financial investments

	Mean	Minimum	Maximum	Standard deviation
2012	1400662	69	6418621	1902218
2013	1121372	156	4775740	1428494
2014	960556	671	2735049	995737

Source: Own processing in Statistica

In the following step, we expressed the efficiency score in both subprocesses in Two-stage CCR model for analyzed insurance companies in 2012-2014. The results are in Table7. In the first subprocess, six insurance companies were efficient in all three years, which is 35.29% out the total number. There were insurance companies such as: Allianz pojišťovna, a.s., Česká pojišťovna, a.s., Kooperativa, pojišťovna, a.s., Komerční pojišťovna, a.s., MAXIMA pojišťovna, a.s., Pojišťovna České spořitelny, a.s., Vienna Insurance Group. In 2012-2013, AEGON Pojišťovna, a.s., reached the lowest values of the efficiency score in the first subprocess, as well as Generali Pojišťovna, a.s. in 2014. In 2012, ERGO pojišťovna, a.s. reached the lowest (the most favourable) values of the efficiency score in the second subprocess, as well as Hasičská vzájemná pojišťovna, a.s. in 2013 and UNIQA pojišťovna, a.s. in 2014.

Table 5. Descriptive statistics of the efficiency score in the first subprocess

	Mean	Minimum	Maximum	Median	Standard deviation
2012	0.799	0.055	1.000	1.000	0.370
2013	0.749	0.012	1.000	1.000	0.412
2014	0.491	0.026	1.000	0.243	0.441

Source: Own processing in Statistica

Descriptive statistics of the efficiency score in the first subprocess are in Table 5. The mean and median of the efficiency score in the first subprocess was in 2014 considerably lower than in 2012 and 2013. However, at the same time, there was the biggest variability in the efficiency score expressed by the standard deviation in that year. In 2014, the share of efficient insurance companies decreased considerably, the variability of the efficiency score increased and the mean and the median value of the efficiency score decreased.

Table 6. Descriptive statistics of the efficiency score in the second subprocess

	Mean	Minimum	Maximum	Median	Standard deviation
2012	16.500	1.248	202.620	5.050	48.031
2013	340.332	1.184	5630.847	5.055	1363.425
2014	11.031	1.051	138.645	1.539	32.952

Source: Own processing in Statistica

Descriptive statistics of the efficiency score in the second subprocess are in Table 6. The arithmetic mean of the efficiency score in the second subprocess in 2013 was considerably higher than in 2012 and 2014. The arithmetic mean of the efficiency score has been particularly influenced by extremely high value of the efficiency score of MAXIMA pojišťovna, a.s. The median of the value has not been changed significantly. At the same time, in 2013, the variability of the efficiency score expressed by the standard deviation was the highest.

In the following step, we test null hypothesis 1H<sub>0</sub> at the significance level of 0.05. The results of hypothesis testing median concordance of the efficiency score in the first subprocess by non-parametric Friedman's test and Kendall Coefficient of Concordance for dependent data files are in Table 8.

Table 7. The efficiency score in Two-stage model

	2012		2013		2014	
	1.	2.	1.	2.	1.	2.
AEGON Pojišťovna, a.s.	0.055	1.914	0.047	6.974	0.147	1.097
Allianz pojišťovna, a.s.	1	5.022	1	5.029	1	5.054
AXA životní pojišťovna, a.s.	1	5.060	1	5.061	0.111	1.539
BNP Paribas Cardif Pojišťovna, a.s.	0.301	4.385	0.465	69.76	0.243	6.125

Česká pojišťovna, a.s.	1	5.029	1	5.047	1	5.056
Česká podnikatelská pojišťovna, a.s	1	5.060	1	5.0570	0.091	1.233
ČSOB Pojišťovna, a.s. člen holdingu ČSOB	1	5.054	1	5.055	0.095	1.394
ERGO pojišťovna, a.s.	0.155	1.248	0.123	8.798	0.113	1.084
Generali Pojišťovna, a.s.	1	5.059	0.012	3.427	0.026	1.231
Hasičská vzájemná pojišťovna, a.s.	0.950	13.34	1	1.184	0.951	6.329
Kooperativa, pojišťovna, a.s.	1	5.044	1	5.034	1	5.055
Komerční pojišťovna, a.s.	1	5.050	1	5.050	1	5.055
MAXIMA pojišťovna, a.s.	1	202.62	1	5630.85	1	138.64
MetLife pojišťovna a.s.	1	5.050	1	5.058	0.078	1.067
Pojišťovna České spořitelny, a.s., Vienna Insurance Group	1	5.007	1	5.050	1	5.055
UNIQA pojišťovna, a.s.	1	5.051	1	5.054	0.411	1.051
Wüstenrot, životní pojišťovna, a.s.	0.115	1.499	0.081	14.168	0.086	1.452

Source: Own processing in EMS

Table 8. Friedman ANOVA and Kendall Coefficient of Conc. - the first subprocess

Chi Sqr. = 6.0000, p < 0.04979, Coeff. of Concordance = 0.17647, Aver. rank r = 0.12500

	Aver. rank	Sum of order	Mean	Standard deviation
2012	2.265	38.500	0.799	0.370
2013	2.088	35.500	0.749	0.412
2014	1.647	28.000	0.491	0.441

Source: Own processing in Statistica

The coefficient of concordance had the value of 0.17647. The average rank had the value of 0.125. P-level had the value of 0.04979. At the significance level of 0.05 we reject null hypothesis and we accept the alternative hypothesis 1H<sub>1</sub> which states that the differences between medians of the efficiency scores of the insurance companies in 2012-2014 is statistically significant. The significant change in the life insurance efficiency of the insurance companies in the first subprocess occurred mainly in 2014, when the arithmetic mean together with the median of the efficiency score dropped considerably and the standard deviation of the efficiency score was the highest. The changes, which have occurred, have been mainly caused by the decrease of earned premium and at the same time by the increase of costs of claims. The increase of costs of claims in the life insurance influenced the life insurance market development considerably. The increase has been mainly caused by premature contract terminations. According to the annual report of Czech Insurance Association (2014), in 2014, 200 000 contracts dwindled from the insurance portfolio and the sharp trend of premature contract terminations continued. The biggest decrease was in classic life insurance (NBS, 2014). One of the possible cause of such trend could be the fact, that in 2014 amendatory act number 267/2014 Sb. (Parliament of the Czech Republic, 2014) was accepted by which the law about income tax number 586/1992 Sb. has been changed. The effect of amendment was from 1.1.2015. According to amendment, the novelty is that the insurance company client has to choose between having tax benefits without the possibility of continuous withdrawals or insurance company client can choose a mode without tax benefits with but with the possibility of continuous withdrawals.

At the significance level of 0.05, we test null hypothesis 2H<sub>0</sub> The results of hypothesis testing median concordance of efficiency score in the second subprocess by non-parametric Friedman's test and Kendall Coefficient of Concordance for dependent data files are in Table 9.

Table 9. Friedman ANOVA and Kendall Coefficient of Conc. - the second subprocess

Chi Sqr. = 3.64705 p < 0.16146, Coeff. of Con. = 0.10727, Aver. rank r = 0.05147

	Aver. rank	Sum of order	Mean	Standard deviation
2012	1.941	33.000	16.500	48.031
2013	2.353	40.000	340.332	1363.425
2014	1.706	29.000	11.031	32.952

Source: Own processing in Statistica

The coefficient of concordance had the value of 0.10727. The average rank had the value of 0.05147. P-level had the value of 0.16146. At the significance level of 0.05 we do not reject null hypothesis, which states that the differences between medians of efficiency scores of insurance companies in 2012-2014 is not statistically significant. It follows from the analysis, that in 2012-14, significant changes occurred in production efficiency. Year 2014 was the key year for insurance companies when the situation on the life insurance market got worse. The significant changes of the investment efficiency in the observed period were not occurred.

#### 5. Conclusions

In the paper we have focused on the expression of the efficiency score of the life insurance of commercial insurance companies in the Czech Republic in 2012-14 applying Two-stage model.

In 2012-14, six commercial companies were efficient in the first subprocess. In the second subprocess, none of the insurance companies efficient in the first subprocess have had the minimal efficiency score in the second subprocess.

In the paper we have focused on the efficiency specifics of the insurance companies in the particular years of the analyzed period. In 2012-14, there was statistically significant difference between medians of the efficiency score of the insurance companies at the significance level of 0.05. In 2014, it was considerable change in the insurance company's efficiency in the first subprocess when the arithmetic mean and the median of the efficiency score dropped significantly and the standard deviation of the efficiency score was the greatest. We assume that the change could be caused by premature contract terminations of the life insurance and the insurance portfolio dwindling. It is a question for a discussion, whether this change have not occurred as a consequence of the amendatory act about income taxes and whether Czech clients are not considerable sensitive about legislation changes, which affect negatively benefits they had until then. In further research, it would be contributive to extend the analysis by additional views. One of the possibilities would be the execution of PEST macro level analysis which assesses external environment (Havierniková, 2015).

The found out results have some limitations. The efficiency score of the insurance companies is expressed providing constant returns to scale. The analysis can be followed up by the analysis of the efficiency rate of the insurance companies providing variable returns to scale as well as comparison of the efficiency rate values with the efficiency rate values expressed in other models like for example in more complex network DEA models.

The values we used are from the period 2012-2014. However, it would have the great importance making the long-term observation with the aim to generalize achieved results.

#### **Acknowledgments**

The article is part of the research project funded by the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences VEGA [1/0208/14].

#### References

Charnes, A., Cooper, W.W., Rhodes, E. (1978). Measuring the efficiency of decision-making units. *European Journal of Operational Research*, vol. 2, no. 6, pp. 429-444.

Chen, Y., Zhu, J. (2004). Measuring information technology's indirect impact on firm performance. *Information Technology and Management Journal*, vol. 5, no. 1-2, pp. 9-22.

Cummins, JD, Tennyson, S., Weiss, MA. (1999). Consolidation and efficiency in the US life instance industry. *Journal of Banking &Finance*, vol. 23, no. 2-4, pp. 325-357.

Cummins, JD., Rubio-Misas, M, Zi, HM. (2004). The Effect of organizational structure on efficiency: evidence from the Spanish insurance industry. *Journal of Banking & Finance*, vol. 28, no. 12, pp. 3113-3150.

Czech Insurance Association. (2014). Annual Reports 2014. [online]. [cit.2015-12-1]. Avialable: http://www.cap.cz

Czech Insurance Association. (2014). Individual Results of Members. [online]. [cit.2015-12-1]. vialable: http://www.cap.cz

Färe, R., Grosskopf, S. (1996). Productivity and intermediate products: A frontier approach. *Economics Letters*, vol. 50, pp. 65-70.

Havierniková, K. (2015). The sources's risk identification of small and medium sized enterprises in the process of the cluster's cooperation from the view of female entrepreneurs. *Inter. Scientific Conference Proceedings Women in Business in the Past and Present.* pp. 190-198.

Hwang, S.N., Kao, T.L. (2006). Measuring Managerial Efficiency in Non-Life Insurance Companies: An Application of Two-Stage Data Envelopment Analysis. *International Journal of Management*, vol. 23, no. 3, pp. 699-720.

Insurance Companies. (2013). Annual Reports of Insurance Companies.

Jablonský, J., Dlouhý, M. (2004). Models for Evaluation of Efficiency of Production Units. Praha: Professional Publishing, 2004

Kao, Ch., Hwang, S-N. (2008). Efficiency Decomposition in Two-stage Data Envelopment Analysis: an Application to Non-life Insurance Companies in Taiwan. *European Journal of Operational Research*, vol. 185, pp. 418-429.

NBS (2014). *Analysis of the Slovak Financial Sector for the Year 2012*. [online]. [cit.2015-12-1]. Avialable: http://www.nbs.sk/en/publications-issued-by-the-nbs/nbs-publications/analysis-of-the-slovak-financial-sector

Parliament of the Czech Republic. (2014). Act No. 267/2014 on Income Tax

Seiford, L., M., Zhu, J. (1999). Profitability and Marketability of the Top 55 U.S. Commercial Banks. *Management Science*. vol. 45, no. 9. pp. 1270-1288.

Vávrová, E. (2014). Assessing the Consequences of Global Financial Crisis in the System of Credit Risks Insurance. *Proceedings of the 11<sup>th</sup> int. scientific conference European Financial Systems 2014*, pp. 677-683.

Yang, Z.A. (2006). Two-stage DEA Model to Evaluate the Overall Performance of Canadian Life and Health Insurance Companies. *Mathematical and Computer Modelling*, vol. 43, pp. 910-919.

Zhu, J. (2009). Quantitative Models for Performance Evaluation and Benchmarking: Data Envelopment Analysis with Spreadsheets. Worcester: Springer, 2009.

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# 17. ILLEGAL MIGRATION AND MIGRATION MANAGEMENT MEASURES

**Abstract:** The aim of this article is to give a theoretical overview of the problem of illegal migration. The purpose of this study is to provide an overview of existing approaches, mechanisms and management measures to reduce irregular migration in the EU (for example strengthening the external borders; management illegal employment; return home migrants; management information exchange etc.). In article, the emphasis is on managerial comprehensive, professional approach and cooperation of various institutions such as the problem of illegal migration. The fight against irregular migration is a policy priority for many States. The importance of management measures to combat illegal immigration has been repeatedly emphasised by all the institutions of the EU. This is an urgent need to evaluate migration management at a European and national level. Against this background, we want to point, in this article that management measures to control irregular migration play a central role in European migration policy.

Keywords: illegal migration, International migration, migrant, integration policy, migration management

JEL Classification: F22, F15, F5, F62

## 1. Introduction

The main purpose of the article is to give a theoretical overview of the problem dealing with illegal migration and migration management measures. Contribution gives is to explain the basic terms associated with problems of illegal migration. The purpose of this study is to correct and provide an overview of existing approaches, mechanisms and management measures to reduce irregular migration in the EU.

Methodology in this submitted article is based on analysis and synthesis of available bibliographic sources within the European Union. Is based on general scientific methods, induction, deduction, scientific abstraction and comparison. The given study works with the data from the database of Eurostat and Ministry of Interior of the Slovak Republic.

Migration movement is a natural occurrence accompanying the mankind from the very beginning of its creation. Migration is complex problem, which affects different spheres of social life, economic, social, political, cultural, psychological and spheres environmental. Under the illegal migration we understand the entry or stay of foreigners in our country, who do not or no longer fulfill the conditions for entry or residence normative legal acts, which Slovakia is bound. Slovakia has so far been referred to as "risk countries". Its position for entry into the Schengen area was for many migrants, the entry gateway to the Eurozone especially to the V4 country (Soósová, 2014). Illegal migration presents a very well organized crime which representatives are very good technical equipment and also they are international connections. Legal and illegal international migration can overlap each other. Breach of conditions of legal residence have resulting in illegal residence. Illegal crossing borders, in case if the request for asylum and have been issued, resulting in a legal residence permit (Žáková, 2006).

Illegal migrants, sans papiers, undocumented immigrants, aliens without residence status, clandestinos, illegals, illegalised people, illegal residents, people in hiding – all these are terms used for people staying without the necessary residence permit and without a formal statutory temporary suspension of deportation in a country of which they are not citizens (Vogel, Cyrus, 2008).

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Even in the past and today, international migration can be an empirical clearly and conspicuously explain the unified theory. Research on International Migration origins date back to the last quarter of the 19th century, and is associated with the name Ernst Georg Ravenstein, who was considered an expert in the research of migration processes and scientific works were "stepping stone" for many other authors in later years. Palat (2015) defines seven Ravenstein laws of migration:

- 1) All migratory flows create feedback.
- 2) In most cases, migrants migrate only short distances.
- 3) Those migrants who decided to move longer distances, prefer big cities.
- 4) The people of the village are more likely to migrate.
- 5) Young and single people migrate more often than families.
- 6) Migrants is largely underage people.
- 7) The population major cities recorded population growth because more migrants than natural increase city.

The cause of the occurrence and persistence of migration according to Palat (2015), the economic disparities in the country. Instead, consideration of a flow of factors of production: land, capital copper developed and less developed countries. Developing countries have sufficient capital but have a long-term problem of lack of work. For developing countries is less characteristic that face a lack of productive capital and surplus labour. Natural phenomenon therefore happens that people migrate to countries with sufficient labour factor of production capital in this case is moving in reverse. The term 'illegal immigration' is used to describe a variety of phenomena. This includes third-country nationals who enter the territory of a Member State illegally by land, sea and air, including airport transit zones This is often done by using false or forged documents, or with the help of organised criminal networks of smugglers and traffickers (Štefančiková, 2014).

	Developing countries	Poor countries
Capital	Surplus capital	Lack of capital
Work	Lack of work	Surplus

Figure 2. The flow of capital and labour between the developing and poor countries

Source: Palat, 2015

In addition, there is a considerable number of persons who enter legally with a valid visa or under a visa-free regime, but "overstay" or change the purpose of stay without the approval of the authorities. Lastly there are unsuccessful asylum seekers who do not leave after a final negative decision. Estimates of illegal migration flows can only be derived from relevant indicators, such as the numbers of refused entries, of illegal immigrants apprehended at the border or in a Member State, of applications for national regularisation procedures and of removals. A further useful indicator is given by the considerable number of those who enter legally and then "overstay". Increased migration pressure during the next decades seems very likely in view of the economic and political situation in many countries of origin and with regard to demographic forecasts. Illegal migratory movements are likely to continue at a significant rate as long as 'push' factors in third countries and 'pull' factors in the EU remain important (http://europa.eu/rapid/press-release\_MEMO-06-296\_en.htm).

## 2. Management of migration

Migration is commonplace and it's required for development of the society. Approaches for solving of migration are different and this problem have to solve all countries. Crucial point of this problem is for all countries management of migration flow.

According to Eurostat in 2014, around 286 000 non-EU citizens were refused entry at the external borders of the EU-28. There was an overall 12.2 % reduction in the number of refusals that was due to the decrease of refusals in Spain and Poland (around 20 000 less refusals each). More than two thirds of refusals were recorded in Spain (172 185) and Poland (20 125). Over half of the total number of EU-28 entry refusals (about 60 %) were recorded by Spain, and mainly concerned Moroccan citizens (97 %) refused entry at Ceuta and Melilla (Spanish territories that share a physical border with Morocco). Graph 1 illustrates the 'Spain effect' on the entry refusal data.

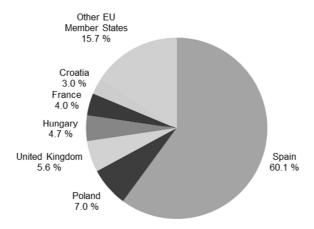


Figure 1. Non-EU citizens refused entry at the external borders of the EU-28, 2014 (%)

Source: Eurostat

Divinský (2007) defining management of migration as "system of diversified governmental competencies and organized and humanitarian directing of process of foreign migration on territory of particular state. Primary objective of migration management is regulation of illegal migration in order of maximalization his positive effect and minimizing of negative impact for example spontaneousness, inorganization and illegal character on domestic, regional and worldwide level (Adepoju et al., 2010; Kazlauskienė, Rinkevičius, 2006). Migration in world-wide scale is inpossible to forbid. We have to accept it and find suitable tools by migration policies. Development of migration show that country which act without international cooperation has limited options of migration management. It's impossible to solve this complicated problem isolated without support of other countries.

Long-term aspect show us necessity of creating strategy for management of migration, which define at least principles (Mach, 2007).

- 1) Must take into consideration uniqueness of the country and various specifications.
- 2) Must be in harmony with development of surrounding countries, clearly define their own migration policy.

Policy of migration should solve crucial themes like for example:

- support of legal migration;
- protecting of national borders;
- struggle against various forms of illegal migration;
- enhancement of asylum system.

We can divide migration policy into:

- immigration policy solve conditions for entry and residence of migrants;
- asylum policy principles for acquiring of asylum;
- integration policy process of adaptation of migrant into "new" society.

For the State, which wants to implement integration policy towards migrants, it is necessary to examine the economic section of conditions - employment of migrants is crucial for the integration process (Masárová, Štefančiková, 2015).

# 2.1. Migration management measures

The importance of measures to combat illegal immigration has been repeatedly emphasised by all the institutions of the EU. In particular, in its 2001 Communication on a common policy on illegal immigration, the Commission announced its intention to "address the issue of illegal immigration with a comprehensive approach" that targets measures encompassing the different stages of the migration process (Tupá, 2015). The European Commission recommends extensive measures to control irregular immigration although there are justifiable doubts about the efficiency and effectiveness of these measures (Dagiliene, et all, 2014). Against this background, we show that measures to control irregular migration play a central role in European migration policy. Some measures of migration management:

- 1) Strengthening the external borders With the Borders Code for the management of operational Cooperation at the External Borders a framework has already been set up through which border controls can be further developed to a high standard. In the biometric technology, such as fingerprints and digital photographs, will have a significant impact on border control systems and should be exploited to enhance the effectiveness of border control operations.
- 2) Cooperation with third countries Management and cooperation on migration between the EU and countries of origin and transit is crucial. In particular, short and mid-term measures are currently implemented in response to currently events to illegal migration and ongoing illegal immigration to the EU.
- 3) Fight against human trafficking This plan covers a range of issues such as measures to improve the understanding of the crime and its dimensions, prevent trafficking, reduce demand, more efficient investigation and prosecution, protection and support of victims, safe return and reintegration and also issues linked to anti-trafficking in third countries.
- 4) Management illegal employment The possibility for illegally staying immigrants of finding employment in the EU mostly in construction, catering and textile industries and very often under exploitative conditions remains a significant pull-factor for illegal immigration. Member States are called upon to introduce sanctions for such rogue employers. Measures at EU level with the aim of harmonising such sanctions could be an additional tool for preventing further illegal immigration.
- 5) Regularisation of illegal immigrants Measures needs to be taken towards those illegally present third country nationals in the EU who are unlikely, for whatever reason, to be returned to their countries of origin.
- 6) Return home migrants Return remains a cornerstone of EU migration policy. An effective return policy is key in ensuring public support for elements such as legal migration and asylum.
- 7) Management information exchange Operational cooperation between Member States can only be successful if they are able to share information of a technical and strategic nature swiftly and easily. This plan is calls for enhanced use of existing information instruments.

Considerable proportion of today's roughly 200 million global migrants do not possess regular residence status. Amongst the general public and politicians, illegal immigration to Europe is associated with a large number of fears, that countries are losing control over their borders, that social systems are overstretched by unauthorised use, that indigenous workers are being pushed out of the labour market, and that criminality is growing. As a result, management irregular migration is one of the priorities of the European Union's migration policy. A large number of measures to control illegal migration with varying degrees of intervention and, at times, considerable financial expense are justified by their serving to combat illegality (Vogel, Cyrus, 2008).

Migration policy includes also protecting of borders in harmony with "Schengen acquis" and include activities, which should eliminate illegal crossing of ground and air borders, Protecting of borders should not limit entry of authorized person. Responsibilities of migration policy of Slovak Republic related to protecting of borders:

- defining of national plans for managing of borders of Slovak Republic;
- application and development of system of technical support which is used during controls of ground and air borders of Slovak Republic;
- strengthened of cooperation among members countries of European Union.;
- professional preparing of people responsible for controlling of the borders and duties of foreigners according international security.
  - According to Ministry of Interior of the Slovak Republic is support to migrants from government:
- effective process of receiving visa and allowance for living through improving of cooperation among representative department and department of foreign police through ICT - improvement of language for officers for better ability to communicate with foreigners;
- creating rules for economic immigration for qualified and high-qualified immigrants and creating of points system;
- defining rights and duties for emigrants including their social assurance, accessibility of various groups of migrants to health care and labour market in order their adaptation to the society;

- creating a realization of accommodation policy for inner mobility in order assurance of suitable accommodation for migrants;
- precise controls of migrants in order of limitation of illegal living, employment or business and application of the same labour conditions including wages and social assurance.
- creating of informational and consultation centers for migrants also in their countries of origin.

Measurement and impact assessment of illegal migration is not easy. Thereafter, a migration management is not a simple matter. The reasons are, lack of relevant data from some countries involved in migration policy and therefore international migration statistics often have to rely on expert statistical estimates, which depend on the data that are available to individual countries.

A primary role in quantifying illegal migration occupy international organizations such as Eurostat, the European employment service, United nations, International labour organization, International organization for migration. In the Slovak republic, except the international organization is, for example: The National security office, Slovak Statistical office, Central Office of Labour, Social Affairs and Family, Slovak National bank (Sedláček, 2014).

#### 3. Conclusion

Illegal migration is process involving different elements of management at various stages. The migration process could be said to begin with the impetus for migration, including root causes the push and pull factors, and whether forced or voluntary, moving through the various stages of travel and entry - either by regular or irregular means, and either facilitate or spontaneous, settlement and /or return, integration and/or reintegration, and ultimately, in some cases, the acquisition of nationality (Daugėlienė, 2007). There are a number of offshoot relationships, including the potential contribution that diaspora can make to the economic development of their countries of origin as well as cross - cutting themes such as protection and health. Complex set of relationships highlights the need for a global understanding and approach to migration management that take into account the relationship between migration and other contemporary issues of a social, economic, and political nature for example, labour market developments, security concerns, and evolving national identities.

# Acknowledgements

This publication was created in the frame of the project VEGA 1/0736/14 "Trendy v migrácii pracovnej sily do krajín EÚ a ich dopad na hospodársky a sociálny rozvoj SR".

#### References

Adepoju, A., Van Noorloos, F., Zoomers, A. (2010). Europe's Migration Agreements with Migrant-Sending Countries in the Global South: A Critical Review. *Journal of International Migration*, vol. 48, iss.3, pp. 42-75.

Dagiliene, L., Leitoniene, S., Grenčíková, A. (2014). Increasing business transparency by corporate social reporting: development and problems in Lithuania. *Engineering Economics*, vol.25, iss.1, pp. 54-61.

Daugeliene, R. (2007). The position of knowledge workers in knowledge-based economy: migration aspect. *European Integration Studies*, vol. 1, pp. 103-112.

Divinský, B. (2007). *Zahraničná migrácia v Slovenskej republike. Vývojové trendy od roku 2000*. Bratislava: Výskumné centrum Slovenskej spoločnosti pre zahraničnú politiku, no 2007, [online]. [cit. 2015-11-14]. Available: http://www.iz.sk/sk/stanoviska/sfpa-boris-divinsky-Zahranicna-migracia-v-Slovenskej-republike.

Kazlauskienė, A., Rinkevičius L. (2006). The Role of Social Capital in the Highly-Skilled Migration from Lithuania. *Engineering Economics*, vol. 4, pp. 69-75.

Mach, P. (2007). Forum statisticum slovacum. Slovenská štatistická demografická spoločnosť.no.3, 2007. [online]. [cit. 2015-12-14]. Available: http://www.ssds.sk/casopis/archiv/2007/fss0307.pdf

Masárová, T., Štefančiková, A. (2015). Integrácia migrantov na trh práce v SRvkontexte regionálnych disparít. In *Znalosti pro tržní praxi 2015*. Ženy - podnikatelky v minulosti a osti. Sborník z mezinárodní vědecké konference Olomouc. Societas Scientiarum Olomucensis II, 2015, pp.598-607.

Palát, M. (2015). Mezinárodní migrace a ekonomika v Evropské unii vývoj, determinanty, politiky a trendy. Ostrava: Key Publishing, 2015.

Sedláček, M. (2014). Analyse of innovation performance of Slovak Republic regions and main factors of regional development based on innovation. In *GEM Conference On Psychology & Psychiatry, Sociology & Healthcare Education*. Conference proceedings volume IV Economics & Tourism 2014. Sofia: STEF92 Technology, pp. 27-34.

Soósová, V. (2014). Competitiveness of the V4 countries. In *GEM conference on psychology & psychiatry, sociology & healthcare education*. Conference proceedings vol. IV Economics & Tourism 2014. Sofia: STEF92 Technology, pp. 113-120.

Štefančiková, A. (2014). The mission and the importance of universities in regional development. In *GEM Conference On Psychology & Psychiatry, Sociology & Healthcare Education*. Conference proceedings vol. II Sociology & Healthcare 2014. Sofia: STEF92 Technology, pp. 1009-1016.

Tupá, M. (2015). Problémy a trendy v migrácii pracovnej sily. Trenčín: TnUAD, 2015.

Vogel, D., Cyrus, N. (2008). Irregular Migration in Europe – Doubts about the Effectiveness of Control Strategies. *Policy brief*, No 9 [online]. [cit. 2015-10-10]. Available: http://focus-migration.hwwi.de/index.php?id=2874&L=1.

Žáková, M. (2006). Azylová problematika na Slovensku z pohľadu sociálnej práce. Bratislava: VŠZaSP sv. Alžbety., 2006.

*Uznesenie vlády Slovenskej republiky* č. 574 z 31. (2011), [online]. [cit. 2015-11-1]. Available: http://www.minv.sk/?zamermigracnej-politiky-slovenskej-republiky.

EU policy to fight illegal immigration. [online]. [cit. 2015-10-29]. Available: http://www.europa.eu/rapid/pressrelease MEMO-06-296 en.htm.

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# 18. THE IDENTIFICATION AND CLASSIFICATION OF RISKS IN TERMS OF CLUSTER COOPERATION

Abstract: The part of risk management phases are the processes of the risk identification and risk classification. It is possible to identify these processes in each entity that is located and operating in environment that is: dynamic, influenced by various external and internal factors and is exposed to some types of risks. In the paper, as an entity we consider the cluster. The subject of this paper is presenting the theoretical knowledge in combination with the practical application of risk management areas for specific field-cluster cooperation. The attention was focused on the identification of risks and their classification. There are two types of clusters in the Slovak republic: technological and tourism. The main aim of this paper is to draw up a conceptual methodology proposal for risks identification and classification in both types of clusters. The proposal of this methodology is based on the results of questionnaire survey realized between small and medium sized enterprises and literature review. Risks categories will be analyzed and evaluated with use of quantification methods - non-parametric multi-selective Kruskal Wallis test and Median test. The novelty of paper is to pointing on the types of risks, with which the entities has to be consider in the frame of cluster cooperation. The results of the paper show that most important categories of risk are mainly production, economic as well as political risks.

Keywords: classification, cluser, identification, risk management

JEL Classification: G32, L26, M13, R00, R12

#### 1. Introduction

Current economic activity is characterized by the forces of globalization, development of technology, deregulation and democratization collectively creating an extremely complex operating environment for companies as well as clusters (Vojtovic, Krajnakova, 2014; Gorzeń-Mitka, Okreglicka 2014; Kordos, Karbach, 2014; Španková, Grenčíková, 2014; Dagiliene et al. 2014). Business environment is characterized by growing dynamics and diversity as well as by actions of competitors (Gorzeń-Mitka, Okreglicka, 2015). These aspects influence on the activities of each entity. Each entity, whether it is a business entity, individual, educational institutions, the body of local government, cluster or regional stakeholder is located and operating in an environment that is dynamic, constantly evolving and is influenced by various internal and external factors, which is exposed to some risk. The common basis is the uncertainty that is linked with activities of each subject. As Belás et al. (2015) stated, most business decisions are carried out under conditions of uncertainty. It means that uncertainty and randomness exists in the development of conditions for business activities, in the course of these activities, and also in their result does exist. If we are able to quantify the probability of deviation of actual processes and results from the expected level, then we talk about risk.

The risk has different meanings for different activities. We can find several definitions of risk in professional domestic and foreign works. Ivascu and Cioca (2014) define the risk as a situation which occurs in the enterprise that can negatively or positively affect business objectives, including probability and opportunity being determined by a hazard. Betáková et al. (2014) focused on potential risks of the implementation of instruments for environmental area management on the development of urban settlement. Hollman, Mohammad-Zadeh (1984), Global Risk alliance (2005), Verbano and Venturini (2013), Hudáková, Bugánová et al. (2015), Klucka et al. (2015) define risk in various ways, where the most common characteristics are: the risk of such occurrence, the risk as a consequence, the risk as a potential threat and the risk as a deviation from the planned target.

According Ivascu and Cioca (2014), due to the significant potential impact of risk factors on the results of the enterprise and the impossibility of their full control by the enterprise, risk analysis is an

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important dimension of the strategic management of the enterprise. Strategic management involves the sequence of steps, which are referred to collectively as the risk management: risk identification, risk analysis and assessment, determine interventions priority to limit risk and risk treatment. Risk management is a process to help enterprises to reduce risks in achieving enterprise goals. Real risk management contributes to the development of the enterprise (Ivascu, Cioca, 2014). Managerial discretion in identifying risks and responding to them led to different approaches in managing risk such as financial risk, management, insurance and political risk management. None of these approaches were wrong but their focuses were limited and fragmented (Soltanizadeh et al., 2014). Risk categories can differ depending on the project, but each risk category should be carefully defined such as exogenous risks (political, economic, industrial, currency, social environment) and endogenous risks (stakeholders, resources, operational, supply chain, etc.). Risk control can be secured through the identification of the risk type (Kardes et al., 2013) Risk identification is important part of risk management and is in focus of many researchers: Szczepański and Światowiec-Szczepańska (2012), Kardes et al. (2013), Dumitrescu (2015), Ivascu and Cioca (2014), Belás et al. (2015), Pereira et al. (2015), Soltanizadeh et al. (2014), Hudáková, Bugánová, et al. (2015) and many others.

In the paper as an entity on which the different risks factors have impact we consider the connection of regional stakeholders into the network cooperation in a form of cluster. The concept of cluster in the Slovak Republic is a well-known issue, but nevertheless the involvement of regional players in this form of cooperation is limited. There are several reasons, but one of the most serious problems is the lack of information about benefits and risks arising from cluster cooperation. There are many types of risks that will be encountered in cluster creation and cooperation. Some of them have a minimal impact and some of them are very important. They can be understanding as the principles and processes for effective risk management in the process of clustering. They will help to stakeholders to make necessary decisions to ensure the best possible outcome from the cluster cooperation.

The significant stakeholders for cluster cooperation represent the small and medium sized enterprise (SMEs). SMEs are in the Slovak republic as well as in Europe considered as an important pillar and stabilization factor of country economy and its regions (Hudáková, Bugánová et al., 2015; Urbancová, Hudáková, 2015; Srovnalíková, Pekarskiene, 2015; Krajnakova et al. 2015). At the end of 2013, in the Slovak republic the share of the SMEs sector in Slovakia amounted to 99% (micro enterprises 96,8%, small and medium sized enterprises 2,6%) while the share of large enterprises represented 0.1% of all business. Slovak SMEs have main part of SMEs micro enterprises, and big part is family business. SMEs had in 2014 more than 53 % share of value added and 72 % share on employment (Šúbertová, Meszárošová, 2015). SMEs are important stakeholders in Slovak clusters, too. As Balog stated (2015), SMEs are the most represented category of clusters' members in Slovakia. This category consists of 49 % of all members in clusters. Other significant categories of clusters' members are large enterprises (15%), universities and R&D organizations (in total 12%), selfgoverning regions as well as towns (in total 9%). The managers of clusters consider as key actors the SMEs (40%) and large enterprises (23%), but also universities and R&D organizations (in total 13%). The importance of membership depends mainly from quality and their contribution for the development of cluster. In this case, the significant roles play large enterprises and universities.

Even though many researchers were worked on risk management of business and SMEs, very few researchers were reported about the risk management of cluster cooperation. We can find several works focused on topic of risk management for specific field of entities cooperation in works of Xia and Chen (2011), Szczepański and Światowiec-Szczepańska (2012), Kardes et al. (2013), Fazli et al. (2015). It is not possible to find specific studies about risk management in case of cluster cooperation in Slovak scientific background. The main aim of this research is to get a better knowledge, from a risk management of cluster cooperation. The research aims as well to make a contribution to scientific discussion on the roles, features and future perspectives of Slovak clusters. As a consequence, the specific goal of this paper is to draw up a conceptual methodology proposal for risks identification and classification in both types of clusters: technological and tourism.

# 2. Methodology of research

The focus of this research is on SMEs, which constitute the vast majority of enterprises in cluster in Slovakia. In particular the SMEs under analysis come from two industries those of technological and tourism. Their choice dictates the fact that mostly these two kinds of clusters occur in Slovak regions

and they are important for development of Slovak economy. And as Kordos (2014) emphasizes technology and innovation implementation processes in the European Communities can affect the business environment in terms of the EU competitiveness enhancement regarding the further social and economic development. Qualitative data were collected through the several ways, mainly through the questionnaire survey with small and medium sized entrepreneurs in the Slovak regions, then through the consultation with managers of clusters and experts from area of clustering and other Slovak and foreign universities in order to help the development of the research framework and explain the empirical results of this research.

In 2015 we accomplished a statistical survey of the business risks of SME in Slovak regions. The relevant population of this research is all firms with 0 to 250 employees. This population consists from 82 SMEs. With reference to the two kinds of industries under examination 46% of respondents belong to the technological industry while 54% belong to the tourism. Some of them are new established (2015) some of them are far older (2004). In terms of structure of SMEs and number of employees the results surveys were as follows: 23% of microenterprises, 30% of small and 47% of medium-sized. Data were collected by a questionnaire survey through in depth personal interviews. All questions relating to the risk management are based on the risk categorizations that appear in activities of SMEs. Respondents were asked to identify the categories of risks that could occur in the case of cluster cooperation and which are significant from their point of view. We analyzed the effect of selected categories of risks with regard to their focus in two stated fields of industries.

In order to meet main aim stated, we used empirical research methods (questionnaire, interview), statistical methods (non-parametric multi-selective Kruskal Wallis Test and Median test) and statistical software Statistica.

#### 3. Results of research

In the frame of scientific research project realized at the Faculty of Social and economic relations IGS No.1/2015 The evaluation of cluster potential in regional development with focusing on cluster initiative creation in the Trenčín region we observed more than 40 clusters in Slovak regions. The clusters in Slovak regions are presented in Table 1.

Table 1. Clusters in the Slovak regions

Region	Technological clusters	Clusters of tourism
Bratislava	Danube knowledge cluster, ABC – Academic Business Cluster, National	
-	energy cluster, EMOCITY – Cluster for electro mobility and smart city	
Trnava	Automotive cluster – West Slovakia, Electrotechnic cluster West	
	Slovakia, Energetic cluster, Energetic cluster Centrope, Cluster for	Cluster of tourism – West
	Green and Innovative Technologies, Cluster "Agriculture and	Slovakia, Cluster Smolenice
	countryside", Trnava-Myjava engineering cluster	
Trenčín	Slovak IT cluster, KITech cluster of innovative technologies for the	
	handling of dusty inorganic waste	
Nitra	Slovak plastic cluster, Agro-environmental cluster, Food cluster,	Cluster Topoľčany
INITA	Bioeconomy Cluster, Cluster for Accumulation of Energy from OZE	1 7
Žilina	Z@ict, Cluster of Liptov innovation and regional development, Cluster Monocrystal	Cluster Liptov, Cluster
		Turiec, Cluster Orava,
		Cluster Oravaregion, Cluster
	Thomosty state	Orava - Regional Tourism,
		Organization
Banská Bystrica	1st Slovak engineering cluster, Cluster Triskel	Tourism association Balnea
		Cluster, Cluster Horehronie,
		The cluster of border castles,
		Cluster Kremnické vrchy
Prešov	Energetic cluster of Prešov region, Railway transport cluster	Cluster of tourism -Branisko-
		Barucheň, Cluster of tourism
		Slanské vrchy
Košice	BITERAP cluster, Cluster AT+R,	
	Košice IT Valley, 1 <sup>st</sup> Spiš cluster, Cluster Radar, Technology Cluster for	
	Earth Resource Utilization, Aviation Cluster Slovakia, Electrotechnical	
	Cluster	

Source: Own work

Due to the activities of the Slovak clusters and activities of SMEs, the focus of research was oriented on the 9 categories of risks (technical, production, market, financial, economic, innovation, information, political and medial risks).

Table 2. Classification of key risks to SMEs according to the highest rate of risk (%)

Category of risk	Tourism	n		Techno	ological	
	%	μ	0,95<δ<1,16	%	μ	1,00<δ<1,07
Technical	13	3,17	1,20	19	3,48	1,15
Production	15	3,52	1,23	13	3,50	1,09
Market	8	3,31	1,35	9	3,58	1,14
Financial	4	3,10	1,11	3	2,95	1,01
Economic	26	4,02	1,15	26	4,02	1,05
Innovation	7	3,29	1,25	5	3,26	1,09
Information	1	2,72	1,09	2	2,81	1,07
Political	15	4,18	0,89	13	3,81	1,16
Medial	12	3,67	1,30	10	3,59	1,08

Source: Own work

Subsequently were classified different intensities of identified risk categories, according to the highest rate of risk for both types of industries.

Non-parametric multi-selective Kruskal Wallis and Median tests of risk categories according to rate of risk were performed. Since the calculated p-value of the analysis of intensity variance of risk categories from Table 3 is higher than 0,05 except category of production risks. We tested the hypothesis, that the significance level of risk was statistically different from the rate of risk level stated by SMEs' entrepreneurs. The hypothesis is rejected only in case of production risks.

Table 3. The analysis of the variance of risks categories by using Kruskal – Wallis Test and Median test

Category of risk		Tourism	Technologica
	K – W Test	H(4, N=26)=2,706933 p=0,6080	H(4, N=55)=2,371079 p =0,6679
Technical	Median test	Chi-Kvadr.=3,430362 sv=4	Chi-Kvadr. = $2,862200 \text{ sv} = 4 \text{ p} =$
		p=0,4885	0,5811
	K – W Test	H(4, N=26)=8,850539 p=0,0649	H(4, N=55)= 12,74868 p=0,0126
Production	Median test	Chi-Kvadr. = 10,86042 sv= 4 p =0,0282	Chi-Kvadr. = 8,197198 sv= 4 p = .0846
	K – W Test	H(4, N=26)=2,614069 p=0,6243	H(4, N=55)= 6,492480 p=0,1653
Market	Median test	Chi-Kvadr. = $0,000000 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = $6,090093 \text{ sv} = 4 \text{ p} =$
		1,000	,1925
	K – W Test	H(4, N=26)=5,682706 p=0,2241	H(4, N=55)= 6,786084 p=0,1476
Financial	Median test	Chi-Kvadr. = $2,855532 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = 4,449615 sv= 4 p =
		0,5823	,3486
	K – W Test	H(4, N=26)=1,486419 p=0,8290	H(4, N=55)= 5,169713 p=0,2703
Economic	Median test	Chi-Kvadr. = $,9769345 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = $4,449615 \text{ sv} = 4 \text{ p} =$
		0,9133	,3486
	K – W Test	H(4, N=26)=3,237098 p=0,5190	H(4, N=55)= 1,449987 p=0,8355
Innovation	Median test	Chi-Kvadr. = $2,309524 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = $1,061745 \text{ sv} = 4 \text{ p} =$
		0,6790	0,9003
	K – W Test	H(4, N=26)=4,656863 p=0,3244	H(4, N=55)= 3,755765 p=0,4401
Information	Median test	Chi-Kvadr. = $7,2222222 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = $3,917484 \text{ sv} = 4 \text{ p} =$
-		0,1246	0,4173
	K – W Test	H(4, N=26)=1,665410 p=0,7970	H(4, N=55)= 4,782075 p=0,3104
Political	Median test	Chi-Kvadr. = $7,2222222 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = $3,265251 \text{ sv} = 4 \text{ p}$
-		0,1246	=0,5145
	K – W Test	H(4, N=26)=2,749873 p=0,6005	H(4, N=55)=1,485091 p=0,8293
Medial	Median test	Chi-Kvadr. = $4,070238 \text{ sv} = 4 \text{ p} =$	Chi-Kvadr. = $2,854795 \text{ sv} = 4 \text{ p}$
		0,3966	=0,5824

Source: Own work

#### 4. Discussion

In paper we focus mainly on risks identification and their classification. In a light of researchers' works of Xia and Chen (2011), Szczepański and Światowiec-Szczepańska (2012), Verbano and Venturini (2013), Soltanizadeh et al. (2014), Ivascu and Cioca (2014), we drew up the conceptual methodology of risk identification in case of cluster cooperation. Risk identification involves determining which risks might affect the cluster activities and documenting their characteristics. It is an iterative process when different types of risks that could affect the cluster's activities ability to achieve its goal should be identified. It is suitable to describe of an identified risks as specific as possible. The following steps should be considered as a conceptual methodology of risk identification in cluster cooperation.

Step (1). The collection of information about possible sources for risks identification: the main risks of cluster strategy creation, information about risks found in similar projects realized by other clusters, the results of surveys, the experience of stakeholders. In this step, cluster identifies what can happen, when and where, how this can happen, why and what impact it might have on cluster activities. Clusters identify the sources and causes of risks, the existing and potential control mechanisms and finally, cluster names stakeholders and their expectations in relation to risk.

Step (2). The using of various methods of risk identification in internal and external environment of cluster: questionnaire – distribution to stakeholders about observations of risks and knowledge of risk management procedures, individual or group-managed interviews, consultations or brainstorming, organizing the workshops and working groups focused on risk identification, analysis of historical information, flow chart method, PESTLE analysis, Porter five forces analysis, risk trigger questions. The results of these analyses can be summarized and evaluated using the SWOT analysis.

Step (3). The creation of check list for risks identification in risk categories (organizational – type of activity, resources, funding, prioritization, project management of realizing activities - estimating, planning, controlling, communication, technical – requirements, technology, complexity, performance and reliability, quality, financial, legislative, infrastructure and business services, user - input, skills, training. Pre-defined risk categories provide a structure that helps to ensure that a systematic process is followed to identify risks. Risk categories can be tailored over time, as specific cluster projects demand.

Step (4). Creation of risk register that is distributed to all stakeholders and used to monitor and manage the risks. This register should be updated by each stakeholder and leaders of cluster.

The risks classification is possible to realize based on various criteria: risks influenced from activities of stakeholders, risks influenced from cluster's management mode, risks influenced from cluster's activities. Table 4 presents risks classification due to the external and internal factors in both types of clusters in Slovak republic.

Table 4. The main risks resulting from cluster cooperation

Type of cluster	Risks due to the external threats	Risks due to the internal activities
Technological	credit risk, interest rate risk, commodity risk, commodity risk, currency risk, changes in customer requirements, changes in the industry, the management of the cluster, state regulation, etc.	research and development, products and services, funding risk, market liquidity risk, operational risk, commercial risk, risk of reputational loss, employees, management cluster, cluster culture, suppliers
Tourism	credit risk, taxation risk, regulatory risk, changes in the industry, the form of cluster management, changes in customer requirements, natural factors, state regulation, etc.	services provided, funding risk, risk of reputational loss, employees, management of cluster, cluster and culture etc.

Source: Own work

#### 5. Conclusion

Paper of this study are consistent with Belás et al. (2015), Dumitrescu et al. (2015), Fazli et al. (2015) and Hudáková, Bugánová et al., where mostly economic, financial, technical and political categories of risks are important for SMEs and have impact on business environment. The results of the paper

according to the highest rate of risk show that most important categories of risk are mainly production, economic as well as political risks. The results of non-parametric analysis showed, that risk categories depend on the level of rate risk referenced by entrepreneurs in given areas. The results of questionnaire survey and interviews with specialist, researchers and other interested persons showed that risk management for cluster cooperation is important part of SMEs' business and it is important to focus the scientific research on steps of risk management. All individual steps of risk management present the implication for next scientific research.

# Acknowledgements

This paper was supported by Grant Agency VEGA [No 1/0918/16]: Risk management of SMEs in the context of clusters' involvement activities in the Slovak Republic.

#### References

Balog, M. (2015). Cluster policy in the condition of Slovak republic. Bratislava: Slovak Innovation and Energetic Agency, 2015.

Belás, J., Ključnikov, A., Vojtovič, S., Sobeková-Májková, M. (2015). Approach of the SME entrepreneurs to financial risk management in relation to gender and level of education, *Economics and Sociology*, vol. 8, no 4, pp. 32-42.

Betáková, J., Lorko, M., Dvorský J. (2014). The impact of the potential risks of the implementation of instruments for environmental area management on the development of urban settlement. *WIT Transactions on Ecology and The Environment*, vol. 181, pp. 91-101.

Dagiliene, L.; Leitoniene, S.; Grencikova, A. (2014). Increasing Business Transparency by Corporate Social Reporting: Development and Problems in Lithuania. *Inzinerine Ekonomika-Engineering Economics*, vol. 2, iss. 1, pp. 54–61.

Dumitrescu, A, Purcărea, A. A., Negoițăa, O.D., Negoiță, O. (2015). Research regarding connections between risks and processes within small and medium enterprises. *Procedia Technology*, vol. 19, pp. 1038-1044.

Fazli, S., Mavi, K., R., Vosooghidizaji, M. (2015). Crude oil supply chain risk management with DEMATRL-ANP. *Operational Research*, vol. 15, iss. 3, pp. 453-480.

Global Risk Alliance Pty Ltd, NSW Department of State and Regional Development. (2005). *Risk management guide for small business*. Sydney: NSW Department of State and Regional Department, 2005.

Gorzeń-Mitka, I., Okręglicka, M. (2015). Review of complexity drivers in enterprise. In *Liberec Economic Forum 2015*. Proceeding of the 12th International Conference Liberec Economic Forum 2015. Liberec: Technical University Liberec, pp. 253-260.

Gorzeń-Mitka, I., Okręglicka, M. (2014). Improving decision making in complexity environment. *Procedia Economics and Finance*, Vol. 16, pp. 402-409.

Hollman, K. W., Mohammad-Zadeh, S. (1984). Risk management in small business. *Journal of Small Business Management*, vol. 22, no. 1, pp. 7-55.

Hudáková, M., Bugánová, K., Dvorský, J., Belás, J., Dana L.P. (2015). Analysis of the risks of small and medium-sized enterprises in the Zilina region. *Communications: scientific letters of the University of Žilina*, vol. 1, pp. 34-39.

Ivascu, L., Cioca, LI. (2014). Opportunity risk: Integrated approach to risk management for creating enterprise opportunities. In *Conference: 2nd International Conference on Psychology, Management and Social Science (PMSS)*. Book Series: Advances in Education Research, vol.49, pp. 77-80.

Kardes, I., Ozturk, A., Cavusgil, T., Cavusgil, E. (2013). Managing global megaprojects: Complexity and risk management. *International Business Review*, vol. 22, iss. 6, pp. 905-917.

Klucka, J., Mozer, V., Dvorsky, J. (2015). Fire losses in the Slovak republic – their classification and quantification. *Communications. Scientific Letters of University of Žilina*, vol.1, pp. 61-66.

Kordos, M. (2014). Role of innovations in the EU industrial policy and competitiveness enhancement. In *Proceedings of the 2nd international conference on European integration 2014*. Ostrava: VŠB, pp. 335-342.

Kordos, M., Karbach, R. (2014). The issue of innovation in international economics. In *SGEM conference on political sciences law, finance economics & tourism*. Conference proceedings volume III Economics & Tourism. Sofia: STEF92 Technology, pp. 653-660.

Krajnakova, E., Navikaite, A., Navickas, V. (2015). Paradigm shift of small and medium-sized enterprises competitive advantage to management of customer satisfaction. *Inzinerine Ekonomika-Engineering Economics*, 2015, vol. 26, iss. 3, pp. 327-332.

Pereira, L., Tenera, A., Bispo, J., Wemans, J. (2015). A risk diagnosing methodology web-based platform for micro, small and medium businesses: Remarks and enhancements. Chapter: *Knowledge Discovery, Knowledge Engineering and Knowledge Management*, vol. 454, Series: Communications in Computer and Information Science, pp. 340-356.

Soltanizadeh, S., Zaleha Abdul Rasid, S., Golshan, N., Quoquab, F., Basiruddin, R. (2014). Enterprise risk management practices among Malaysian firms. *Procedia Social and Behavioral Sciences*, vol.164, pp. 332-337.

Srovnalíková P., Pekarskiene I. (2015). The conditions and advantages of family business. *Social and Economic Revue*, vol. 13, no 3, pp. 31-38.

Szczepański, R., Światowiec-Szczepańska, J. (2012). Risk management system in business relationships-Polish case studies. *Industrial Marketing Management*, vol. 41, iss. 5, pp. 790-799.

Španková, J., Grenčíková, A (2014). Remuneration and motivation of employees in transport undertakings. In *SGEM* conference on political sciences law, finance economics & tourism: Conference proceedings volume III Economics & Tourism. Sofia: STEF92 Technology, pp. 495-502.

Šúbertová, E., Meszárošová, Z. (2015). Comparison of perception of external influences on family businesses in the Slovak Republic and in selected European country. In *Proceedings of the 7th International Scientific Conference: Finance and Performance of Firms in Science, Education and Practice.* Zlín: Tomas Bata University, pp. 1511-1523.

Urbanová, H., Hudáková, M. (2015). Employee development in small and medium enterprises in the light of demographic evolution. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brnensis*, vol 63(115), no 3, pp. 1043-1050.

Verbano, Ch., Venturini, K. (2013). Managing risks in SMEs: A literature review and research agenda. In *Journal of Technology Management & Innovation*, vol. 8, iss. 3, pp. 186-197.

Vojtovic, S., Krajnakova, E. (2014). Enterprise management in the conditions of economic recession. In *International Conference: Political Sciences Law, Finance Economics & Tourism, Sofia: SGEM,* vol. III, pp. 177-184.

Xia, D., Chen, B. (2011). A comprehensive decision-making model for risk management of supply chain. *Expert Systems with Applications*, vol. 38, iss. 5, pp. 4957-4966.

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# 19. THE STRATEGY OF SUSTAINABLE DEVELOPMENT IN THE PROGRAMMING DOCUMENTS OF SELF-GOVERNING REGIONS OF SLOVAKIA

**Abstract:** With an ambition to achieve sustainable development we are meeting at the various levels of government. It starts with the European Union through the states continuing to the individual levels of self-governing. Sustainable development is a concept that is defined legally and expertly. In this article we have analyzed strategic documents of self-governing regions in Slovakia. The aim is to identify the priorities concerning sustainable development of the various documents adopted by self-governing regions. We mainly used the method of content analysis and comparison. Our results pointed out to several differences that come up and are created from the sustainable development strategies. The fundamental finding is the fact that a specific chapter of sustainable development contained only two program documents.

Keywords: program of economic and social development, self-governing region, Slovakia, strategy of sustainable development

JEL Classification: H83, Q01

#### 1. Introduction

History of the term sustainability (sustainability) and sustainable development (SD) is relatively short, and it started to be used in early 70s mainly in connection with the recognition that any uncontrolled growth (population, production, consumption, pollution, etc.) is unsustainable in the environment of limited resources. Sustainable development means a targeted, long-term (continuous), comprehensive and synergic process affecting conditions and all aspects of life (cultural, social, economic, environmental and institutional) at all levels (local, regional, global) and oriented to such a model of a community that fully meets biological, material, spiritual and social needs and interests of people and meanwhile eliminates or significantly reduces interventions that are threatening, damaging or destroying conditions and forms of life; avoids burdening the environment above the acceptable level, reasonably uses its resources and protects the cultural and natural heritage (National Strategy for Sustainable Development, 2015).

# 2. Theoretical background and methodology of research

Slovakia's strategic approach to sustainable development is expressed in the national sustainable development strategy. According to which it is possible to evaluate individual strategies, concepts, programs and activities in relation to sustainable development on the basis of 16 principles (National Strategy for Sustainable Development, 2001).

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Table 1. Principles of evaluation of programs in relation to sustainable development

**Principles of evaluation Principles of evaluation** The principle of supporting human resource development The principle of cultural and social integrity Ecological principle The principle of non-violence The principle of self-regulatory and self-supporting Emancipation and participation principle develoment The principle of effectiveness The principle of solidarity The principle of rational sufficiency The principle of subsidiarity The principle of preventative precaution and foresight The principle of acceptable errors The principle of respecting needs and rights of future The principle of optimization generations The principle of social, ethical and The principle of intragenerational, vnútrogeneračnej, environmentally friendly management, intergenerational and global equality of citizens rights decision making, regulation and behavior

Source: National Strategy for Sustainable Development, 2001 (based on own compilation)

In Slovakia sustainable development is defined by the law, namely by § 6 of the Act no. 17/1992 Coll . of the environment. According to which it is "the development that enables present and future generations to satisfy their basic vital needs while preserving the diversity of nature and the natural functions of ecosystems" (Act no .17/1992 Coll.). It is important, because "regional development also depends on the legislation of the given country and on the importance of development for the given area within the national plan for development supported by national legislation and regional EU policies" (Štefkoet al., 2010, p. 527).

The sustainable development strategy is indeed often guaranteed at all levels of government, but access to its fulfillment is considerably different. It is very often caused by vague and also general definition as well as by faint recognition of its contribution. We can encounter this failure in the strategy documents of self-governing regions which presents the second (regional) level of self-government in Slovakia since 2002. By *content analysis* and *comparison* we evaluate individual Programs of Economic and Social Development (PESD) in relation implemented the principles and priorities of the concept of sustainable development. Despite the same methodology of their creation we have noticed some differences. Stabilizing factor since the 90s in the sustainable development of the regions seems to "use EU regional policy, which envisages a more even distribution of resources between regions and increase the sustainability of providing sustainable development ..." (Pawera et al., 2013, p.25). Pointing out the individual approach of self-governing regions we drew attention to the area of sustainable development, which is often part of the strategic documents. The main *aim* is to identify the priorities concerning sustainable development of the documents adopted by self-governing regions.

# 3. Sustainable development in strategic documents of self-governing regions of Slovakia

Self-governing regions are the regional government authorities in Slovakia according to the Act no. 302/2001 Coll. Their real action was conditioned by holding elections for self-governing authorities. The first round of elections was scheduled for 1<sup>st</sup> December 2001. Since 1<sup>st</sup> January 2002 self-governing regions are the part of territorial self-government of Slovakia. Following self-governing regions are:

- Bratislava self-governing region (BSGR),
- Trnava self-governing region (TTSGR),
- Trenčín self-governing region (TSGR),
- Nitra self-governing region (NSGR),
- Žilina self-governing region (ŽSGR),
- Banská Bystrica self-governing region (BBSGR),
- Košice self-governing region (KSGR),
- Prešov self-governing region (PSGR).

So far, the existence of second level of self-government raises several fundamental issues. In addition to the ongoing debate about the appropriateness of the model of eight administrative units, the responsibilities of individual authorities are an important issue. While professional public sees them as a tool of substantial influence life in society, non-professional part attributed the role and responsibility for development of the country to the National Council of Slovakia or to the Government.

Even from the definition of sustainable development it is evident that it is an essential part of society development. According to the law, self-governing region, "ensures all-round development of its territory and the needs of its people..." (Act no. 302/2001 Coll.). The stated priority corresponds with the ambition of sustainable development. In the field of regional development it belongs to the fundamental documents of government Program of economic and social development (PESD). PESD should reflect the real situation and issue the needs of the population. Governmental concept is presented in the National Regional Development Strategy, which is also the starting point for individual PESD.

# 3.1. Characteristics of the Programs of Economic and Social Development

All eight self-governing regions files PESD as the key documents of its development. Since their programming period vary, only accepted documents have been taken into account.

Bratislava self-governing region currently adopts its programming document only Document for the period of 2007 to 2013. It consists of 'An analysis of economic and social bases' and 'Programming, financing and securing of PESD' that had been accepted separately. In the first of them sustainable development is understood only in relation to valuation of up to date activities of the self-governing region in the context of involving into various projects. The second part talks about sustainable development as the necessary measure in meeting the strategic objectives - environment (PESD Bratislava self-governing region, 2006 and 2007).

*Trnava self-governing region* used PESD to plan its development in the period 2009 - 2015. The document consists of analytical and program section. A separate chapter is devoted to sustainable development, which is a part of the analytical part. TSGR priorities are within this area characterized from economic and social point of view. Sustainable economic development of the region is defined by two basic principles. These are:

- Economic freedom of entities.
- Strict respecting of property rights / law enforcement.

The above principles of economic development should be fulfilled by monitoring the competitive advantages of TTSGR. That is why the following approaches and areas were included among priorities:

- Environment of self-governing region open to innovations.
- Attractive environment for strategic investors.
- The environment of the region supporting small and medium enterprises.
- Transport infrastructure: an approximate occasion, integrated transport.
- Effective management, professional management in self-government in the region.
- Energy and food policy
- Tourism and cross-border cooperation on the territory of self-governing region.
- Countryside Trnava self-governing region, equivalent to the quality of urban life.

The listed priorities are part of the long-term strategic activities; it is in line with the concept of sustainable development. According to the programming document TSGR social development has the aim to create free and balanced environment for the population. To achieve social development it is necessary respect the following principles:

- Individual decision-making of inhabitants
- Proactive thinking in order to improve their status.
- Wide choice of options for residents.
- Non-creating of privileged groups.

In PESD it is emphasized that sustainable development is not to create a specific competitive advantage for different groups of people and it is also important to ensure a consistent efficient use of all opportunities for social development. Sustainable development in terms of social development should be ensured by respecting the following priorities:

- Human resources and quality of lifelong and entrepreneurial education of population.
- Proactive behavior of the population.
- A healthy environment also for future generations.
- Safe place to live.
- Socially conscious environment in the region, a comprehensive social welfare system.
- Region with plentiful cultural offer.
- Healthy population of the region, high level of health care.
- Sports and physical culture.

According to the text of the document are the above priorities based on the assumption that long-term steady increasing standard of living is determined by ensuring that every citizen has the freedom of choice. Presented region can be understood as a fundamental strategy for economic and social development of Trnava self-governing region (PESD Trnava self-governing region, 2009).

Trenčín self-governing region has currently adopted a programming document for the years 2013 - 2023. Some of the principles of sustainable development are implemented in the five basic parts PESD (human resources, environment, etc.) but without stronger links to specific criteria (PESD Trenčín self-governing region, 2012).

Nitra self-governing region has a program of economic and social development for the period 2012 - 2018. Adopted document consists of eight main parts, none of which specifically talks about sustainable development. However, within the objectives and measures there are set priorities to comply with the basic principles of sustainable development. In particular, the human resources and the environment. The program document of sustainable development is mentioned only in general terms and in relation to towns cooperation, rural development, water management and the economic growth (PESD Nitra self-governing region, 2012).

Žilina self-governing region does not have current program of economic and social development. The strategic document was last received for the years 2007-2013. The development strategy of the region and the economic and social starting points are two essential parts of the program. Neither one of them, however, include a separate section dedicated to sustainable development. The development strategy of the region is only guaranteed under the specific objective of maintaining environmental quality and coordination of development activities. In the economic and social bases sustainable development is associated mainly with employing research potential of the region, which is one of the conditions for the development of society (PESD Žilina self-governing region, 2007).

Banská Bystrica self-governing region is based on the programming document adopted for the period 2007-2013 in the question of planning its development. From a total of nine main parts of the program, the second chapter is devoted to the concept of sustainable development. Entitled as 'Sustainable Development Strategy of Banská Bystrica self-governing region' it discusses the vision, strategic objectives and the priority axis of development. The following areas were included in the priorities of the plan:

- Human resources development and improving the quality of life of citizens.
- Economic development, encouragement of investments and innovations.
- Tourism.
- Transport.
- Information Society.
- Environment.
- Agriculture, forestry and rural development.

Stated general priorities are further differentiated into partial, which are to be filled with precise measures. The conclusion, the strategy of sustainable development is amended by showing the spatial representation of allocation priorities (PESD Banská Bystrica self-governing region, 2007).

Košice self-governing region has currently adopted program of economic and social development for the period 2016-2022. The content of the document consists of five main parts. Namely it is an analytical, strategic, programming, implementation and financial part. However, neither chapter nor a subchapter is dedicated to sustainable development. The document indeed refers to a warning about the formal acceptance of the sustainable development strategy, but neither version of the program brings clear positions in this direction (PESD Košice self-governing region, 2015).

*Prešov self-governing region* is based on strategic documents adopted for the period 2008-2015 in the question of development planning. In the analytical, strategic and program part of PESD sustainable development is mentioned only in connection with fulfilment of specific objectives and actions of priority topics without specific principles (PESD Prešov self-governing region, 2008).

#### 3.2. Results of research

Sustainable development strategy is implemented into the programming documents self-governing regions in variant measurements and in different levels. Individual PESD are created on the bases of similar methodology and assumptions, but its version could be change in the case of sustainable development.

Table 2. Sustainable development in strategic documents of self-governing regions

Self-governing region	Period of PESD	Chapter SD	Principles and priorities of SD
BSGR	2009 – 2015		
TTSGR	2009 – 2015	x	Principles from economic point of view:  • Economic freedom of entities.  • Strict respecting of property rights / law enforcement.  Priniples from social point of view:  • Individual decision-making of inhabitants  • Proactive thinking in order to improve their status.  • Wide choice of options for residents.  • Non-creating of privileged groups.
TSGR	2013 - 2023		
NSGR	2012 - 2018		
ŽSGR	2007 - 2013		
BBSGR	2007 - 2013	x	Priorities of BBSGR:  • Human resources development and improving the quality of life of citizens  • Economic development, encouragement of investments and innovations  • Tourism  • Transport  • Information Society  • Environment  • Agriculture, forestry and rural development
KSGR	2016 - 2022		
PSGR	2008 - 2015		

Source: Based on own compilation

# 4. Discussion

An unexpected research results is the absence of a separate program for a strategy of sustainable development in six regions. Still, even in the group of documents without elaboration of sustainable development, it is possible to distinguish two levels of quality. Specifically, the PESD which implemented some of the principles of sustainable development, and those that guaranteed sustainable development only in general terms. The first group includes programming documents of Nitra and Trenčín self-governing region. The second group includes BSGR, ZSGR, KSGR and PSGR, which implemented the principles of sustainable development minimally and they did so in relation of measures in various areas of development. PESD of Trnava and Banská Bystrica and had been compiled with the very strategy of sustainable development. In both documents most reasonable principles are supporting human resource development, ecological principle and the principle of

cultural and social integrity, which are taken into account mainly in context of economic growth of the region. The other evaluation principles of sustainable development were not reflected in the text of PESD, implying that the National Sustainable Development Strategy of Slovakia was the starting document to a limited extent only.

#### 5. Conclusion

Content analysis of Program of economic and social development showed that six self-governing regions do not have the chapter of sustainable development in its strategic documents. PESD of Trnava and Banská Bystrica region include the concept of sustainable development, but they are primarily focused only on the three evaluative principles published by the National Sustainable Development Strategy. The action of self-governing regions is insufficient in this area and that is only in general terms without real measures. It is important to notice that besides PESD with ending programming period, none of the current and recent documents do not include the separate Strategy of sustainable development. This fact testifies to the continuity of unclearly specified sustainable development as a fundamental basis for regional development planning, which is a warning signal for all examined self-governing regions.

#### References

Act no. 17/1992 Coll. [online]. [cit.2015-12-01]. Available: http://www.zakonypreludi.sk

Act no. 302/2001 Coll. [online]. [cit.2015-12-01]. Available: http://www.zakonypreludi.sk

Bačík, R., Štefko, R., Gburová, J. (2014). Marketing pricing strategy as part of competitive advantage retailers. *Journal of applied economic sciences*, vol. 9, iss. 4, pp. 602-607.

Frankovský, M., Ištvániková, L., Stefko, R. (2009). Strategies of behavior in demanding managerial work situations in social contexts. *Studia Psychologica*, vol. 51, iss. 2-3, pp. 231-236.

Huba, M., Ira, V., Macáková, S., Švihlová, D., Záborská, Z. (2000). *Indikátory trvalo udržatelného rozvoja miest. Košice* ETP - Slovensko, STUŽ/SR. 2000.

Ira, V. (1999). Value orientation, consumption patterns, expectations and preconditions for sustainable development. In Huba, M., (ed.). *International cooperation – the approach to sustainable communities*. Bratislava (AI, STUŽ), pp. 39-41.

National Strategy for Sustainable Development. (2001). [online] [cit.2015-12-01] Available: http://www.minzp.sk/dokumenty/strategicke-dokumenty

Pawera, R. (2013). Regionálna politika a politika súdržnosti Európskej únie a jej vplyv na Slovensku. Univerzita Komenského v Bratislave. 2013.

PESD Bratislava self-governing region. (2006 a 2007). [online] [cit.2015-12-01] Available: http://www.region-bsk.sk/koncepcne-materialy.aspx

PESD Trnava self-governing region. (2009). [online] [cit.2015-12-01]. Available: https://www.trnava-vuc.sk/sk/strategicke-dokumenty/trnavsky-samospravny-kraj

PESD Trenčín self-governing region. (2012). [online]. [cit.2015-12-01]. Available: http://www.tsk.sk/regionalny-rozvoj/rozvojove-dokumenty/program-hospodarskeho-a-socialneho-rozvoja.html?page id=226

PESD Nitra self-governing region. (2012). [online]. [cit.2015-12-02]. Available: http://web.unsk.sk:8080/showdoc.do?docid=176

PESD Žilina self-governing region. (2007). [online]. [cit.2015-12-02]. Available: http://www.regionzilina.sk/showdoc.do?docid=8885

PESD Banská Bystrica self-governing region. (2007). [online]. [cit.2015-12-03]. Available:

http://www.vucbb.sk/portal/urad-bbsk/dokumenty/odbor-regionalneho-rozvoja/oddelenie-rozvoja-hospodarskych-aktivit/program-hospodarskeho-socialneho-a-kult-0

PESD Košice self-governing region. (2015). [online]. [cit.2015-12-04]. Available: http://www.vucke.sk/APIR/sk/Pre\_Podnikatelov/phsr/Stranky/Roz%C5%A1%C3%ADren%C3%A1verziaPHSRKSK.aspx

PESD Prešov self-governing region. (2008). [online]. [cit.2015-12-04]. Available: http://www.po-kraj.sk/sk/dokumenty/rozvojove-dokumenty-psk.html?actualDir=/files/dokumenty/Rozvojove-dokumenty-PSK/PHSR-PSK-2008-az-2015.

Štefko, R.; Habanik, J.; Šindleryova - Butoracova, I. (2010). Marketing Instrumentary in the Process of Project Acceptation within the Acceleration of Back-warded Regions Development. *Ekonomicky časopis*, vol. 58, iss. 5, pp. 512-526.

Śtefko, R., Lajcin, D., Frankovský, M. (2012). Possibilities of Predicting the Behavior of Managers When Coping with Demanding Situations in Managerial Work. *Ekonomicky časopis*, vol. 60, iss. 8, pp. 835-853.

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# 20. ECONOMIC PERFORMANCE OF VISEGRAD GROUP COUNTRIES ASSESSED BY THE GDP INDICATOR AND PROSPERITY INDEX

Abstract: Competitiveness of the economy has become an important category in the global political economy theory as associated with the international division of labor intensification process, which got a new dimension in the globalization process. The role of European Union economic policy, based on the implementation of its particular policies, is to increase its competitiveness in global economy environment. Therefore, the aim and the interests of the EU as an entity of global economy are to increase the competitiveness of EU members. Thus the paper will deal with the competitiveness analysis of the geopolitical regional association V-4 countries by means of tools such as GDP indicator and Index prosperity. Nonetheless the paper defines their extent of impact on the EU competitiveness enhancement as a single entity of global economy along with its linkage to social and economic development and job creation options in V-4countries.

Keywords: economic performance, European Union, Prosperity Index, international economic relations, social and economic development, V-4 countries

JEL Classification: E66, F43, F63

#### 1. Introduction

Gross Domestic Product (GDP) is considered an essential economic indicator because it best represents the performance of economy based on the production factors outcome located in national territory. This indicator best characterizes the processes occurring in the economy as well as its overall results (e.g. what is produced in the economy and was bought), and thus it affects all other macroeconomic variables (Krajnakova, Vojtovich, 2011). In monetary terms, it is the value of final goods and services produced in the territory of a country for a certain period (year), regardless of who owns the production factors that created it. It must be stressed that these are final products and services that have undergone official market. As the value of the gross domestic product is determined by several methods, by means of the GDP it is possible to find out important information about the value of final production, income economic actors, but also the expenditure of households, firms, and governments abroad (Mura et al., 2015).

Prosperity Index (PI) by the Legatum Institute of London is another of the indexes built on recent advances in the research of individuals' welfare. The given analysis is sometimes referred to as "economics of happiness (or the science of happiness)" and it is driven by advances in behavioral economics and positive psychology. The quantitative nature of the indicators used in this research enables to assess some "soft" quality of life aspects by means of "hard" statistical data such as inflation, unemployment, expenditure on research and development, the cost of starting a business, the number of internet servers and cell phones per capita, life expectancy etc.

Economic theory which reflects, describes and analyzes the economic reality is capturing the process of deepening division of labor at enterprise, national and international levels as well as

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associated international exchange processes (Mura, Buleca, 2012). These processes, in the broadest sense, are related to confrontation of economic actors at regional, national and global markets which is based on specialization and cooperation resulting from the division of labor. Brakman (2006) and Dicken (2007) argue that enterprises, economies or integration groups, if they want to compete on international markets, they must produce products or services that will stand in international comparison. These businesses, economies, integration groups, that are able to compete and generate increasing economic performance, what is the basis for their further GDP growth and development, are identified as competitive ones and are able to the higher prosperity for their inhabitants (Hamilton; Wepster, 2009; Dunning; Lundan, 2008).

The role of European Union economic policy, based on the implementation of its particular policies, is to increase its competitiveness in the global economy environment. Therefore, the aim and the interests of the EU as an entity of the global economy are to increase the competitiveness of all 28 members of the Union. Within the largest EU enlargement towards Central and Eastern Europe, the countries of Visegrad regional group (V-4) appear to be the most advanced and industrialized countries having entered the EU recently. As having been mentioned above, the paper will deal with the GDP and PI analysis of the geopolitical regional association V-4 countries and defining the extent of the impact on the competitiveness enhancement of the EU as a single entity of the global economy.

# 2. Theoretical background

Haviernikova (2014) argues that Gross domestic product is essential parameter prosperity of the economy, GDP growth is an indicator of economic development. The use of GDP to assess the economy performance has its advantages and disadvantages. Positive aspect appears to be the availability of statistical data necessary for its findings on national territory. Based on the state and development of the country's gross domestic product it can best evaluate the overall results of economic activity on its territory (Hošták, 2014). Another advantage of the GDP comes from the potential of international comparisons, since GDP performance reporting is used by most countries of the world. Because of a fair comparison among performances of different sized economies to international comparison the Gross Domestic Product per capita, expressed for example in USD, EUR, or Purchasing Power Parity (PPP) is being used (Larry, 2007).

On the other hand, not forgetting the fact that many economists do not consider GDP as perfect indicator, it does not reflect the well-being and living standards of state citizens. According to Lipkova (2012) it includes only production and services registered by official economy, although results of domestic work and gray and black economy often significantly affect increasing, respectively reducing the welfare of population. GDP also includes outputs which are not subject to purchase and sale (services of education, health, defense). Since these services are not executed on the market they do not have even their market prices however the costs of their provision are included in GDP (Haviernikova, 2012).

Other negative example is the fact that the cost of environmental damage and natural disasters removal are included in the prices of products and services what increases the GDP however the environmental pollution reduces the welfare of people (Fojtikova, 2014). The paradox is that the serious damage removal caused by natural disasters or wars can be a source of economic growth. Other lack of this indicator is that the price increasing as a reason of using of unnecessarily expensive materials or packages based just on esthetics causes the GDP growth although the utility value of those products may not be growing (Krajčo, 2014). On the contrary, in case of some products (e.g. electronics) their quality substantially increased but their prices despite were falling, so the quality increasing of those products does not contribute to the GDP growth.

We agree with the authors Vojtovič and Krajňáková (2013) that the GDP figures, the essence of which is to measure the final production, cannot be expected that it can measure and assess all the other aspects of life. Regarding more accurate and detailed assessment of society performance and well-being it is therefore appropriate to use a combination of several indicators that take into account other aspects of society functioning (Spankova, Grencikova, 2014). Professional literature also contains alternative indicators how to measure economic performance such as: net economic prosperity, true economic development, human development index, index of human suffering, economic freedom index, prosperity index, global competitiveness index and others.

Prosperity index is presented by Legatum Institute, an independent organization based in London. It is compiled on the basis of traditional economic indicators, but also takes into account the

satisfaction of population feeling. The index is based on eight criteria (areas): Economics, Business and opportunities, Government, Education, Health, Safety, Personal freedom, Social capital. Each subindex is further subdivided into 89 sub-variables. Prosperity Index has been published since 2009. At the beginning 110 countries were included in the assessment and according to the index results they were divided into three groups: high (30 states), medium (50 states) and low development (30 states). In 2014 the organization evaluated 142 countries and they were divided into 4 groups: high (30 states), higher medium (41 states), lower medium (41 states), low development (30 states).

# 3. Methodology

This paper will discuss how and in what way the competitiveness can affect the V-4 business environment in terms of further EU economy social and economic development. Thus the main goal is to figure out how to assure sustainable economic growth in the V-4 economies and enhance the EU competitiveness within the world economy triad in international economics system environment. The main question is if the higher competitiveness of V-4 countries can enhance the overall EU competitiveness and to what measure. The research task is focused on the analysis of the problematic aspects competitiveness analysis of V-4 geopolitical and regional association countries and defining the extent of the impact on the EU competitiveness increasing as a global economy subject in conditions of international economic environment affected by the global economic recession. The research will be focused on exploring of the particular V-4 economies' operating area in the European economics system as well as the macroeconomic characteristics development analyses of the Czech, Hungarian, Polish and Slovakian economy. To execute this task the analysis of Gross Domestic Product and Prosperity index will be used.

Basic data will be drawn from generally accepted institutions, evaluating the competitiveness effectiveness of economies such as Word Economic Forum (WEF) and Legatum Institute London. Annually published news on competitiveness by organizations like World Economic Forum and the Legatum Institute has achieved high acceptance from the governments of countries being evaluated as well as businesses, and therefore they are considered as authoritative ones.

Ways of synthetic and analytic methods will be used in this paper. The methods of information analysis, comparative analysis, statistical methods and indexes, analysis of data and facts from scientific and professional publications, periodical and no periodical press as well as internet sides will be primarily used and examined. Subsequently the analysis will lead to synthesis and prognosis by means of abstraction method eliminating the less important factors in order to set general statements and opinions.

#### 4. Findings

Regarding the V-4 countries Prosperity index analysis in the following years Slovak Republic after a slight improvement of its position in 2011 made its position worse in 2014, and dropped to 38th place. Needless to say that the ranking of countries was affected by the fact that in 2012 32 new states were included into the evaluation three of which (Luxembourg, Malta and Cyprus) were ranked in front of Slovakia. Slightly the ranking of other V-4 states was getting worse as well. Czech Republic appears to be the most successful among the V-4 countries in terms of Prosperity Index, while the worst results are achieved by Hungary. As the order of V-4 countries in the Prosperity index evaluation was also affected by the number of countries being evaluated, the V-4 countries PI values development is shown in Figure 4.

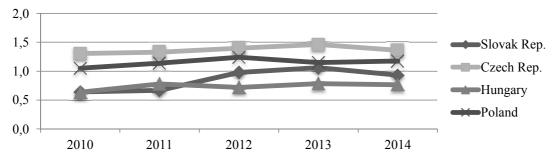


Figure 1. V-4 countries' Index prosperity development

Source: Own work, based on the Legatum Institute, 2015

Throughout the reporting period, Czech Republic has scored the best results among the V-4 countries, the, the highest index value recorded in 2013 (1,461). Poland is at second place with the most favorable position in 2012 (1.24). Slovak Republic was, with the exception of 2010, at third place, its Prosperity Index was improved in 2012 and 2013 (1,461), however in 2014 the level of PI fell to 0,931. The PI value of Hungary ranges below 0.8. Results of V-4 countries achieved in 2014 will be examined in more detail under each sub-indexes (Figure 2).

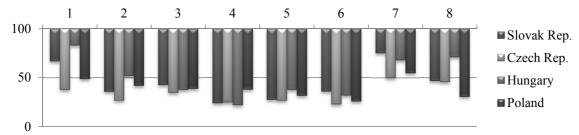


Figure 2. Comparison of the V-4 countries success in particular areas of Prosperity Index (2014)

Notes

1: Economy 2: Business and opportunities 3: Government and State 4: Education 5: Health care

6: Security 7: Personal freedom 8: Social capital

Source: Own work based on the Legatum Institute, 2015

As it is seen in Figure 2, Czech Republic achieves the best results in six sub-indexes. Poland is the most successful in one sub-index (social capital) as well as in Hungary (education). Slovakia has not been evaluated as the best in any of the areas generally the best results can be noticed in the fields of education and health, while personal freedom and economy are the least successful areas for Slovakia. It is interesting to note the very low ratings of Hungary in the economic, social capital and personal freedom areas.

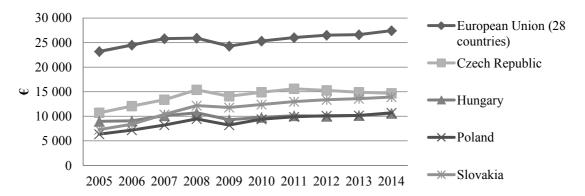


Figure 3. GDP per capita (EURO, current prices)

Source: Own work, based on Word Economic Forum, 2015

Graphic shows the evolution of GDP per capita in the V4 countries. It shows the annual growth, except in 2009, when Slovak Republic, Czech Republic and Hungary demonstrated economic crisis decline in GDP per capita. Throughout the reporting period, the highest GDP per capita was reached by Czech Republic, in 2005 almost 15500 USD in 2014 more than 27000 USD, an increase of more than 75%.

According to the WEF data in the years of 2000-2006 the second highest GDP per capita was in Hungary, but in 2007 before Hungary and Slovakia was in 2010 and Poland. In Hungary, GDP per capita increased from 12039 USD in 2005 to 20065 USD in 2014, t. j. by 67%. While in 2005 GDP per capita reached 77.79% Hungary's GDP per capita in Czech Republic, in 2014 this figure was only 73.77%. During the reporting period, the biggest increase in GDP per capita was in Slovakia, from 11308 USD to 24605 USD in 2014, 117%. The share of GDP per capita in Slovakia at the level of GDP per capita of Czech Republic increased from 73,06% in 2005 to 90.46% in 2014. In Poland we can see a positive development of GDP per capita in each year during the period, up from 10,378 USD

in 2005 to 21214 USD in 2014, representing an increase of 105%. The share of GDP per capita in Poland at the level of GDP per capita of Czech Republic increased from 67,05% in 2005 to 77.99% in 2014 (UNDP, 2015); IMF, (2015); The heritage foundation. 2015).

#### 5. Conclusion

The task of the European Union economic policy rising from its policies implementation is to increase its competitiveness in the environment of global economy. Therefore, the intention and the interest of the EU as an entity of the global economy is to increase the competitiveness of Union's 28 members. As part of the biggest EU enlargement to the countries of Central and Eastern European countries the Visegrad region (V-4) appears to be industrially the most developed of new States. Based on the having been mentioned above, the paper dealt with the comparative analysis of the GDP and PI indexes development regarding the competitiveness of geopolitical regional association of V-4 countries followed by determining the degree of influence on improving the economic performance of the EU as a whole entity in the global economy.

Scandinavian countries dominate in countries ranking according to the Legatum Institute, where most prosperous are Norwegians. From all regions of the world citizens of the European Union appear to be with the best live conditions, because in the top twenty from all of the countries of the world there are ten EU member states. However, there is a clear difference between Western and Eastern Europe, where the original member countries achieve greater prosperity than new members. The main difference is in governance. While Western Europe in most cases has the benefits of good governance, Central and Eastern Europe struggles with poor public administration, which prevents the sub-region to be prosperous.

Eastern European countries have much in common in what helps them to be prosperous, but also they have lots of challenges they have to face to. Generally, the new member countries have usually weaker governance and social capital, but there are signs of hope: countries with lower overall results were rated quite high in health, education and security. Those three areas could represent the most important asset of transitive countries of Eastern and central Europe.

From the European Union countries the Danes and Finns are doing the best, who occupied second and third place. Conversely, the lowest prosperity is in Romania, Bulgaria, the Baltic countries, as well as Greece. It can be observed the lagging of so called PIGS (Portugal, Italy, Greece and Spain) behind in other Western countries. Even in the EU, the rich are on average healthier and live longer. The unemployed will spend in a year in hospital twice longer than the workers. European receiving above-average wages feel physically fine of 60%, while the under-average wage from less than 40%. From the post-communist countries do better than the Czech Republic is only Slovenia. It means the Czech Republic is the leading V-4 country based on the GDP and PI analysis.

#### References

Brakman, S. Garretsen, H., Marrewijk, Ch. V., Witteloostuijn, A. V. (2006). *Nations and firms in the global economy - an introduction to international economics and business*. Cambridge: Cambridge University Press, 2006.

Dicken, P. (2007). Global Shift. 5th edition. London: SAGE Publications Ltd., 2007.

Dunning, J. H., Lundan, S.M. (2008). *Multinational Enterprises and the Global Economy*. 2nd edition. Cheltenham: Edward Elgar, UK. 2008.

Fojtikova, L. (2014). Foreign Trade of the Czech Republic after Ten Years of Membership in the European Union. In: *Proceedings of the 2nd international conference on European integration 2014 (ICEI 2014).* pp. 127-137.

Hamilton, L., Wepster, Ph. (2009). The International Business Environment. New York: Oxford University Press. 2009.

Haviernikova, K. (2012). Selected aspects of clusters initiatives in the field of industry in the slovak republic. *21st International conference on metallurgy and materials (METAL 2012)*. Brno:TANGER; VSB - TU OSTRAVA; ASM Int; Czech Soc New Mat & Technologies (CSNMT), pp. 1838-1845.

Havierniková, K. (2014). Convergence of the Slovak Republic regions. In *Proceedings of the 2nd international conference on European integration 2014*. Ostrava, VŠB, 2014, pp. 228-235.

Hošták, P. (2014). Benchmarks for the efficient design of a performance pricing grid in debt contracts In: *SGEM conference on political sciences law, finance economics & tourism: Conference proceedings volume II Finance*. Sofia: STEF92 Technology, pp. 81-92.

IMF. (2015). *Gross domestic product based on purchasing-power-parity per capita GDP*. International Monetary Fund, World Economic Outlook Database, April 2014. [cit. 2015-12-17]. Available:

http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/weorept.aspx?sy=2000&ey=2013&scsm=1&ssd=1&sort=subject &ds=%2C&br=1&c=964%2C935%2C936%2C944&s=NGDP\_RPCH%2CPPPPC&grp=0&a=&pr1.x=47&pr1.y=16.

Krajčo, K. (2014). Performance of the EU economy and V4 countries measured by selected indicators in the context of labor market. In: *SGEM conference on political sciences law, finance economics & tourism : Conference proceedings volume IV. Economic & tourism*. Sofia: STEF92 Technology, pp. 539-546.

Krajnakova, E., Vojtovich, S. (2011). Development of Science and Education Among the Priorities of State. In: 8th International Conference on Efficiency and Responsibility in Education. Prague: CZU, pp. 143-147.

Larry, N. (2007). The Economics of Europe and the European Union. Cambridge: Cambridge University Press, 2007.

Legatum institute. (2015). *The Legatum Prosperity Index*. London: Legatum Institute. [online]. [cit. 2015-12-17]. Available: http://www.prosperity.com.

Lipkova, L. (2012). Innovation Policy of the European Union. In: *Proceedings of the 1st international conference on European integration 2012, ICEI 2012*. Ostrava: VŠB. pp. 171-178.

Muray, L., Buleca, J. (2012). Evaluation of Financing Possibilities of Small and Medium Industrial Enterprises. *Procedia Economics and Finance*, no 3, pp. 217-222.

Muray, L., Buleca, J., Hajduová, Z., Andrejkovič, M. (2015). Quantitative Financial Analysis of Small and Medium Food Enterprises in a Developing Country. *Transformation in Business & Economics*, vol. 14, no 1 (34), pp. 212-224.

Spankova, J., Grencikova, A. (2014). Remuneration and motivation of employees in transport undertakings. In: *SGEM conference on political sciences law, finance economics & tourism: Conference proceedings volume III Economics & Tourism.* Sofia: STEF92 Technology, pp. 495-502.

The Heritage Foundation. (2015). *Index ekonomickej slobody*. [online]. [cit. 2015-12-17]. Available: http://www.heritage.org/index/.

UNDP. (2015). *Human Development Report 2014*. [online]. [cit. 2015-12-17]. Available: http://hdr.undp.org/sites/default/files/reports/263/hdr\_2002\_en\_complete.pdf.

Vojtovic, S., Krajňakova, E. (2013). Trends in Economic Growth and Unemployment in Slovakia. In: *International Conference on Education, Management (ICEMSS-13)*, Publisher: Paris: Atlantis Press, pp. 188-191.

World Economic Forum. (2015). *The Global Competitiveness Report 2013–2014*. Geneva: WEF, 2013. [online]. [cit. 2015-12-17]. Available: http://www.weforum.org/reports.

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# 21. COMPOSITE INDICATOR AS A TOOL FOR ASSESSMENT OF REGIONAL CONVERGENCE

**Abstract:** Identification, measurement, analysing, examination at the time and comparison of regional disparities are important factors in the search for solutions to perceived regional differences. Difficulties in implementing the policy of regional convergence raise a number of issues related to the proper selection of tools and guidance for further regional development. Currently, we described a number of approaches to research and characteristic of regional disparities. Spectrum of used methods of measurement regional disparities, especially social and economic inequalities, is extensive. In this paper a complex statistical model is applied to assess disparities among the regions of the Slovak Republic. By constructing composite indicator, interregional disparities are identified by econometric analysis of real convergence.

Keywords: convergence, composite indicator, regional disparities

JEL Classification: C34, C52, R23

## 1. Introduction

For resolving perceived disparities between regions as the decisive factor seems to be the correct identification and measurement of regional disparities. Regional disparities (RD) are characterized by a wide range of phenomena and processes that can be identified, structured, measured and evaluated.

Evaluation of RD is diverse, bearing in mind the aim pursued, the choice of method and its proper application, as well as the selection of indicators to measure them. So the key task of examining regional disparities is the correct selection of indicators, the method of integration into a single indicator and the correct interpretation of the results (Michálek, 2013).

The paper focuses on the application of one of the possible models of systematic identification of regional disparities. The theoretical basis for processing this paper served several scientific articles of Slovak and foreign experts who are dedicated to the issue of RD.

## 2. Theoretical background of the concept of regional disparities

The indicator can be considered as a special subset of the statistical results. A general definition of the concept, which would be applicable in all areas of official statistics, does not exist. There are several approaches to this definition. By the first approach the indicator is characterized as a combination of statistical results using a defined algorithm in the form of derived measurements. The second principle uses normative interpretation with the possibility of determining categories. The third principle involves mainly social statistics such as health, education, quality of work. In this sense, indicator includes something wider than is actually measured. The fourth approach is engaged in synthetic indicators. They are formed by combining of individual indicators, while using different methods "weighting" of each group.

The indicator is a statistical tool that monitors the nature and level of phenomena and processes monitor their development, changes and trends. This results in certain properties of the indicator:

- significant, relevant, understandable,
- transparent,
- analytical,
- complete,

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- credible,
- internally comparable,
- externally comparable,
- intertemporal (Michálek, 2013).

# 2.1. Selection of appropriate indicators

Those requirements must be respected in selection of appropriate indicators. The number of indicators should not be not even small (distorted the real situation) or too large (loss of clarity and transparency of interpretation). Indicators need to be regularly measured and officially published. We can mention some institutions (OECD, Eurostat, Statistical Office of the Slovak Republic), documents (National Strategy of Regional Development, Europe 2020) and authors (Kutcherauer et al., 2010) that are scientifically engaged in selection of appropriate indicators.

Kutcherauer et al. (2010) designed the system of monitoring and evaluation of RD in the Czech Republic, which includes 13 problem areas, 46 descriptors and then resulting 165 indicators. Matlovič and Matlovičová, in their analysis of RD in Slovakia, used 12 indicators which assigned the same weight. In another article authors assessed the RD through indicators that are based on the Europe 2020 strategy.

## 2.2. Selection of observational units

The selection of the appropriate breakdowns observational units is also not clear. Demarcation of regions due to statistical reporting is not appropriate in terms of the characteristics of the region. For observation of the RD, it is recommended to divide into districts or functional regions (Sloboda, 2006). For this kind of division, some important indicators are not available.

In the present article the statistical NUTS 3 regions are selected for observational units.

# 2.3. Selection of method of analysis RD

Sufficient knowledge and orientation into a wide range of published methods of analysis RD is condition to obtaining the relevant data. There are many used indices that mathematically describe adequately the RD, especially from the socio - economic aspects. The choice of method depends mainly on the pursued aim, observed processes and the claims of statistically processed inputs. Methods, tools and rates (indices and indicators) of RD can be classified according to different aspects. According to the mathematical demands for simple and complex multivariate statistical methods, according to time for static and dynamic, by power of notice to the deterministic and stochastic, factually to simple and integrated, from the aspect of development of the assessment to convergent and divergent. Most authors use, while examining RD, combination of several methods.

Michálek (2013) defined basic concepts, approaches and methods of measurement of RD and divided them as follows:

- indirect methods (scaling techniques, methods of traffic lights, spot method),
- the direct comparative methods (methods of static or dynamic interregional comparison),
- simple statistical methods (methods of spatial polarization, the coefficient of variation),
- degree of spatial concentration (concentration ratios, localization quotient, the Gini coefficient, Lorentz curve),
- indices of entropy (rate of entropy, Theil index, Hoover index),
- complex statistical models (regression models, correlation analysis, PCA analysis, factor analysis,
   Cronbach alpha coefficient, cluster analysis, the method of distance from the fictive object, time series analysis),
- statistical and descriptive aggregated methods and indicators (aggregation techniques, methods of marginal efficiency, distance criterion from the aim, expert judgment),
- new methods and tools (neural networks method, method of real convergence, GIS).

# 2.4 Method of $\beta$ - convergence

Development of regional disparities can be compared by different methods. The question of convergence in the theories of regional development is devoted in "New theory of development". Under the convergence process we can imagine the reduction of disparities between multiple variables at a time up to the level when the difference converges to zero. The opposite of convergence is divergence. β-convergence is concepts that less developed regions are growing faster than developed

regions. The objective of research is the only state in the beginning and in the end of the reviewed period. This may be a particular disadvantage because information on developments remains unused.

Examination by non-linear regression equation:

$$\frac{1}{T}.\log\left(\frac{y_{i,t_0+T}}{y_{i,t_0}}\right) = a - \left(\frac{1 - e^{-\beta T}}{T}\right).\log(y_{i,t_0}) + u_{i,t_0,t_0+T},\tag{1}$$

where  $y_{i,t_0}\left(y_{i,t_0+T}\right)$  is value of analysed indicator in time  $t_0$ ,  $(t_0+T)$ ,  $\beta$  is rate of convergence,  $u_{i,t_0,t_0+T}$  is the random component between years  $t_0$  and  $t_0+T$ . By value of directive of the line  $\beta$ : if  $\beta < 0$  is trend of convergence, if  $\beta > 0$  is trend of divergence, of  $\beta \cong 0$  no trend manifests.

Expression as a percentage the value of coefficient of determination:

$$r^2 = \frac{var \log \bar{k}'}{var \log \bar{k}'},\tag{2}$$

where  $\bar{k}$  is the average rate of growth of reference indicator. If the coefficient of determination closes to 100 % a tendency (convergence or divergence) is considered to be significant. Otherwise it is considered irrelevant (Minařík, 2013). It is appropriate to supplement method of  $\beta$ -convergence by the method of  $\sigma$ -convergence.

# 3. Methodology of research RD using composite indicator

Indicators describing the RD can be divided into simple and composite (integrated, aggregated). Simple indicators are the lowest level of assessment of RD. The problem may be the correct choice and estimate range. According to some authors, it is recommended to evaluate 10 to 15 indicators. According to Kutcherauer (2010), the social sphere is characterized by the fourth distinctive level by 38 indicators, economic sphere by 78 and environmental by 49. Selection of appropriate indicators is described in detail, for example, by Michálek (2013). The document National Strategy of Regional Development of the Slovak Republic specifies group of indicators by which to be judged the RD of Slovakia. Database of values of these indicators is available on the official website of the relevant municipal bodies. These data do not always have the minimum requirements for statistical processing and deeper analysis.

In practice, there is a logical need for an integrated view on the discussed problem. This is related to structure of composite indicator. Detailed methodology and process was published by OECD in 2008.

Composite indicators (CI) show a higher level of identification and interpretation RD. The OECD document describes the main pros and cons of using composite indicators. CI which compare regional disparities are recognized as a useful tool in regional policy. The literature is described a large number of CI. There provides simply comparisons or regions that can be used to illustrate complex problems in wide-ranging fields, e. g. economy, social and environment.

# Mathematical model of CI

Composite indicator is much like mathematical or computational model. In the next section will next be using the following convention:

 $x_{q,r}^t$ : raw value of individual indicator q for region r at time t, with q=1,...,16 and r=1,...,7.

 $I_{q,r}^t$ : normalised value of individual indicator q for region r at time t.

 $RDI_r^t$ : CI value of regional disparities index for region r at time t.

When constructing composite indicator is recommended next few steps:

- 1. Developing a theoretical framework for the selection and combination of individual indicators
- 2. Imputation of missing data
- 3. Multivariate analysis
- 4. Normalisation
- 5. Weighting and aggregation
- 6. Uncertainty and sensitivity analysis
- 7. Links to other indicators
- 8. Visualisation of the results

# 4. Construction of composite indicator of regional disparities (RDI)

This section provides the results of the research. To construct the composite indicator of regional disparities (further referred to as *RDI* - Regional disparities index) were selected indicators published by the Statistical Office of Slovakia for the period 2002-2012. This period in terms of completeness of sets of data seemed most appropriate.

#### 4.1 Theoretical framework and data selection

Regional disparities index (*RDI*) focuses on three dimensions of quality life. In the next table are examined individual indicators of our Composite indicator of regional disparities. *RDI* highly simplified manner, characterizes the quality of life in the region.

Table 1. Table indicators analysed

Indicator	Unit	Scope indicator	Label				
Economic	affairs						
Regional gross domestic product per capita	Euro	positive	x <sup>t</sup> <sub>1,r</sub>				
Ratio of firms with 250 or more employees to total employees		positive	x <sup>t</sup> <sub>2,r</sub>				
Gross value added	mil. Euro	positive	x <sub>3,r</sub>				
Gross fixed capital formation	mil. Euro	positive	x <sup>t</sup> <sub>4,r</sub>				
Registered unemployment rate	%	positive	X <sup>t</sup> <sub>5,r</sub>				
Foreign Direct Investment	th. Euro	positive	x <sub>6,r</sub>				
Social af	fairs						
Population age structure	num.of children to100 seniors	positive	x <sup>t</sup> <sub>7,r</sub>				
Revenues of health insurance from Premium collection	th. Euro	positive	x <sub>8,r</sub>				
Social facilities		positive	x <sup>t</sup> <sub>9,r</sub>				
Health facilities		positive	x <sup>t</sup> <sub>10,r</sub>				
Completed dwellings		positive	x <sup>t</sup> <sub>11,r</sub>				
Average disposable equalised household income	Euro/month	positive	x <sup>t</sup> <sub>12,r</sub>				
Average nominal monthly earning of employee	Euro	positive	x <sup>t</sup> <sub>13,r</sub>				
	Environmental affairs						
Air Emissions Accounts	t	negative	xt <sub>14,r</sub>				
Quantity of municipal waste	t	negative	x <sub>15,r</sub>				
Length of roads (motorways)	km	positive	x <sub>16,r</sub>				

Source: Own work

The analyzed regions have the following label: Region of Bratislava – BA, Trnava – TT, Trenčín – TN, Nitra – NR, Žilina – ZA, Banská Bystrica – BB, Prešov – PO, Košice – KE. For example value of indicator registered unemployment rate of Trenčín region in 2010 is registered  $x_{5,TN}^{2010} = 9,51 \%$ .

# 4.2 Imputation of missing data

In the literature, one can find a number of methods for analysing missing data. Simpler and more complex. Imputations are means or draws from a predictive distribution of missing values. Data were modelled explicitly by regression imputation.

Suppose a set of h-l < Q fully observed indicators  $x_i, ..., x_{h-l}$ . Individual indicator  $x_h$  observed for r regions, but missing for the remaining m-r region. Regression imputation computes the regression of  $x_h$  on  $(x_i, ..., x_{h-l})$  using r complete observations, and impute the missing values as a prediction from the regression:

$$\hat{x}_{ih} = \hat{\beta}_0 + \sum_{j=1}^{h-l} \hat{\beta}_j x_{ij}, \quad i = 1, \dots, m - r.$$
(3)

Missing data were calculated by the method stepwise regression as in the case of indicator Foreign Direct Investment.

# 4.3 Multivariate analysis

When constructing a composite indicator are used multivariate data analysis techniques. By Principal component analysis method is the reduced number of indicators. PCA method based on the correlation matrix of indicators.

Table 2. Correlation matrix of indicators

	r>= -1	-0.80	-0.60	-0.40	-0.20	0 0.	20 0	40 0.	60 0	.80 1						
Indicators	x1 <sup>2002</sup>	x2 <sup>2002</sup>	x3 <sup>2002</sup>	x4 <sup>2002</sup>	x5 <sup>2002</sup>	x6 <sup>2002</sup>	x7 <sup>2002</sup>	x8 <sup>2002</sup>	x9 <sup>2002</sup>	x10 <sup>2002</sup>	x11 <sup>2002</sup>	x12 <sup>2002</sup>	x13 <sup>2002</sup>	x14 <sup>2002</sup>	x15 <sup>2002</sup>	x16 <sup>2002</sup>
x1 <sup>2002</sup>	1,00															
x2 <sup>2002</sup>	-0,54	1,00														
x3 <sup>2002</sup>	0,98	-0,57	1,00													
x4 <sup>2002</sup>	0,97	-0,51	0,99	1,00												
x5 <sup>2002</sup>	-0,73		-0,61	-0,65	1,00											
x6 <sup>2002</sup>	0,89	-0,65	0,95	0,94	-0,47	1,00										
x7 <sup>2002</sup>	-0,60		-0,50	-0,48	0,54	-0,29	1,00									
x8 <sup>2002</sup>	0,96	-0,59	1,00	0,99	-0,58	0,96	-0,43	1,00								
x9 <sup>2002</sup>	0,22		0,26	0,28			0,07	0,29	1,00							
x10 <sup>2002</sup>	0,07	-0,28	0,28	0,28	0,40	0,46	0,44	0,34	0,28	1,00						
x11 <sup>2002</sup>	0,50	-0,50	0,47	0,47	-0,59	0,41		0,50			1,00					
x12 <sup>2002</sup>	0,95	-0,59	0,99	0,98	-0,56	0,98	-0,45	0,99		0,33	0,39	1,00				
x13 <sup>2002</sup>	0,98	-0,60	0,98	0,97	-0,69	0,94	-0,50	0,98			0,53	0,97	1,00			
x14 <sup>2002</sup>	-0,17			-0,07	0,42	0,25	0,34		-0,46	0,55	-0,42			1,00		
x15 <sup>2002</sup>	0,69	-0,51	0,67	0,63	-0,51	0,53	-0,49	0,68	0,22	-0,05	0,68	0,59	0,71	-0,44	1,00	
x16 <sup>2002</sup>	-0,83	0,34	-0,76	-0,78	0,92	-0,70	0,52	-0,74	0,26	0,14	-0,58	-0,74	-0,83	0,12	-0,58	1,00

Source: Own calculation

In our case, we have not made reduction indicators.

## 4.4 Normalisation of data

Normalisation is required prior to any data aggregation as the indicators in a data set often have different measurement units. Standardization of methods, for example: Ranking, Standardisation, Min-Max, Distance to a reference country, Categorical scales, Indicator above or below the mean, cyclical indicators, Balance of opinions. Method Min-Max normalises indicators to have an identical range (0; 1) by substracting the minimum (maximum) value and dividin by the range of the indicator values.

$$I_{q,r}^{t} = \frac{x_{q,r}^{t} - min_{r}(x_{q}^{t})}{max_{r}(x_{q}^{t}) - min_{r}(x_{q}^{t})},$$
(4)

in case of positive scope of indicator. In case of negative scope, the standardization is performed according to the formula:

$$I_{q,r}^{t} = \frac{\max_{r}(x_{q}^{t}) - x_{q,r}^{t}}{\max_{r}(x_{q}^{t}) - \min_{r}(x_{q}^{t})}.$$
 (5)

The selected method is not very suitable in the case of extreme values . In our case, it may be the value of the indicators in the region Bratislava.

# 4.5 Weighting and aggregation

Weights can have a significant effect on the overall composite indicator and region rankings. Some methods are derived from statistical methods, such as factor analysis, data envelopment analysis and unobserved components models. The simple methods include the use of rating scales or paired comparison matrix. In our case, we assigned the same weight to indicators.

For calculating the composite indicator was used simple Additive aggregation method. This method was applied in the calculation of the index of development potential. *RDI* was expressed by the general relationship:

$$RDI_r^t = \frac{\sum_{i=1}^{n} l_{q,r}^t}{\sum_{i=1}^{n} \sum_{j=1}^{m} l_{q,r}^t}$$
 (6)

In case the composite indicator  $RDI_r^t$  is equal to 1, this region is evaluated as average. Above the average is the region with  $RDI_r^t > 1$ . If  $RDI_r^t < 1$ , the region is rated as below average. The following chart shows the values of composite marker  $RDI_r^{2002}$  and  $RDI_r^{2012}$ .

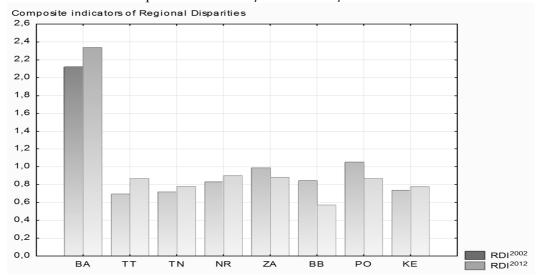


Figure 1. Composite indicators of regional disparities of Slovak regions in 2002-2012

Source: Own calculation

The graph shows that RDI has increased in that period in most regions. It decreased in the regions ZA, BB and PO. The region BB significantly decreased from 0.85 to 0.57. This can be regarded as a negative phenomenon.

# 5. Comparison of trends in the regions using composite indicator

Development of regional disparities in Slovakia was compared using the method of  $\beta$  –convergence. For the base year we selected year 2002. The comparison was after 10 years, so in 2012. In the first plot, Bratislava is included in the analysis; in second is convergence of regions without Bratislava.

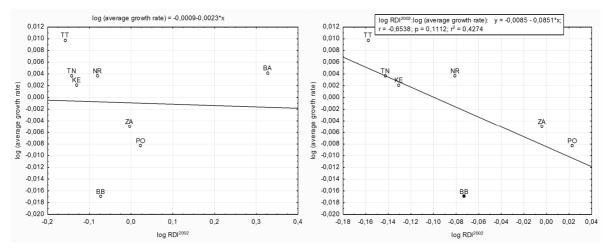


Figure 2. Graphical representation of convergence regions

Source: Own calculation

From the results of the analysis we cannot say if it is convergent or divergent process. To assessment the convergence of other regions, Bratislava region has been omitted.

During the monitored period in a set of seven regions, the convergence prevailed. The directive of the regression line is negative. The coefficient of determination is 42.74 %. We cannot therefore speak of the marked tendency towards convergence regions. In case the results of analysis are little evident, the analysis of correlation plot should be used.

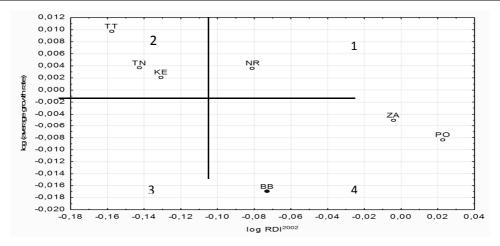


Figure 3. Analysis of correlation plot

Source: Own calculation

The plot area is divided into four quadrants. In the first quadrant, the units have above-average initial value and above-average growth rate. If there is no BA region, here is no value of RDI region. In the second quadrant there are regions with below-average initial value and above average growth rates. These are regions TT, TN, KE and NR. In the third quadrant the region BB is within. Below average initial value of  $RDI_{BB}^{2002}$  is combined with below-average growth rate RDI. Region tends to lag behind other units. In the fourth quadrant there are regions of ZA and PO. They are above-average initial value RDI and below-average growth rate.

#### 6. Conclusion

The article has briefly described the model of construction of the composite indicator. This model is based on the OECD document published in 2008. The composite indicator was designed to assess the evolution of regional disparities in Slovakia's regions. The starting point was indicators of social, economic and environmental field. For the analysis, 16 indicators were selected. Indicator values are officially published by the Statistical Office of the Slovak Republic and easily define quality of life in the region. As observed statistical units, we decided the regions of level NUTS 3. The reporting period was 2002-2012.

From the initial results it is clear that not all regions are increased quality of life during observed period. Significantly reduced in the region of Banská Bystrica. *RDI* value decreases from 0,85 to 0,57. This represents a decrease of 32,94 %. By contrast, in the region of Bratislava, the increase of *RDI* was about 10,38%.

In the case of convergence of regions at the time in terms of the composite indicator *RDI* we cannot speak about any marked tendency.

To achieve relevant results, it is necessary to carry out the analysis of regional disparities as well as other methods. It should also be realized expert detailed qualitative analysis included indicators. The article was conceived as a model for assessing quality of life in regions through the composite indicator.

# Acknowledgements

This paper was created in the frame of the project IGS1/2015 "The evaluation of the cluster potential in the regional development with a focus on the creation of cluster initiative in Trenčín region".

#### References

Barro, R. J., Sala-i-Martin, X. (1990). *Economic Growth and Convergence across the United States*. Working Paper No 3419. Cambridge: NBER Working Paper Series.

Checchi, D., Peragine, V. (2005). Regional Disparities and Inequality of Opportunity: The Case of Italy. IZA Discussion Paper No. 1874, 2005.

Ezzura, R., Pascual, P. (2008). Fiscal decentralization and regional disparities: evidence from several European Union countries. *Environment and Planning A*, vol. 40, no 5, pp.1185-1201.

Habánik, J. et al. (2014). Regionálna ekonomika a regionálny rozvoj. Trenčín: FSEV TnUAD, 2014.

Kutscherauer, A. et al. (2010). Regional disparities in regional development of the Czech Republic. Disparities in country regional development - concept, theory, identification and assessment [online]. [cit.2015-11-30]. Available: http://disparity.vsb.cz/edice\_cd/cd11\_regdis\_mono\_angl/pdf/Regional%20disparities.pdf.

Matlovič, R., Matlovičová K. (2011). Regionálne disparity a ich riešenie na Slovensku v rozličných kontextoch. Prešov: University of Prešov, 2011.

Michálek, A. (2013). *Vybrané metódy merania regionálnych disparít*. [online]. [cit. 2016-7-1]. Available: http://www.sav.sk/journals/uploads/12121204Michalek.pdf.

Minařík, B., Boruvková, J., Vystrčil, M. (2013). Analýzy v regionálním rozvoji. Příbram: Professional Publishing, 2013.

Niebuhr, A. (2006). Market access and regional disparities *The Annals of Regional Science*. Springer-Verlag, vol. 40, iss. 2, pp. 313-334.

Rodríguez-Pose, A., Ezcurra, R. (2009). Does decentralization matter for regional disparities? A cross-country analysis. *Journal of Economic Geography*. Oxford Univ Press, vol. 10, iss. 5, pp. 619-644.

Sloboda, D. (2006). *Slovensko a regionálne rozdiely* [online]. [cit. 2016-7-1]. Available: http://www3.ekf.tuke.sk/re/Disparity%2520a%2520perifernost/Regionalne%2520disparity/Slovens.

Vojtovich, S. (2013). The impact of Emigration on Unemployment in Slovakia. *Engineering Economics*, vol 24, no 3, pp. 207-216.

Fu, X. (2004). Limited linkages from growth engines and regional disparities in China. *Journal of Comparative Economics*, pp. 148–164.

*Handbook on Constructing Composite Indicators*. [online]. [cit. 2016-8-1]. Available: http://www.oecd.org/about/publishing/corrigenda.htm.

*Národná stratégia regionálneho rozvoja Slovenskej republiky*. [online]. [cit. 2016-7-1]. Available: http://www.mpsr.sk/mvrrfíles/003994a.pdf.

Sloboda, D. (2006). *Slovensko a regionálne rozdiely* [online]. [cit. 2016-7-1]. Available: http://www3.ekf.tuke.sk/re/Disparity/%2520a%2520perifernost/Regionalne%2520disparity/Slovens.

Štatistický úrad Slovenskej republiky (2015). *Databázy* [online]. [cit.2016-01-15]. Available: http://datacube.statistics.sk/TM1WebSK/TM1WebLogin.aspx.

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# 22. INFRASTRUCTURE DEVELOPMENT FOR INDUSTRIAL INNOVATIONS IN SELECTED REGION OF THE CZECH REPUBLIC

**Abstract:** The paper concerns infrastructure development for industry innovation creation and implementation in selected region of the Czech Republic. Industrial innovations should lead to a long-term economic development and competitiveness of enterprises and also the whole region. Their successful and open creation, implementation and management are dependent on business strategy and also on external environment, especially on infrastructure background and its development. The main aim of this paper is to identify the key features of political, economic, social, technological, ecological infrastructure supporting innovations, development and growth.

Keywords: innovation infrastructure, competitiveness of enterprises and region, industry innovations, factors of external infrastructure of innovations

**JEL Classification:** L52

#### 1. Introduction

The success of enterprises is strongly dependent on their market position. To be successful, they have to offer appropriate quality and prices of products and services to customers. But nowadays, due to intensive global influences, most of them are exposed to international competition caused mainly by advanced information technologies and technological progress. Due to these worldwide trends they have to flexibly launch innovations which can drive business activities to success and also considerably contribute to economic growth and socio-economic development of regions and states. But successful innovation process from invention to implementation is depended on effective research, technical, organizational, financial, business activities that must be appropriately managed. Actual economic situation requires necessity of innovation activities, flexible decisions and operation of enterprises according to their individual goals and economic incentives. But innovation efficiency of firms is also considered as the key factor of a long-term competitiveness of regions. Mainly the industrial innovations are inevitable for long-term economic growth with positive influence to social sphere, especially employment and increasing of skills. The prosperity of business is reflected also within regions and states, but not implicitly.

Innovations are depended not only on internal environment of a firm, but also on external conditions, this is why they are costly and connected with risk. Therefore enterprises are looking for a stable and convenient environment for their development projects. So, the innovation activities should be systematically supported mainly via building of infrastructure and systemic conditions by local, regional, national governments and international institutions. They are able to influence and activate external frameworks determining innovation activities and competitive advantage of firms. And it usually concerns all main political, economic, social, technological and ecological factors of external infrastructure.

The article concerns the area of infrastructure development for industry innovation creation and implementation in Liberec region of the Czech Republic. The main goal is to analyse and summarize the conditions for industrial innovations support driving to the successful development of competitive and effective industrial sector and contribute to increasing business performance. These analyses shall

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lead to finding the tools and ways to encourage innovations, research and development in selected economic branches. Due to a constantly changing and competitive environment, enterprises and also the whole states have to adapt to these global trends. The sustainable economic growth is increasingly related to the capacity of regional economies to innovate, transform and develop. For this purpose the European Commission allocates substantial amounts towards innovation in a wider sense – supporting appropriate infrastructure, areas and branches. It is reflected in cohesion programmes for a period of 2014-2020 that aim to smart specialization strategies for individual regions to mobilise the innovation potential of EU and national regions driving into long-term sustainable economic growth.

# 2. Innovations and their significance for economic and social development

Nowadays the national economies are open and interconnected, and it brings more intensive competition influences. Recent economic crisis caused a drop of economic and political efficiency in many countries. Many of them experienced a weakening in economic, social and industrial sphere; they did not then invest even in the basic infrastructure, and now it is reflected in their national and regional structural weaknesses and disability to use opportunities.

Pressure on resources, new technologies, knowledge and skills bring challenges for enterprises and whole states to meet requirements of a new economy demand (Nováková, 2011). Many emerging and also developed countries invest into research, industrial technologies and infrastructure to gain a competitive advantage on global markets. They can use systemic tools that are able to significantly influence intensity in which firms create, manage, develop and implement innovations.

# 2.1 Industrial innovations and their significance

Innovations act as essential drivers of competitiveness and economic dynamics. Schumpeter (1982) showed innovations as the basic impulse of economic change and viewed an occurrence of discontinuous change as the core of economic development which moves the economy from its static stage to the dynamic phase of fits and starts. Mainly technological innovations often lead to temporarily monopolies with competitive advantage. Other firms are motivated to innovate and improve their products, services and business processes too. In this phase Schumpeter highlighted the role of entrepreneurs and their ability to carry out new uses and combinations to be competitive and survive. He admits that innovation is a process of "industrial mutation" that incessantly revolutionizes the economic structure from within incessantly destroying the old one, incessantly creating the new one.

Schumpeter (1982) describes development as a long-term process of structural changes substantially driven by innovation. At the same time he emphasizes that successful innovation process is leading to real economic growth, investments and employment. Anyway, it inevitably depends on entrepreneur personality and ability to coordinate activities within invention, innovation, diffusion and imitation phases. The two latest phases lead to the real economic growth and development and they are most risky and expensive. That is the reason, Schumpeter points out the intelligence, alertness, energy and determination as essential characteristics of these, who are responsible for successful innovation process.

According to Ulwick (2005), the innovation is a process of creating a product or service solutions that delivers significant new customer value. According to Veber (2009), innovations are changes, that occur in real structures and that meet a requirement of novelty. They are connected with inventions that are results of natural human thinking activity about natural and social relations and their utilization to own development. According to Klas (2005), the innovation is a new technology, i. e. the systematic application of a new knowledge to new resources to produce new goods or new services. On the other hand, innovations are about responding to the change in a new, original way. They are about generating new ideas, conducting research and development, improving processes, revamping products or services (Brem, Wolfram, 2014).

According to Drucker (1980), innovation is a specific tool of entrepreneurship, the means by which firms exploit change as an opportunity for different business or different services. He emphasizes that innovations shall be attractive and beneficiary for managers to motivate them to realize innovation process successfully. He doesn't focus on the entrepreneurial psychology or traits, but on their actions and behavior. Entrepreneurs shall focus on systematic innovation which consists in the purposeful and organized search for changes, and in the systematic analysis of opportunities such changes might bring new value. Moreover, they have significant impact on the economy and society. Drucker (1980) stresses managerial visions shall be focused on strategic planning that considers threats and opportunities and

shall concentrate on the knowledge-based innovations. His view of their source is in a careful analysis of missing social, economic and perceptual factors, cooperation with scientists, focus on strategic position and market, practicing entrepreneurial management to reduce risk. It is inevitable to have an innovation plan and specific objectives to realize successful innovation process leading to the real growth of a business, a branch and whole economy on the national and regional level.

Nowadays, most states of the European States produce less than before the crisis in 2008 and most of their economic areas are improving slowly (e.g. unemployment rate, mainly for disadvantaged people and groups). The economic crisis and recession strongly influenced manufacturing area – the whole output in EU declined within 2008-2013 by 12 %. Anyway, it is one of the most important sectors that provide employment. In the Czech Republic the manufacturing output is now 35.5 %, the employment range is similar (34.8 %) (Eurostat Statistics Explained, 2016). These figures reflect the significance of this economic area for complex economic development and growth.

How to find proper ways leading to manufacturing sector development?

# 2.2. Infrastructure development for industrial innovations

On the international level there are many organizations supporting system attitude to innovations as all-society affairs. Innovation policy includes elements of research and development policy, technology policy, infrastructure policy and education policy. Innovation policy – or other kinds of public intervention – shall be a complement to the market, not replace or duplicate it. In most other kinds of public policy, the state does not use the market mechanism. Instead it complements or corrects the consequences of it. This is certainly the remarkable share of all public policy. Most public policy of this kind is selective, rather than general. It is selective in the sense that the consequences of it are not uniformly distributed between different activities. Politicians and policy-makers must, for example, allocate public research funds between fields of research (Dvoracek, 2003).

According to European Commission surveys, there are also many strengths within the European space. It has a talented workforce, a powerful technological and industrial base. There is an internal market and a single currency that have successfully helped it resist the worst. Social market economy was tried and tested. There should be a confidence in the ability to set a common agenda for future sustainable development and then gear efforts to deliver it. Firms normally do not innovate in isolation. They interact with other organizations and they do so within a context of institutional rules (Introduction to Innovation Collaboration Techniques, 2016).

The long-term innovative performance of firms in manufacturing, high-tech and science-based industries is strongly dependent upon the interactions of these firms with universities and research institutes. Therefore, settlement of an innovation system must be more than simply an enumeration of its elements. On the European level mainly the European Union and European Commission activates this field through continuous analysis, dialogue, actions and financial support and distribution to the appropriate fields of economic, social, technological, ecological and political sphere of life. It also cultivates relations among different subjects, considering complex features of future development. One among them is an entrepreneurial management. Thus, the force of entrepreneurs is always a strong base for future success in business, development and growth (Kessler, 2007).

# 3. Regional context of industrial innovations development and support

The empirical analyses concerned the analysis of external conditions for industrial innovations creation and implementation in a selected region of the Czech Republic. There are eight regions on the NUTS II level and in terms of GDP per capita, there are one of the largest disparities among regions in the Czech Republic. The 80 % of Europe's export accounts industry, 65 % private sector research and development comes from manufacturing (Klusacek, 2004). Thus, Czech government plays an important role in encouragement of firms to increase investing, research and innovation-related activities. In accordance with EU cohesion policy and recommendations of Innovation Regions in Europe it points the significance of regional infrastructure and system of relations among key players in innovations.

The main goal of this paper is to identify the key features of political, economic, social, technological, ecological infrastructure supporting innovations, development and growth. The study started with a literature review in order to highlight the importance of innovations for economic and social development. Than, method of primary and secondary data collection, data analysis, description and explanation, summary and prediction has been used in the article. The key information to know

the characteristics of a region according to the competitiveness pillars set by the cohesion analysis methodology of Ernst and Young. One of them is the infrastructure.

Within the analysis of statistical data according to this methodology key features of infrastructure were analyzed and described:

- transport infrastructure,
- network effectiveness,
- infrastructure network design,
- quality of life,
- innovations and business environment conditions (European Union, 2015).

When analyzing the business environment conditions, the political, economic, social, technological and ecological factors were considered (Table 1). Every factor was evaluated as an average from its 3 features that describe it in detail (on a scale from 1 the best value to 5 - the worst value).

Table 1. Factors of business environment of the Liberec Region and its evaluation

Factors of business environment	Factors evaluation based on efficiency
political	2.3
economic	2.7
social	3.0
technological	3.0
ecological	3.3
business environment conditions (av.)	2.9

Source: Own work

The political factors were evaluated according to the political stability in region (2), activity of regional governments in regional development support (3) and ability to create cooperation networks (2). The average value is: 2.3.

The economic factors were evaluated according to regional GDP per capita (3), gross value added (3), cohesion policy (2). The average value is: 2.7.

The social factors were evaluated according to rate of unemployment and new job opportunities (4), education (2), risk of social disabilities (3). The average value is: 3.0.

The technological factors were evaluated according to private investments to technology development (4), research and development (3), public and cooperative projects (2). The average value is: 3.0.

The ecological factors were evaluated according to pollution (3), environment (4) and energy (3). The analysis shows that the most stable is the regional government action towards innovation development, followed by economic level. The ecological factors have a weak evaluation in the Liberec region infrastructure of innovations and business environment (Regional Innovation Strategy of the Liberec Region, 2016).

The results show that the goals in the area of industrial innovation, traditional manufacturing innovation, social innovation, public procurement innovation and workplace innovation shall be set. The qualitative analysis of surveys and documents showed that much unique tangible and intangible results occurred in these branches within this region through ages. Another reason is the knowledge - knowledge of individuals, who are educated, skilled, experienced in an initial area, knowledge of managers who successfully led enterprises in the past and at present, who have the vision for the future - and also the culture and ability to common work and inventions (Deschamps, Nelson, 2014). Interaction and interdependence is one of the most important characteristics of the systemic innovation approach, where innovations are thought to be determined not only by the elements of the system but also by the relations between them. For example, the political, economic, social, technological and ecological.

Initiative entrepreneurship, ambition, ingenuity and innovations are important for success in business. Industrial innovations are result of research, technical, organizational, financial, business activities that together form an innovation process from invention to innovation implementation within industrial or social business environment. Then it comes an adoption of market that responses to a diffusion - reaction of customers decides about the success of an innovation. But there is also the structural and social dimension to consider when aiming to the long term sustainable development and economic growth (Dytrt, Stříteská, 2009).

Question is how many entrepreneurs are able to keep up with nowadays dynamic changes and operate their business appropriately? Historically and also nowadays the imbalances occur, especially in the economic and social sphere within states or regions. That is a reason for necessity of institutional interventions to relieve their impact and focus on appropriate direction of activities and changes leading to the future sustainable development of state or region (Ziółkowska, Ziółkowski, 2008).

That is the reason for interventions of regional and state governments, and even international institutions aiming to support and set the appropriate long-term infrastructure and support for active entrepreneurship and positive actions in every sphere of local, regional, national and even international development. Together with proper entrepreneurial activities and market power they contribute to positive sustainable development growth in economic sphere with positive impacts to economic, social sphere and quality of life. And it usually involves all four sectors – business, government, society and the household (Hajek, et al., 2014).

Firms also interact with non-firm organizations such as universities, research institutes, private foundations, financing organizations, schools, government agencies, and others that are connected with innovation process realization on market and its positive feedback. The infrastructure context within which enterprises interact is constituted by laws, social rules, cultural norms, routines, habits, technical standards, etc.

The infrastructure consists of rules, it shapes the behavior of firms and other organizations by constituting constraints and/or incentives for innovation. It is partially created by design, for example patent laws or (some) technical standards. Another part has evolved spontaneously over periods of time, such as various kinds of social rules or habits. Those designed by public agencies may serve as innovation tools. Through infrastructure the behavior of firms is also influenced by a social and cultural context in a wide sense.

These external conditions are often seen as specific to local, regional or national contexts, but they are also dynamic: their forms of operation change with political conditions, changing technological opportunities, economic integration processes, demographical and social context and so on (Pavlik, 2005).

#### 4. Conclusion

Seven years after the beginning of the financial crisis in 2008, its consequences are still being felt around the world - lower productivity growth and high unemployment, recent geopolitical affairs - have added to economic difficulties. At the heart of an economy's competitiveness is its capacity to grow. Creativity, ambition, ingenuity and innovations seems to be crucial factors for success in enterprise sector. Industrial innovations are result of activities in many areas: research, technical, organizational, financial, business. Together they create an innovation process from invention to innovation implementation within industrial or social business environment. Then it comes an adoption of market that responses to a diffusion - reaction of customers decides about the success of an innovation. But there is also the structural and social dimension to consider when aiming to the sustainable development and economic growth in long term (Herman, 2008).

Question is how many entrepreneurs are able to keep up with nowadays dynamic changes and operate their business appropriately. Historically and also nowadays the imbalances occur, especially in the economic and social sphere within states or regions (Pose, di Citaldo, 2015). That is a reason for necessity of institutional interventions to relieve their impact and focus on appropriate direction of activities and changes leading to the future sustainable development of state or region. That is the reason for interventions of regional and state governments, and even international institutions aiming to support and set the appropriate long-term infrastructure and support for active entrepreneurship and positive actions in every sphere of local, regional, national and even international development.

Together with proper entrepreneurial activities and market power they contribute to positive sustainable development growth in economic sphere with positive impacts to economic, social sphere and quality of life. And it usually involves all four sectors – business, government, society and the household.

The paper concerns the importance of industrial innovations for long-term economic development and competitiveness of enterprises, region and states. It is mainly about external environment, consisting of political, economic, social, technological and ecological factors that have inevitable influence of industry innovations success and worldwide competitiveness. The analyses have shown the increasing importance of innovation governance on regional level. Part of several studies showed that regional policy has some impact on innovation capacities of region. Innovations require cooperation and networks (Sroka, Hittmar, 2015).

#### References

Brem, A., Wolfram, P. (2014). Research and development from the bottom – up introduction of terminologies for new product development in emerging markets. *Journal of Innovation and Entrepreneurship*. vol. 3, no 9, pp. 2-22.

Deschamps, J. P., Nelson, B. (2014). Innovation governance: how Top Management Organizes and Mobilizes for Innovation. New York: John Wiley & Sons, Ltd., 2014.

Drucker, P. F. (1980). Managing in turbulent times. New York: Harper & Row Publishers, 1980.

Dvoracek, J. (2003). Entrepreneurship support: Industrial policy. Praha: Oeconomica, Vysoká škola ekonomická v Praze, 2003.

Dytrt, Z., Stříteská, M. (2009). Effective innovations: Management responsibility. Brno: Computer Press, 2009.

European Union (2015). *Documents* [online]. [cit. 2016-01-08]. Available: http://europa.eu/about-eu/institutions-bodies/european-commission/index en.htm.

Eurostat Statistics Explained (2016). *Documents* [online]. [cit. 2016-01-08]. Available: http://ec.europa.eu/eurostat/statistics-explained

Hajek, O., Smekalova, L., Novosak, J., Zahradnik, P., Spatial coherence of national and European regional policy: findings from the Czech Republic and Slovakia. *Political Economy*, vol. 5, no. 5, pp. 630-644.

Herman et al. (2008). Industry innovations. Praha: Oeconomica, 2008.

Introduction to Innovation Collaboration Techniques: Advance Problem Solving for the Knowledge Economy (2016). *Journal* [online]. [cit. 2016-01-08]. Available: https://greenbuzz.ch/2016/01/08/buzz-in-feb-introduction-to-innovation-collaboration-techniques-advanced-problem-solving-for-the-knowledge-economy/.

Kessler, A. (2007). Success factors for new businesses in Austria and the Czech Republic. *Entrepreneurship & Regional Development: An International Journal*, vol. 19, no 5, pp. 381-403.

Klas, A. (2005). Technology and innovations as a basic factor of the economic development. *Economic Journal*, vol. 53, no. 6, pp. 576-592.

Klusacek, K. (2004). Technology foresight in the Czech Republic. *International Journal of Foresight and Innovation Policy (IJFIP)*, vol. 1, no. 1/2, pp. 89-105.

Nováková, J. (2011). Research, development and innovations in EU: Knowledge transfer and influence on innovations creation. *Contemporary Europe*, no 2, pp. 121-136.

Pavlik, M. (2015). Innovations in the area of local economy support. *Innovation Entrepreneurship and Technology Transfer*, vol. 23, no 2, pp. 31-33.

Pose, A. R., di Citaldo, M. (2015). Quality of government and innovative performance in regions of Europe. *Journal of Economic Geography*, vol. 15, no 4, pp. 673-706.

Regional Innovation Strategy of the Liberec Region. (2016). *Documents* [online]. [cit. 2016-01-08]. Available: http://www.kraj-lbc.cz/public/orlk/ris lk zkracena verze ebec0d1b30.pdf.

Schumpeter, J. A. (1982). The theory of economic development: an inquiry into profits, capital, credit, interest and the business cycle. New Brunswick/New Jersey: Transaction Publishers, 1982.

Sroka, W., Hittmar, S. (2015). *Management of network organizations: Theoretical problems and dilemmas in practice*. Switzerland: Springer International Publishing, 2015.

Ulwick, A. (2005). What customers want? New York: Mc Graw - Hill Education, 2005.

Veber, J. (2009). Management: basics, modern managerial attitudes, performance, prosperity. Praha: Management Press, 2009.

Ziółkowska, J., Ziółkowski, B. (2008). Eco innovations in Europe – state and development prospects. *International Journal of management practice*, vol. 3, no 1, pp. 20-30.

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# 23. KNOWLEDGE SHARING THROUGH SOCIAL MEDIA IN EDUCATION IN THE 21ST CENTURY

Abstract: The aim of lifelong learning it is to provide people of all age groups equal and open access to quality education. The successful individuals in the global society of the 21st century must be able to evolve their knowledge with the tools of ICT and be able to share information for the global community. The aim of the article is to show the utilization of social media in education. The main objective of the research was to determine how students studying at FSEV TnUAD perceive the impact of social media in education. Finally, we present the positive effects and negative effects of using social media in education. The results confirm the readiness of students to use social media in the context of educational system in Slovakia. An important factor in the utilization of Web 2.0 tools in open education is the motivation for changing the institutional culture. The basic idea of further development of education, science, research and sports, from the perspective of global trends of digitalization and development needs of Slovakia, delivers the DIGIPEDIA 2020.

Keywords: education, social media, share, virtual mobility

JEL Classification: J 24, M 53

#### 1. Introduction

Internet users are 46.1 % of the world population. Within Europe 63,5% of the population is classified among internet users. In Slovakia, it is 82.1% (Internet World Stats, 2015). Digitization is the intersection of new technologies, new capabilities, and changing human behavior (EY, 2015). Education and training are the most important investments in human capital. The current demands in education lead the educational institutions to preparation of the flexible forms of education (Hančovská, 2015).

Lifelong learning is a response to increasing demands for competitiveness in the globalization process. Adult education will improve their employability opportunities and increase life satisfaction, on the other hand, older people stay mentally active and socially integrated (Kajanová, 2014a).

This paper aims to show the utilization of social media in education and to present the positive effects and negative effects of using social media in education.

# 2. Background

Web 2.0 is all about harnessing collective intelligence (O'Reilly, Battelle, 2009). Sharma (2008) described some of the most significant characteristics of Web 2.0 as user-centred design, crowd-sourcing, collaboration, power decentralization, dynamic content, and rich user experience. Web 2.0 tools, are used in the higher education context because they can: help engage students in their learning while providing social interaction with their peers in the learning process; enable students to work at the conceptual level of understanding on authentic projects where they can solve problems, discover relationships, discern patterns, and develop a deep understanding of content; and collaboratively build knowledge of students mediated by user-generated (either student or teacher) design; allow students

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and teachers opportunities for reflection; and, ultimately, cultivate communities of practice (Exter et al., 2012). Two essential features are useful in distinguishing Web 2.0 projects and platforms from the rest of the web: microcontent and social media (Alexander, Levine, 2008).

#### 2.1. Social media

Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content (Kaplan, Haenlein, 2010). As show in Table 1, this creates six categories of social media.

Table 1 Classification of Social Media by social presence/media richness and self-presentation/self-disclosure

		Social presence/Media richness				
		Low	Medium	High		
	II:ah	Dlagg	Social networking sites	Virtual social worlds		
Self-presentation/	High	Blogs	(e.g., Facebook)	(e.g., Second Life)		
Self-disclosure	T	Collaborative projects	Content communities	Virtual game worlds		
	Low	(e.g., Wikipedia)	(e.g., YouTube)	(e.g., World of Warcraft		

Source: Kaplan, Haenlein, 2010

Knowledge sharing is not only verbal or in written forms with various communication channels. There are no barriers for information flow. The new technology is also very fast and internet allows people to upload and share large files within a few seconds with personal computers and mobile devices. The majority of higher education students is aware of Web 2.0 and commonly uses those in their life. The growing amount of interests for using those tools help universities to adapt as supplementary communication and collaboration medium. (Kulaklia, Mahony, 2014).

The web users are average the most time on Facebook (Nielsen, 2014), averaging 8 hours 01 minute (see Table 2).

Table 2. Top 10 U. S. Web Brands for November 2011 and February 2014 (Time per Person)

Rank	Brand 2011	Time per Person	Brand 2014	Time per Person
1.	Facebook	6:59:20	Facebook	8:01:11
2.	AOL Media Network	2:56:06	Google	2:03:42
3.	Yahoo!	2:06:30*	Yahoo	2:01:49
4.	Google	1:44:51	YouTube	1:51:16
5.	YouTube	1:36:37	AOL Media Network	1:48:23
6.	MSN/WindowsLive/Bing	1:32:49	MSN/WindowsLive/Bing	1:25:09
7.	Apple	1:07:03	Microsoft	0:51:08
8.	Microsoft	0:44:31	Amazon	0:42:26
9.	Amazon	0:42:14	Wikipedia	0:28:39
10.	Wikipedia	0:18:42	Ask Search Network	0:12:36

Source: Nielsen, 2011; Nielsen, 2014

Video usage has grown across the week on digital platforms (i.e., PCs, smartphones or tablets), rising nearly 20% overall year-over-year among adults (Nielsen, 2015).

# 2.2. Positive effects and negative effects of using social media in education

Social media is characterized by participation, conversation (many-to-many) openness and connectedness. Social media allows to form quickly communities and communicate effectively (Mayfield, 2008). Social media allows connecting people who share information and activities regardless of political, economic and geographic boundaries (Kajanová, 2015a). Information and communication technology and in particular the Internet have a great impact on the availability, reusability, accessibility and cost of teaching materials (Kajanová, Sedláček, 2014). A reader can add content into story platforms directly: editing a wiki page, commenting on a post, replying in a Twitter feed, posting a video response in YouTube. With findability connected to a growing amount of media content licensed under Creative Commons (Alexander, Levine, 2008). The cooperation in social

<sup>\* -</sup> Yahoo! duration data shows an artificial decrease for May – November 2011 and does not reflect the activity on these sites.

networks also brings respect for different opinions and ability to present and argue own opinion (Kajanová, Soósová, 2014). Collaboration supports not only the cooperation between students, but also the skills that this common work brings. Virtual worlds use the full potential of virtual mobility in education. In addition to the integration of professional knowledge from different areas, saving time and travel costs brings it also relationship building throughout the world (Kajanová, 2014b).

Being effective means to learn in new communication techniques that are clear and constructive (Hančovská, 2014). Social media unleashes human creativity and has generated countless innovations that have revolutionized many aspects of human life – as in education and communications. Better educated and trained students can do more diverse work – and to a higher standard – and be more creative and innovative. Experiences from the application of graduates in practice and the requirements for the structure of human resources show that the academic institutions can be oriented to creative industry. Investors are attracted by creativity (Štefančiková, 2014). Creative industry is one of the most dynamically growing sectors. It uses human creativity and talent to create goods and services in a sustainable way (Krajňáková, Vojtovič, 2015).

Innovation in the region can form innovation ecosystem (Sedláček, 2014). Norway was ranked on the first place in the HDI (0,944), inequality-adjusted education index value is 0,886. Slovakia is ranked at the 35th place in the HDI (0.844) in 2014. The inequality-adjusted education index value was represented 0.813 in Slovakia in 2014 (UNDP, 2015). By 2020 the aim of DIGIPEDIA 2020 (MŠVVaŠ SR, 2013) is to ensure promoting of digital educational content. Creating a database of digital learning programs so support improvements in quality of digital learning at primary, secondary and higher education, and lifelong learning.

The profound changes brought about by the digitalisation, convergence and continuing globalisation of computer networks are connected with the risk that computer networks and electronic information may also be used for committing criminal offences and that evidence relating to such offences may be stored and transferred by these networks (Council of Europe, 2001). Threats in a new digital world (EY's Global Information Security Survey 2015) are:

- smart devices and services resulting in unintended consequences and a mass of data, increasing vulnerabilities for exploitation; humans often removed from decision making processes,
- social media and sharing information not fully appreciating the implications for privacy and confidentiality,
- more data in the cloud; attractive, but dangerous, with the loss of control, increased threats and unexpected connectivity,
- human behaviors are changing, in both positive and negative ways,
- rafts of new legislation and regulations are forcing a change in processes. These, in turn, mean that other vulnerabilities are created, which further change the threat landscape (often widening, not reducing).

Security behaviour can also be described using a two-factor taxonomy (see Figure 1), where two of those behaviours (Aware Assurance and Basic Hygiene) are positive, designed to increase security, and four of the behaviours may result in breaches to security (Stanton et al., 2005).

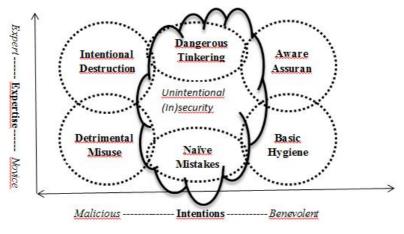


Figure 1. Two-factor taxonomy of end user security behaviours

Source: Stanton et al., 2005

Distinct culture – bound rules and norms have an effect upon the way the members of the culture in question behave in a particular context. In an intercultural dialogue involving partners using different linguistic codes, there may arise situations causing misunderstandings not only in translation and perception but also in the message misinterpretation. Such misunderstandings and misinterpretations can eventually lead to disagreements and conflicts (Delgadová, 2014).

The combination of three freely available tools in Twitter (geo-location tagging: streamd.in, Twitonomy and Creepy) were used to obtain the required information. The gathered data could be used to commit crimes such as identify theft. The users of social media were at risk of being a victim of crime, such as burglary or online stalking which could turn into physical stalking or even harassment (Gan, Jenkins, 2015). There are however issues of crime prevention and public safety which need to be considered at the level of public policy and the social network providers should take a more active role to improve safety for their users. There exists absolute agreement that cybercrime is a genuine and significant problem in the modern world. The fact that cyber criminality is a transnational phenomenon that touches upon many different disciplines (law, criminology, sociology, social and political science, information systems and telecommunications) creates problems of terminology (Simms, Ghernaouti, 2014).

Human factors in information security certainly present many complex and dynamic issues. There are many variables that need to be taken into account, including not only individual differences and differences in personality traits, but also interactions and influences of organisational culture and climate (Parsons, 2010). Competent and confident teachers, in schools with a systematic approach to teaching Internet safety, have a key role when it comes to developing students' Internet safety awareness (Hatlevik, Tømte, 2014). Users want both security and flexibility, and finding a balance between these two factors is challenging. Various tools created focus on educating and warning users regarding one specific type of threat, e.g., phishing attacks. A different approach, integrating warnings concerning multiple types of threats to modify user behaviour may be a potential solution (Shepherd et al., 2014). Specifically, these warnings would utilise affective feedback, this type of feedback may be suitable in an educational context.

# 3. Methodology

To achieve the research aims and objectives, the researcher used different research methods. Stage one to conduct a literature review. The research was dependent on published and online form of academic journals, conference papers, research reports, books, case studies, etc. Stage two was to conduct a questionnaire among the students of Faculty of Social and Economic Relations at Alexander Dubček University of Trenčín from December 2015. Of the 105 students who were willing to participate in the online survey, the majority of the sample was female (79.05 %) (n = 83) while male participation was 20.95 % (n = 22). This research also aims at addressing the questions below:

- 1) Which of following types of social media do you currently use?
- 2) Which of following types of social media in education do you currently use?
- 3) What are the benefits of using social media in education?

The majority of respondents (80 %) are using internet on a daily base for Internet shopping, however, in a time shorter than one hour. More than one hour, respondents spend for activities as acquisition, processing and sharing information and for education (see Table 3).

Table 3. Activities and hours of Internet use

	< 1 hour	< 1 - 2  hours >	< 3 - 4 hours>	< 5 - 6 hours>	>6 hours
Information	31.4 %	42.9 %	16.2 %	6.7 %	2.9 %
Entertainment	34.3 %	31.4 %	27.6 %	4.8 %	1.9 %
Shopping	80 %	16.2 %	2.9 %	0 %	1 %
Education	28.6 %	46.7 %	15.2 %	5.7 %	3.8 %

Source: Own work

The most respondents (70.5 %) are using collaborative projects, but in less than one hour. More than 1 hour, respondents most frequently used social networking sites. The most respondents do not use virtual social worlds (54.3 %) and virtual game worlds (49.5 %) (see Table 4).

Table 4. Social media and hours of Internet use

	< 1 hour	< 1 – 2 hours>	< 3 – 4 hours>	< 5 – 6 hours>	>6 hours	I do not use
Collaborative projects	70.5 %	13.3 %	2.9 %	0 %	1 %	12.4 %
Blogs	52.4 %	9.5 %	6.7 %	0 %	1 %	30.5 %
Content communities	45.7 %	34.3 %	17.1 %	1.9 %	0 %	1 %
Social networking sites	12.4 %	39 %	29.5 %	7.6 %	6.7 %	4.8 %
Virtual game worlds	38.1 %	8.6 %	1 %	1.9 %	1 %	49.5 %
Virtual social worlds	40 %	2.9 %	1.9 %	0 %	1 %	54.3 %

Source: Own work

The most respondents (51.4 %) prefer using of ICT in education at secondary level (see Table 5).

**Table 5. Preference use ICT in education** 

	Per.
do not use any ICT	4.8 %
limited use of ICT	12.4 %
use ICT at secondary level	51.4 %
use ICT extensively	27.6 %
use only ICT	3.8 %

Source: Own work

Respondents are using social networks the most frequently s in education (59 %) (see Table 6).

Table 6. Using of social media in education

	Daily	Weekly	Monthly	Hardly ever	Never
Collaborative projects	9.5 %	36.2 %	12.4 %	24.8 %	17.1 %
Blogs	13.3 %	12.4 %	7.6 %	23.8 %	42.9 %
Content communities	35.2 %	31.4 %	7.6 %	17.1 %	8.6%
Social networking sites	59 %	13.3 %	2.9 %	8.6 %	16.2 %
Virtual game worlds	8.6 %	7.6 %	1 %	10.5 %	72.4 %
Virtual social worlds	6.7 %	4.8 %	4.8 %	7.6 %	76.2 %

Source: Own work

The biggest advantages in the use of Web 2.0 in education are: the rapid acquisition of knowledge (65.7 %), it is easy to find resources for study (56.2 %), it is supported by active participation in learning (25.7 %), social participation in e-learning to motivate students (23.8 %) and contributes to improving performance (19 %).

#### 4. Conclusion

The most respondents (99 %) are using content communities (for example YouTube) and also 91.4 % are using content communities in education. In a similar survey in 2015 (Kajanová, 2015c), most respondents used collaborative projects in education (100 %) and social networking sites (100 %). In a similar survey in 2012 (Kajanová, 2012), 86 % of respondents used social networking sites (e.g. Facebook) and 82 % of respondents used content communities (e.g. Wikipedia) in education.

Teachers and students apply more and more the data of social media in education with the goal to understand the different aspects of human behavior, physical environment, and social phenomena (Komańda, Kajanová, 2014). Simultaneously, there is a rather common belief among the surveyed students that Internet sources of information offer contents which are sufficient for the didactic process and do not need to be worked out any further. As many as 99.5% of respondents admitted that they use internet sources of information. Almost 46% of them assessed these sources of information, in the first place, as sufficient for learning the scope of material of the realised didactic process. The second most popular indication was the fact that Internet sources of information were regarded as ready to use in the didactic process without the need for further developing (27.07% of indications). It seems that this issue should be considered, above all, in the perspective of students' motivation to manifest an active attitude in the educational process.

It is necessary to ensure the company using social media, which is economically successful, but which also seeks to establish the principle of social justice and participation for all participants (Masárová, 2012). To address the societal needs over the coming years, increased attention must be paid to core skills such as quantitative reasoning, critical thinking, communication skills, teamworking skills and the effective use of information technology. The emphasis has switched from overspecialization towards deeper and broader disciplinary foundations, with learning objectives that explicitly seek to nurture in students the creativity, enthusiasm and skills required for continual engagement with learning (National Strategy for Higher Education to 2030, 2011).

Frequent use of mobile devices does not mean that students or teachers are ready for use social media in learning and teaching. When using the Internet, mobile phones or other devices, one has to be able to make moral and rational decisions on one's own and is therefore responsible for one's own behavior (Kajanová, 2015b). However, with the increased access to technology, it is important that students develop Internet safety awareness as concerns privacy, copyright and safety issues Internet safety has to do with the responsibility we have for ourselves, as well as for others (Hatlevik, Tømte, 2014).

Utilization of Web 2.0 tools enables emphasis on social learning and using of social media such as blogs, wikis, podcasts and virtual worlds (Kajanová, 2014c). An important factor in the utilization of Web 2.0 tools in education is the motivation for change in the institutional culture.

#### References

Alexander, B.; Levine, A. (2008). Web 2.0 Storytelling-Emergence of New Genre. *Eduause Reiew*. (November//December 2008), pp. 41-56.

Council of Europe. (2001). *Convention on Cybercrime*. Budapest, 23. XI. 2001. [online]. [cit.2015-12-18]. Available: http://www.coe.int/sk/web/conventions/full-list/-/conventions/rms/0900001680081561.

Delgadová, E. (2014). Vplyv kultúry na komunikáciu. Sociálno-ekonomická revue, vol. 12, no.1, pp. 110-119.

Exter, K. at al. (2012). Using Web 2.0 Technologies for Collaborative Learning in Distance Education-Case Studies from an Australian University. *Future Internet*, vol. 4(1), pp. 216-237.

EY. (2015). Risk and opportunity in an increasingly digital world. [online]. [cit.2015-12-18]. Available: http://www.ey.com/Publication/vwLUAssets/EY\_-\_Risk\_and\_opportunity\_in\_a\_digital\_world/\$FILE/ey-risk-and-opportunity-in-an-increasingly-digital-world.pdf.

EY's Global Information Security Survey 2015 (2015). *Creating trust in the digital world*. [online]. [cit.2015-12-18]. Available: http://www.ey.com/Publication/vwLUAssets/ey-global-information-security-survey-2015/\$FILE/ey-global-information-security-survey-2015.pdf.

Gan, D., Jenkins, L. R. (2015). Social Networking Privacy-Who's Stalking You? *Future Internet*, vol. 7(1), pp. 67-93. [online]. [cit.2015-06-15]. Available: http://www.mdpi.com/1999-5903/7/1/67.

Hančovská, E. (2014). Manager's personality versus stress management and workload. In SGEM conference on psychology & psychiatry sociology & healthcare education: Conference proceedings volume I Psychology & psychiatry Education & educational research. Sofia: STEF92 Technology, pp. 233-240.

Hančovská, E. (2015). Vzdelávanie pracovníkov v organizácii a jeho vplyv na pracovný výkon. *Sociálno-ekonomická revue*, vol. 13, no. 2, pp. 71-78.

Hatlevik, O. E., Tømte, K. (2014). Using Multilevel Analysis to Examine the Relationship between Upper Secondary Students Internet Safety Awareness, Social Background and Academic Aspirations. *Future Internet* 2014, 6 (4), pp. 717-734. [online]. [cit.2015-12-17]. Available: http://www.mdpi.com/1999-5903/6/4/717/htm#B2-futureinternet-06-00717.

Internet World Stats. (2015). *World Internet Users and Population Stats*. [online]. [cit.2015-12-18]. Available: http://www.internetworldstats.com/stats.htm.

Kajanová, H. (2012). The Use of social Media in Education. In *Personalmanagement in bewegten Zeiten*. Plauen: M&S Verlag/OHG, pp. 247-260.

Kajanová, H. (2014a). Manažment celoživotného vzdelávania. Trenčín: TnUAD, 2014.

Kajanová, H. (2014b). The use of social media in system of education in Slovakia. In *SGEM conference on psychology & psychiatry sociology & healthcare education: Conference proceedings volume III Education & educational research.* Sofia: STEF92 Technology, pp. 1011-1018.

Kajanová, H. (2014c). Web 2.0 ako účinný nástroj pre rozvoj vzdelávania študentov. In *Sociálno-ekonomické aspekty rozvoja ľudského kapitálu*: Zborník z medzinárodnej vedeckej e-konferencie. Trenčín: TnUAD, pp. 181-192.

Kajanová, H. (2015a). Využívanie sociálnych médií vo vzdelávaní v 21. storočí. *Sociálno-ekonomická revue*, vol. 13, no. 2, pp. 80-86.

Kajanová, H. (2015b). Využívanie virtuálnych svetov vo vzdelávaní. In: *Vysokoškolská pedagogika a vysokoškolské vzdelávanie - 50 rokov pedagogického vzdelávania na Slovenskej poľnohospodárskej univerzite v Nitre*. Recenzovaný zborník vedeckých prác. Nitra: Slovenská poľnohosporárska univerzita, pp. 8-88.

Kajanová, H. (2015c). Vzdelávanie v 21. st. a sociálne médiá. In: *Znalosti pro tržní praxi 2015: Ženy - podnikatelky v minulosti a současnosti:* Sborník z mezinárodní vědecké konference. Olomouc: Societas Scientiarum Olomucensis II, pp. 314-324.

Kajanová, H., Sedláček, M. (2014). Readiness of students to use M-learning in education - case study. In *SGEM conference* on psychology & psychiatry sociology & healthcare education: Conference proceedings volume III Education & educational research. Sofia: STEF92 Technology, pp. 737-744.

Kajanová, H., Soósová, V. (2015). Potenciál Facebooku ako nástroja vzdelávania / In *Vysokoškolská pedagogika a vysokoškolské vzdelávanie - 50 rokov pedagogického vzdelávania na Slovenskej poľnohospodárskej univerzite v Nitre*. Recenzovaný zborník vedeckých prác. Nitra: Slovenská poľnohosporárska univerzita, pp. 89-96.

Kaplan, A. M., Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons* vol. 53 (1), pp. 59-68.

Komańda, M., Kajanová, H. (2014). Interest in distance learning and assessment of internet sources of information in the view of Polish students majoring in economic sciences, *GRANT Journal*, vol. 3, no. 2, pp.37-41.

Krajňáková, E., Vojtovič, S. (2015). Vzdelávanie a príprava odborníkov pre kreatívny priemysel. *Sociálno-ekonomická revue*, vol. 13, no. 2, pp. 87-98.

Kulaklia, Mahony, (2014). Knowledge creation and sharing with Web 2.0 tools for teaching and learning roles in so-called University 2.0. *Procedia - Social and Behavioral Sciences* 09/2014. vol. 150, pp. 648-657.

Masárová, T. (2012). Kvalita sociálnych procesov a jej faktory. Sociálno-ekonomická revue, vol. 10, no. 1, pp. 62-68.

Mayfield, A. (2008). *What is Social Media?* [online]. [cit.2015-12-18]. Available: http://www.icrossing.co.uk/fileadmin/uploads/eBooks/What is Social Media iCrossing ebook.pdf.

MŠVVaŠ SR. (2013). Koncepcia informatizácie rezortu školstva s výhľadom do roku 2020 – DIGIPEDIA 2020. [online]. [cit.2015-12-11]. Available: https://www.iedu.sk/digipedia/Documents/4796.pdf.

National Strategy for Higher Education to 2030. (2011). [online]. [cit.2015-12-14]. Available: http://www.hea.ie/sites/default/files/national strategy for higher education 2030.pdf.

Nielsen. (2011). *November 2011 – Top U.S. Web Brands*. [online]. [cit.2012-1-5]. Available: http://blog.nielsen.com/nielsenwire/online mobile/november-2011-top-u-s-web-brands/.

Nielsen. (2014). Clicks and Balances: Top Government Websites and U.S. Web Brands in February 2014. [online]. [cit.2015-12-18]. Available: http://www.nielsen.com/us/en/insights/news/2014/clicks-and-balances-top-government-websites-and-us-web-brands-in-february-2014.html.

Nielsen. (2015). *Timing Is Everything: When it Comes to Connecting With Content, theTime of Day Means a Lot.*. [online]. [cit.2015-12-15]. Available: http://www.nielsen.com/us/en/insights/news/2015/timing-is-everything-when-it-comes-to-connecting-with-content-the-time-of-day-means-a-lot.html.

O'Reilly, T., Battelle, J. (2009). Web Squared: Web 2.0 Five years on. [online]. [cit.2015-12-11]. Available: http://www.web2summit.com/web2009/public/schedule/detail/10194.

Parsons, K. et al. (2010). *Human Factors and Information Security: Individual, Culture and Security Environment.* [online]. [cit.2015-12-18]. Available: http://www.dtic.mil/dtic/tr/fulltext/u2/a535944.pdf.

Simms, D., Ghernaouti, S. (2014). *A Report on Taxonomy and evaluation of existing inventories*. [online]. [cit.2015-12-18]. Available: http://ecrime-project.eu/wp-content/uploads/2015/02/E-Crime-Deliverable-2-1-20141128 FINAL.pdf.

Sharma, P. (2008). *Characteristics of Web 2.0 Technology*. [online]. [cit.2015-12-20]. Available: http://www.techpluto.com/web-20-services/.

Shepherd, L. A., Archibald, J., Ferguson, R. I. (2014). Reducing Risky Security Behaviours: Utilising Affective Feedback to Educate Users. *Future Internet* 2014, vol. 6 (4), pp. 760-772. [online]. [cit.2015-12-18]. Available: http://www.mdpi.com/1999-5903/6/4/760/htm#B10-futureinternet-06-00760.

Stantont, et. al. (2005). Analysis of end user security behaviours. Computers and Security, vol. 24, iss. 2, pp. 124-133.

Sedláček, M. (2014). Analyse of innovation performance of Slovak Republic regions and main factors of regional development based on innovation. In *SGEM conference on political sciences law, finance economics & tourism: Conference proceedings volume IV Economics & tourism.* Sofia: STEF92 Technology, pp. 27-34.

Štefančiková, A. (2014). The mission and the importance of universities in regional development. In SGEM conference on psychology & psychiatry sociology & healthcare education: Conference proceedings volume II Sociology & healthcare. Sofia STEF92 Technology, pp. 1009 - 1016.

UNDP. (2015). *Human Development Report 2015: Work for Human Development*. [online]. [cit.2015-12-19]. Available: http://hdr.undp.org/sites/default/files/hdr\_2015\_statistical\_annex.pdf.

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# 24. TELEWORKING – CHARACTERISTICS AND EVALUATION OF THE EMPLOYMENT IN THE FORM OF REMOTE

**Abstract:** Telework is a new tool, which allows employing people who are not able to work in a traditional way. As a result, more people can start working and generate profit for the country. However, what is the most important is that telework is a perfect solution for companies which aim at reducing employment-related costs. In this study the aim of the research is the characterization of telework. For this purpose, the test was carried out, which were the answer to these questions. For this purpose, it used a diagnostic survey. Studies clearly show that telecommuting is a form of employment, which acts on behalf of the employer. First of all it allows it to limit the cost of employment, but also to attract qualified personnel. In the case of further studies, primarily examine also the opinion of teleworkers in teleworking. It can also be looked at more carefully examine the areas that can be changed to this form of employment was more useful.

Keywords: teleworking, teleworker, form of employment

JEL classification: M21

#### 1. Introduction

Telework is a modern type of work, allowing employing a given person to work from home. As a result, the companies can have workers who, for various reasons, cannot work on site. This situation applies mostly to the disabled people, and such type of employment as if becomes a new motivational tool for many, allowing workers to fulfill many different obligations at the same time. What is more, teleworking as an employment type may be seen as a choice in favour of an employee who faces a difficult situation, but who wants to work and invest their potential in a given company. A company itself also benefits from teleworking by reducing its employment-related costs, but also, and most importantly, by being able to find a well-qualified staff, regardless of the employees' life situation (Jasco, 2005, p. 1537).

Due to the fact that telecommuting is a fairly new form of employment, is not fully characterized and popular. The same is not yet enough amount of research in this area. Most of the items come from the period of 2006-2010. By what today can be equated with the necessity of teleworking to mobility at work.

# 2. Teleworking - specifics and analyze

# 2.1. Definition

In Polish law, telework is defined in article 675 of the Polish Labour Code, which states that telework is: "A type of work (...) performed on a regular basis outside of the company's office, with the use of electronic means of communication defined according to the law on rendering electronic services "(telework)" (Nowicka-Skowron, 2009, pp. 58-59)

On the basis of this definition the conditions of telework can be determined, thus telework shall be performed (Access Economics, 2011, p. 7):

- outside the company's office,
- with the use of electronic means of communication.

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The Polish Labour Code states that such work must be done on a regular basis, thus, according to the provisions of law, temporary telework is not treated as a telework.

The Polish Labour Code also specifies the meaning of a teleworker, who is "an employee performing the work in conditions specified in § 1, and transferring the results of his or her work to their employer, particularly with the use of electronic means of communication" (Janiec et al., 2006, p. 9)

Basing on this definition, it is possible to distinguish the characteristics of a teleworker:

- A person employed on the basis of an employment contract, which means that freelancers and physical persons with their own business activity are not teleworkers;
- A teleworker mostly works in a flexibly determined time. Continuous and regular character of his
  or her work is a crucial element as well.

In turn, the European Commission understands telework as a method of organizing and performing work, where an employee works outside of his or her employing company's office for a specific part of their working time, at the same time providing an employer with the results (outcomes) of their work with the use of information and data transfer technologies, especially via Internet (Dubois, Rothwell, 2007, pp. 126-127).

Literature provides a lot of research information on telework. Available subject data is interdisciplinary and combines the elements of economy, psychology, management, law, ecology, and logistics. However, what seems to be the biggest difficulty is the imprecise definition of the term.

#### 2.2. Different forms of telework

The most recent literature on this topic provides different classifications of telework.

Basing on the first criterion of the possibility to perform a part of duties by means of telework, the following types can be distinguished (Teluk, 2002, p. 70):

- permanent telework, where the work is performed remotely at all times;
- alternating telework (with a division of work), where for one part of a week a teleworker works in the company's office, and for the rest of time – outside of it;
- complementary telework, where the employee mostly works in the office but has the possibility to perform some of the tasks at home, for instance to finish the tasks that have not been finished during the office work hours (Madsen, 2003, p. 54).

A different classification divides telework with regard to the conditions in which e-work is performed. Telework can then be (Milian, 2015, p. 11):

- regular with pre-set rules of remote work,
- temporary (ad hoc), where the employer allows telework in special circumstances that are beyond the employee's control.

The next classification divides telework basing on the subject telework with employment contract – performing all duties by persons employed in a company.

The last classification is based on the place where telework is performed (Szpriger, 2012, p. 126.):

- at home,
- in a telecentre.
- during business trips a so-called mobile or nomadic telework,
- in some other place.

# 3. Methodological research assumptions

The subject of research in this article is the characteristics of telework as a work possibility for the disabled.

In order to reach justified conclusions and form proven statements regarding studied facts, it is crucial to start research from specifying what the researcher aims to achieve by doing this research.

The main problem can be expressed in the following question: Is telework a possibility or a threat for a company that employs teleworkers?

In addition, the following detailed problems have been formed:

- 1) Who can be a teleworker?
- 2) How to evaluate teleworkers and telework?
- 3) How does the company benefit from having at least some of their personnel employed as teleworkers?

The main criteria for the selection of methods, techniques, and research tools are based on the specification of the problem, research tasks and objectives, as well as on the specification of a given discipline.

The conducted research was based on diagnostics poll method, as defined in various ways in secondary literature. Firstly, diagnostic poll is a way of collecting information on structural and functional attributes, as well as on the dynamics of social phenomena, opinions and beliefs of selected groups, increase of specific phenomena and the directions of their development, and also of any other phenomena that are not located institutionally, but are important in education. For this purpose, a specially selected group is chosen as a representation of the general population to which the studied phenomenon applies (Greenberg, Nilssen, 2008, p. 148.). Secondly, the poll is a method used for descriptive, explanatory, and exploratory purposes. It is used in the analysis of individual persons (Szpriger, 2012, p. 56). Thirdly, diagnostics poll is a research method whose objective is to collect information on problems that are within the researcher's interest. Such information is gathered as a result of verbal expression of studied persons, called respondents. A constructive characteristics of a poll method is "questioning" or opinion polling (Greenberg, Nilssen, 2008, p. 151).

The technique used in this method is a survey.

Survey is one of the most popular methods of gathering information. It is based on asking questions (open or closed ones) in a questionnaire and having them answered in writing. Such a study is completely anonymous, which allows us to assume that the obtained answers are reliable, and that responders are more eager to take part in the survey. The benefit of using a survey is that it allows to interview more people in a shorter time.

The applied research tool consists of items that allow using a selected research technique.

The conducted studies were voluntary and were performed on the group of 145 representatives of management staff, including persons of different age and professional experience. For this purpose, in March 2014 the survey was sent to various companies employing teleworkers, which ensured optimum conditions for filling in the survey.

The companies were selected randomly. The only criterion was that they employed min. 35% of their personnel as partial teleworkers (only some of the tasks were performed outside of the company's seat) or teleworkers who fulfil all their responsibilities remotely. Moreover, company owners and the management had to express their consent for conducting the study.

# 4. Research's author

#### 4.1. Teleworkers' specification

In the theoretical part of this paper it was indicated that to perform telework, it is necessary to have specific and suitable dispositions. This assumption was also checked in the empirical part, as a result of which, the following e-worker's profile can be presented.

Therefore, first referred to persons who work as employees (Table 1).

Table 1. Group people working most often as teleworkers

People working mostly as teleworkers	n (%)
Women talking care of children	36
Caretakers of a sick relative	25
Disabled people	21
Sickly people	13
People living abroad	5

Source: Own work

Teleworkers are mostly women who are taking care of children, but want to work and be financially independent. According to the management's opinion, such women form 36% of teleworkers. Second rate (25%) belongs to those who take care of their sick relatives. They were also unable to work on-site. Another 21% of e-workers are disabled people, who, for various reasons, cannot commute to their companies' offices. 13% are sickly people without any determined level of disability. Finally, 5% of teleworkers live abroad, from where they cannot work on-site in their companies (Table 1).

The second aspect of the investigation determining teleworkers is education (Table 2).

Table 1. Teleworkers' education

Teleworkers' education	n (%)
Higher	49
Secondary	41
Vocational	10
Lower-secondary	0
Primary	0

Source: Own work

Almost half of teleworkers have completed higher education, whereas people with secondary education amount to 41% of the study group. Only 10% of teleworkers are persons after vocational training. This may indicate that to be an e-worker one needs to be sufficiently qualified in order to successfully fulfil imposed obligations.

# 4.2. Evaluation of teleworkers and teleworking

Proper evaluation can be made on the basis of determined work site and individual dispositions. Such evaluation mostly regards teleworkers, who are perceived as equal to the on-site staff. Next, the telework quality itself is evaluated, as a relatively new form of employment.

Yet another test issue are teleworkers' positive traits (Table 3).

Table 3. Teleworkers' positive traits

Teleworkers' positive traits	n (%)
Conscientiousness	28
Availability	24
Meticulousness	21
High efficiency	19
Mitigating conflicts	8
Other	0

Source: Own work

The qualities mostly valued by the management in their e-workers include:

- conscientiousness 28% allowing to complete planned tasks within specified time;
- availability 24% allowing to start a given project within required time, for instance when it is necessary to call some clients after a specific hour;
- meticulousness 21% allowing to precisely and accurately complete a task;
- high efficiency 19% allowing to achieve better results than previously expected;
- mitigating conflicts 8% during conversation with clients this ability allows not only to speak to the point and precisely address a given problem, but also to calm the client down and, at the same time, create a positive company image.

Positive aspects are not the only thing that define teleworkers. Another issue are teleworkers' negative traits (Table 4).

Table 4. Teleworkers' negative traits

Teleworkers' negative traits	n (%)
Lack of full control	35
Efficiency below standard	31
Making private call at employer's cost	27
Laziness	6
Sluggishness	1

Source: Own work

However, in spite of its numerous advantages, telework also has its drawbacks. Key negative traits indicated in the study are:

- for 35% of participants the lack of full control, which may contribute to lower effectiveness;
- for 31% of participants efficiency below standard, which may prolong the process of achieving set goals;
- for 27% of participants making private calls at employer's cost, which may increase employment-related costs of such workers;

- for 6% of participants laziness, which also decreases employee's work potential;
- for 1% of participants sluggishness, which may decrease the effectiveness and lower efficiency below set standards.

All the above profile of teleworkers allows identifying advantages of telework (Table 5).

Table 5. Advantages of telework

Advantages of telework	n (%)
Telework as motivation	30
Possibility too reduce employment costs	25
Qualified workers regardless of their private situation	18
No need to provide additional equipment at the site	15
Subsidies for allowing telework	12

Source: Own work

Except for the evaluation of teleworkers, management staff was also asked to indicate the advantages of telework itself, perceived as a new method of employment. The greatest group of respondents (30%) claimed that telework allows to additionally motivating employees. This mostly applies to those who have a difficult personal situation, and do not want to lose their jobs. 25% of the respondents stated that this type of employment allows the company to reduce employment costs by ca. 30% in case of healthy e-workers, and by even almost 100% in case of disabled workers with a significant level of disability. This also proves that work from home allows finding qualified staff in spite of some workers' complicated personal situation, as indicated by 18% of participants. The next advantage resulted from the lack of need to provide additional equipment for the worker, as, at times, it is an employer's responsibility to provide computer equipment and reliable Internet access. Also, 12% of respondents mention that telework ensured subsidies for employing their teleworkers.

The last issue are drawbacks of telework (Table 6).

Table 6. Drawbacks of telework

Drawbacks of telework	n (%)
No possibility to control	35
Required trust (entrusting company's secrets to the worker)	25
Problems with solving technical issues	23
Chance of choosing a wrong candidate	16
Other	1

Source: Own work

Having mentioned the advantages of telework, one cannot ignore its disadvantages, which are also visible in teleworking. Respondents mostly indicated the lack of control over their teleworking personnel, as mentioned by 35% of participants. The second most-mentioned drawback was the necessity to entrust the company's secrets to a person from outside of the company, a person who may not be discrete enough to ensure that such information does not reach unauthorized persons. For 23% of respondents the lack of technical knowledge, and technical problems were significant, as such issues are difficult to solve remotely. What is more, 16% of participants struggle with how to choose the right e-worker, whereas another 1% also indicated other problematic aspects, such as the problem with workers themselves: their lower efficiency or being too absorbed by their home problems.

#### 5. Conclusion

Changes brought about in the 20th century were ground-breaking, also in the area of management. It can be claimed that computerization was the greatest revolution of this period. It allowed transferring many responsibilities from workers to computers.

Yet, the possibility to quickly exchange information, regardless of distance, also enabled people to work from home. This was connected with the introduction of other solutions, at least in the area of management, as it is impossible to directly observe a teleworker and how he or she fulfils their obligations. What is more, work from home also limits the possibilities to motivate workers; for

instance, it is difficult to verbally praise the teleworker in front of others, when the members of the team are located in different parts of the country (Harbert, Tucker-Tatlow, 2013, pp.16-18).

That is what inspired the author of this paper to study whether telework is an asset for companies, or rather a threat for their organization.

The analysis of collected secondary literature indicated that many people have concerns about this form of employment and choose not to use such a possibility. However, acquired empirical knowledge shows that telework is actually beneficial for a company. This conclusion results mostly from the fact that there are subsidies offered for companies employing e-workers, and that telework allows to find or keep qualified staff, in spite of their difficult personal situation, at the same time reducing employment costs. Still, one needs to remember that with telework, company's secrets may reach unauthorized persons. Also, telework causes serious difficulties in the area of workers' control, with significant threat of hiring persons who will not succeed in such working conditions.

However, in spite of these difficulties, telework is a solution for today's workers' needs and will become more and more popular. However, it need the right people, which will have the appropriate predispositions and professional qualifications. So it will use teleworker, rather than potential held by his presence at the company's headquarters.

However, it should be noted that the results of the research can not generalize. This is due to the fact that in open literature not previously carried out similar tests. For this reason, it is recommended that in the future, repeat the test and assemble the empirical results with each other.

#### References

Access Economics (2011), Next Generation Telework: A Literature Review. Department of Broadbanad, Deloitte: Communications and the Digital Economy, p. 7. [on-line], [cit.2016.03]. Available: https://www.melbourneinstitute.com/downloads/hilda/Bibliography/Other\_Publications/2011/Next\_Generation\_Telework-

nttps://www.meioourneinstitute.com/downloads/niida/Bibliography/Other\_Publications/2011/Next\_Generation\_1elework A\_Literature\_Review-July\_2011.pdf.

Babbie E. (2007). Badania społeczne w praktyce. Warszawa: Wydawnictwo Naukowe PWN, 2007.

Dubois D., Rothwell W. (2007), Zarządzanie zasobami ludzkimi oparte na kompetencjach. Gliwice: Wydawnictwo ONE, 2007.

Greenberg A., Nilssen A. (2008), *Telepraca – odpowiedź na wyzwania związane z rozproszonym biznesem XXI wieku*. Warszawa: Wainhouse Research, 2008.

Harbert A., Tucker-Tatlow J. (2013), *Literature Review: Teleworking in Human Services*. San Diego: San Diego State University, 2013.

Janiec M., Czerniak T., Kreft W., Piontek R. (2006). *Prowadzenie działalności biznesowej z wykorzystaniem telepracy*. Warszawa: PARP, 2006.

Jasco P. (2005), As we may search – Comparison of major features of the Web of Science, Scopus, and Google Scholar citation-based and citation-enhanced databases. *Current Science*, vol. 89, iss. 9, p. 1537-1547.

Madsen S. (2003), *The Benefits, Challenges, and Implications of Teleworking: A Literature Review.* Utah: Utah Valley University, 2003.

Milian S. (2015), When Algorithms Shape Collective Action: Social Media and the Dynamics of Cloud Protesting, [on-line], [cit.2016.03]. Available: http://sms.sagepub.com/content/1/2/2056305115622481.full.

Nowicka-Skowron M., Mann M. (2009), *Problemy innowacyjno-rozwojowe w zarządzaniu przedsiębiorstwem*. Częstochowa: Wydawnictwo Wydziału Zarządzania Politechniki Częstochowskiej, 2009.

Polish Labour Code of August 27, 2007 specifying rights and obligations of teleworkers and employers employing people for telework (Act of August 27, 2007 on the change of the act – Polish Labour Code and other selected acts – Journal of Laws No. 181, item 1288). 675 § 1.

Polish Labour Code of August 27, 2007 specifying rights and obligations of teleworkers and employers employing people for telework (Act of August 27, 2007 on the change of the act – Polish Labour Code and other selected acts – Journal of Laws No. 181, item 1288) 675 § 2.

Sołoma L. (1999). Metody i techniki badan socjologicznych. Olszyn: Wydawnictwo WSP, 1999.

Szpriger T. (2012). Innowacyjne modele e-biznesu. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego, 2012.

Teluk T. (2002). E-biznes. Nowa gospodarka. Gliwice: Wydawnictwo Helion, 2002.

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# 25. SUPPORT FOR THE SME SECTOR IN THE FRAMEWORK OF THE SMART GROWTH OPERATIONAL PROGRAMME FOR THE YEARS 2014-2020

**Abstract:** Knowledge and innovation constitute the key to economic growth in Europe. The European Union seeks to build a more competitive, knowledge-based economy through its actions. The new cohesion policy for 2014-2020 means that the regions and the Member States need to direct investments financed by EU funds into four key areas conducive to economic growth and job creation:

- 1. Research and innovation.
- 2. Information and communication technologies (ICT).
- 3. Supporting the competitiveness of small and medium-sized enterprises (SMEs).
- 4. Supporting the transition to a low carbon economy.

The aim of the paper is to present the Smart Growth Operational Programme within the framework of the 2014-2020 financial perspective as a tool of cohesion policy in Poland. Sub-measure 3.2.2 "Technology innovation credit", which is a continuation of Measure 4.3 "Technological credit" available in the years 2007-2013 under the IE OP, will be analysed.

Keywords: Smart Growth Operational Programme (SG OP), SME sector, technology innovation credit

**JEL Classification:** O3

# 1. Introduction

Stimulating innovativeness requires taking actions related to the improvement of the system granting access to financial support. Therefore, policies conducive to supporting SMEs, both at the EU level and in the individual EU countries, become an extremely important factor in the process of unlocking the EU potential. Undoubtedly, the greatest barrier to innovation in the case of companies operating in Poland is the volume of their financial resources. Inability to raise sufficient funds or acquire external financing for innovative companies is the greatest obstacle to innovation in the functioning of the SME sector. Growth problems of the SME sector have changed little both in Poland and in the EU (Larsen, Lewis, 2007; European Commission, 2008; PKPP Lewiatan, 2011; PKPP Lewiatan, 2013; Mina et al., 2013). The lack of the company's own resources and limited access to external funding hinder the development of new technologies in the SME sector. The phenomenon of lack of access to long-term capital necessary for the development of enterprises in the initial phases of activity is called the "equity gap" (Pełka, 2007). The term is used to describe the economic difficulties of SMEs in obtaining financing from banks, capital markets and other financial institutions or the lack thereof (OECD, 2006; Gualandri, Venturelli, 2008).

One way to reduce the equity gap is a public intervention implemented within the framework of funds under the EU programmes. The financial engineering instruments are designed to contribute to improving the availability of capital for small and medium-sized enterprises (IBnGR, 2010). Limited access to external financing is the most important problem in the development of innovativeness of SMEs in Poland and the European Union as public aid may be an important condition for the financing of SME innovation processes (Meuleman, DeMaesenerie, 2012). In the wake of the 2008 financial crisis, there has been increased focus on access to finance for small firms (Lee et al., 2015).

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Approx. EUR 80 billion will be allocated for the development of research, innovation and competitiveness in Europe in the 2014-2020 financial perspective in the framework of EU programmes. As part of the reformed cohesion policy for 2014-2020, the funding of EUR 351.8 billion will be made available for investments in the European regions and cities, as well as investments in the real economy. This will be the primary EU investment tool, allowing the implementation of the objectives of the "Europe 2020" strategy. In connection with these changes, Poland has also taken action to update and extend the time horizon until 2020 of one of the main strategic documents on which the development policy is based, i.e. the National Development Strategy (MRR, 2012). Since 2000, the EU has been taking measures to build the most competitive and dynamic knowledge-based economy in the world. In 2010, a new EU growth strategy – the Europe 2020 Strategy – for smart, sustainable and inclusive growth was created (European Commission, 2010).

# 2. The use of the European Union funds by innovative enterprises from the SME sector in Poland

# 2.1. Methodology of research

The aim of the paper is to present the specific features of repayable financial assistance based on the example of Sub-measure 3.2.2. "Technology innovation credit" in the context of the new financial perspective 2014-2020. The implementation of this objective is based on theoretical considerations. The author presents data showing the level of use of the EU funds and technological credit by innovative enterprises from the SME sector in Poland in the years 2007-2013. For this purpose, scientific publications, as well as reports of Polish and foreign institutions were used (European Commission, OECD). The analysis was carried out on the basis of the statistical information contained in the reports and analyses of the Central Statistical Office and the Bank of National Economy (Bank Gospodarstwa Krajowego – BGK).

# 2.2. The use of the European Union funds by innovative enterprises from the SME sector

Public support for innovative activities can come from units at the local/regional level or the central level, the European Union and the Framework Programmes. In the years 2011-2013, public financial support in Poland was allocated to 25.1% of actively innovative manufacturing enterprises (compared to 25.9% in the years 2010-2012) and 22.9% of service enterprises (respectively 18.7%). Among manufacturing enterprises, public support for innovative activities was most often used by private companies. In the years 2011-2013, 25.3% of actively innovative enterprises from this sector made use of the said form of financial aid. 22.9% of service enterprises in the public and private sector used public financial support for innovative activity. In the earlier study period, mainly public sector enterprises benefited from this kind of support. In terms of size, in the years 2011-2013, among actively innovative manufacturing enterprises, public support was the most commonly used by enterprises employing 50-249 people (29.4%), while among service enterprises by entities employing 10-49 persons (23.8%) (GUS, 2014). In total, public support in Poland was used by 23.2% of innovative companies. Public support for innovative activity was used by one in five innovative companies in Poland, most often enterprises benefited from EU funds – 19.5%, and government support – 8.4%. In terms of the share of companies benefiting from public aid from the EU, Poland ranked second – behind companies from Hungary (33.8%). Public support from local level units was used in Poland by 4.6% of innovative enterprises and support for enterprises under the framework funds was received by 3.8%. This high position of Polish companies indicates that they are able to successfully compete with companies from the EU countries for funds from the Framework Programmes (Nieć, 2015).

## 2.3. Smart Growth Operational Programme

The Smart Growth Operational Programme 2014-2020 is a national operational programme funded by the European Regional Development Fund (ERDF). The programme is built on five priority axes:

- Priority axis I: Support for R&D activity of enterprises
- Priority axis II: Support for the environment and capacity of enterprise for R&D&I activity
- Priority axis III: Support for innovation in enterprises
- Priority axis IV: Increasing the research potential
- Priority axis V: Technical assistance.

Axes I and II provide support in the form of instruments allowing companies to acquire financing for the development of innovative solutions throughout the whole development cycle of innovative projects – "from idea to market". Taking into account different levels of risk in the implementation of the project at the above mentioned phases, instruments in the form of non-reimbursable grant support and reimbursable assistance are planned to be applied. Axes III and IV provide instruments to build the capacity of enterprises to conduct R&D activity and implement their results, as well as to create the potential of scientific institutions to conduct R&D activity for the needs of the economy and to strengthen the capacity of business environment institutions to facilitate cooperation between the business sector and the science sector (Głodek et. al, 2014). Stimulating the growth of business innovativeness is associated with the use of a set of fiscal and financial as well as organisational and institutional instruments, including coordination of tools and targets at subsequent levels (Rada et al., 2015).

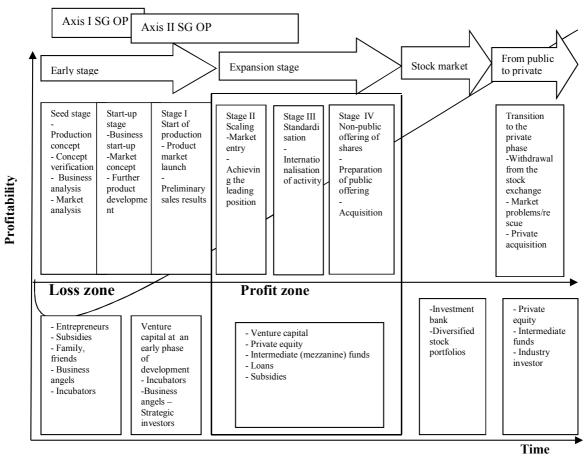


Figure 1. Intervention model for SG OP

Source: Głodek et. al., 2014

Translating it into the innovative product development cycle, the SG OP provides support at the stage of early development and at the early stages of the expansion stage (Figure 1). Each innovative venture, regardless of its scope, requires financial expenditures. Enterprises have difficulty with financing innovations since these projects are characterised by a prolonged period of return on the capital invested and a higher level of risk than projects based on technologies already used. Moreover, it is difficult to properly assess the value of the project due to the novelty which the company intends to implement. A significant gap in financing of new technologies has been identified at the stage of product testing, presentation and implementation (Ferrer et al., 2012).

Financial engineering instruments, such as guarantees, loans and capital, are increasingly used in the public financing of enterprises (North et al., 2001). Although these instruments are complex, they are gaining importance in the policy of support, in particular, support for the SME sector, for two reasons mainly. Firstly, these are instruments of the "leverage" nature, i.e. limited public support is combined with the contribution provided by the private sector. Secondly, these financial instruments have a

"multiplier effect", hence they can be reused to support more companies (Nicolaides, 2013). The possibility of re-using this financial support increases the efficiency in the use of EU funds. The new financial instruments are an effective tool to eliminate the capital gap in the economy.

# 2.4. Sub-measure 3.2.2 "Technology innovation credit" SG OP

In the new financial perspective for the years 2014-2020, the previous technological credit (Measure 4.3 Technological credit IE OP) was replaced by the "Technology innovation credit". It is managed by the Bank of National Economy (BGK). Entrepreneurs were eager to take advantage of technological credit available under the IE OP. The principal beneficiaries of Measure 4.3 "Technological credit" were small and medium-sized enterprises, which accounted for respectively 60% and 31.2% of the signed credit agreements. The average value of the project amounted to PLN 4.86 million. The regional distribution indicates that most of the projects were located in the Wielkopolskie, Śląskie and Łódzkie Voivodeship. These three regions accounted for 42.8% of the projects. The analysis of the age of the enterprises indicates that companies operating on the market for many years benefited from the technological credit. The average age of 95 randomly selected companies (out of 166 beneficiaries) was 14 years (median - 16 years); the shortest period of market activity of the beneficiary was 2 years (Szczucki, Gajewski, et. al, 2013). In total, 1,528 applications were received by the BGK in all the editions in the years 2009-2013 for Measure 4.3 Technological credit. Since the beginning of the implementation of Measure 4.3 Technological credit, 717 contracts were signed for the total amount of PLN 1,872 million (Table 1).

Table 1. Financing agreements signed and technological credits granted broken down into categories of enterprises (SME status) in the years 2007-2013

Company size	Number of agreements	Funding (technology bonus)	Technological credit amount
Micro	98	245,148,254.67	306,121,976.79
Small	245	588,902,249.90	715,279,658.21
Medium	374	1,037,962,630.62	1,466,110,246.02
Total	717	1,872,013,135.19	2,487,511,881.02

Source: BGK materials

Pursuant to the amended Act of 30 May 2008 "On some forms of supporting innovative activity" (Dz. U. 2014, poz. 226., z 2015 r. poz. 1308), enterprises implementing new technologies are allowed to receive assistance in the form of technological credits granted by commercial banks. The measure is directed to the sector of micro, small and medium-sized enterprises and the technological credit can be used to finance the investment which concerns the implementation of a new technology in the form of industrial property rights, results of industrial research and development activities or unpatented technical knowledge. Technology is to enable the production of new or significantly improved products, processes or services in relation to the ones previously produced in Poland. The amount of technology bonus cannot exceed PLN 6 million and the rate of technological credit cannot be higher than the average interest rate on other investment loans. The contribution of the entrepreneur implementing a technological investment in the financing of this investment may not be less than 25% of expenditure.

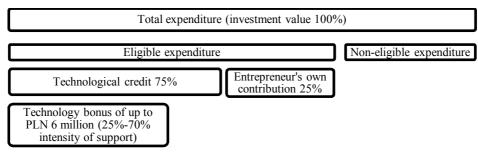


Figure 2. Financial structure of Sub-measure 3.2.2

Source: Own work

The "technology innovation credit" in the new version introduces a lot of changes that are favourable for the beneficiary. The design of the instrument itself has not changed. It is still an investment credit granted by a commercial bank for a technological investment which is partially repaid by the Technology Credit Fund in the form of technology bonus (Figure 2). An important change is the amount of technology bonus which has increased from PLN 4 to 6 million (Figure 3). In addition, the entrepreneur does not have to present an opinion on the novelty of the technology, which constituted an annex to the application and was a mandatory document in the years 2007-2013. Based on the current rules, the issue of novelty of the given technology is assessed by a panel of BGK experts. The continuous call for proposals, in which the order of receipt of applications mattered, has been replaced by the closed competition based on a ranking system. The time for assessing applications has also been shortened. In the years 2014-2020, EUR 422,055,000 was allocated to Submeasure 3.2.2, including EUR 303,000,000 for the first competition 07.12.2015-29.01.2016 (BGK, 2015). The interest in the Sub-measure in the first competition was enormous – 494 companies submitted applications for funding, the value of the requested financial assistance exceeds five times the available funds and amounts to PLN 1.7 (BGK, 2016).

This instrument in the proposed form has a chance to result in an increase in investment demand on the part of entrepreneurs in the area of innovation and R&D. The introduction of market mechanisms to support instruments can improve the efficiency of public funding offered to small and medium-sized enterprises in terms of allocation of resources. The studies indicate an increased interest in reimbursable instruments (Kalvet, Vanags, Maniokas, 2012). To date, the share of repayable instruments accounted for only 2% of the EU aid. However, in the period 2014-2020, particular importance is attributed to such instruments as loans, credits, loan guarantees and equity interests.

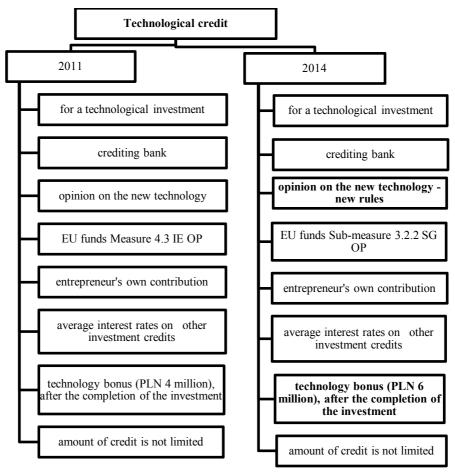


Figure 3. Evolution of the technological credit in the years 2011-2014

Source: Own work

#### 3. Conclusions

Based on the analysis of documents and reports of Polish institutions, the paper presents Sub-measure 3.2.2 "Technology innovation credit" as one of the financial support instruments for enterprises provided in the framework of SG OP 2014-2020. It is a continuation of Measure 4.3 "Technological credit" SG OP 2007-2013. Technological credit is an instrument which, through the mechanism of technological premium, reduces the risk of the project and impacts the propensity to invest in R&D. As studies show (Kiełek, 2013; Szczucki et.al., 2013), this instrument is a proven and highly effective mechanism for granting public funds for innovative projects. The results of the study indicate that the use of technological credit funds available in the years 2005-2008 and 2008-2013 had a positive impact on the operation of enterprises in three main areas: product and technical, market as well as economic and financial ones (Kiełek, 2013). The institutional system of implementation of technological credit based on commercial banks and a public institution (BGK) has proved to work well. Technological credit is an instrument that supported productivity and the work on financial instruments for the support of new technologies should continue to develop in this direction. Systems for selection of co-financing applications submitted by entrepreneurs should be assessed in order to eliminate those that do not present well-thought out projects and projects whose implementation will not contribute to the development of the company and the economy.

On the basis of statistical data, the author discusses the use of the EU funds by innovative enterprises in Poland. The data show an increasing share of public funding in the financing of innovative activity of these enterprises. This is of particular importance in reducing the financial gap in enterprises. The support model introduced in the SG OP uses both equity and debt instruments, thus creating financial engineering instruments used at different stages of business and technology development. Greater importance of repayable instruments in 2014-2020 increases the possibility of more efficient use of the EU funds.

The measures undertaken to foster the growth of innovativeness of the economy are aimed at increasing its competitiveness. Solutions introduced in the field of effective mechanisms to support innovation and to increase public spending on investments in research and development will stimulate growing involvement of private entities in this area. Activities in the framework of the SG OP are designed so that companies as well as research units could obtain financial support at every stage of technology development. The result of these actions taken under the SG OP will be greater commercialisation of research results and support for the development of advanced technologies.

The future development will be less concentrated on making up for backwardness in the national potential for innovation and more focused on the already perceived Polish advantages and specialisations on the global scale (the smart specialisation strategy). This will be facilitated by the Smart Growth Operational Programme for the years 2014–2020, financing research, the development of new innovative technologies and measures to enhance the competitiveness of small and medium-sized enterprises (Pokorski, 2015).

### References

BGK (2015). Regulamin konkursu w ramach PO IR 2014-2020. Warszawa: Bank Gospodarstwa Krajowego, 2015.

BGK (2016). *Aktualności kredytu na innowacje technologiczne* [online]. [cit. 2016-02-21]. Available: https://www.bgk.pl/przedsiebiorstwa/kredyt-na-innowacje-technologiczne/aktualnosci/single/prawie-500-firm-stara-sie-w-bgk-o-dotacje-na-innowacje-technologiczne-1715/

European Commission (2008). *Putting Small Business First. Europe is good for SMEs, SMEs are good for Europe.* Brussels: Enterprise and Industry, 2008.

European Commission (2010). Communication from the Commission Europe 2020. A strategy for smart, sustainable and inclusive growth. 3.3.2010, Brussels: European Commission, 2010.

Ferrer, J.N., Volkery, A., Witkhana, S., Medarova-Bergstrom, K. (2012). *The use of innovative financial instruments for financing UE policies and objectives*. Brussels: Centre of European Policy Studies, 2012.

Głodek, P., Kiełek, E., et al. (2014). Ocena ex ante instrumentów finansowych w ramach Programu Operacyjnego Inteligentny Rozwój Raport końcowy. Warszawa: Ministerstwo Infrastruktury i Rozwoju, 2014.

Gualandri E., Venturelli V. (2008). Assessing and measuring the equity gap and the equity requirements for innovative SMEs. CEFIN Working Papers No 7. Modena: CEFIN.

GUS (2014). Działalność innowacyjna przedsiębiorstw w latach 2011-2013. Warszawa: GUS, 2014.

IBnGR (2010). Mechanizmy inżynierii finansowej w podnoszeniu efektywności absorpcji środków UE i ich znaczenie w polityce spójności po 2013 roku. Gdańsk: Instytut Badań nad Gospodarka Rynkowa, 2010.

Kiełek, E. (2013). Kredyt technologiczny jako instrument zwiększania innowacyjności przedsiębiorstw z sektora MSP w Polsce (PH.D. dissertation). Łódź: Uniwersytet Łódzki, 2013.

Kalver T., Vanags J., Maniokas K. (2012). Financial Engineering Instruments: The Way Forward for Cohesion Policy Support? Recent Experience from The Baltic State. *Baltic Journal of Economics*, vol.12, iss. 1, pp. 5-22.

Larsen, P., Lewis, Al. (2007). How Award-Winning SMEs Manage the Barriers to Innovation?. *Creativity and Innovation Management*, vol. 16, iss. 2, pp. 142-151.

Lee, N., et al. (2015). Access to finance for innovative SMEs since the financial crisis. *Research Policy*, vol. 44, iss. 2, pp.370-380.

Mina, A., et al. (2013). The demand and supply of external finance for innovative firms. *Industrial and Corporate Change*, vol.22, iss. 4, pp. 869-901.

MRR (2012). Strategia Rozwoju Kraju 2020. Warszawa: MRR, 2012.

Meuleman, M., De Maesenerie W. (2012). Do R&D subsidies affect SMEs' access to external financing? *Research Policy*, vol. 41, iss. 3, pp. 580-591.

Nicolaides P. (2013). Financial Engineering Instruments and their Assessment Under EU State Aid Rules. Bruges European Economic Policy Briefings. 26/2013 [online]. [cit.2015-12-21]. Available: https://www.coleurope.eu/system/files force/research-paper/beep26.pdf?download=1

Nieć, M. (2015). Działalność innowacyjna przedsiębiorstw w Polsce na tle krajów Europy. In Zadura-Lichota, P. (ed.). *Innowacyjna przedsiębiorczość w Polsce. Odkryty i ukryty potencjał polskiej innowacyjności*. Warszawa: PARP, pp.11-46.

North, D., Smallbone, D., Vickers, I. (2001). Public Sector Support for Innovating SMEs, *Small Business Economics*, vol. 16, iss. 4, pp. 303-317.

OECD (2006). The SME Financing Gap: Theory and Evidence, *Financial Market Trends*, vol. 2006, No 11, iss. 2, pp. 89-97.

Pełka, W. (2007). Finansowe uwarunkowania rozwoju innowacji w Polsce. In Okoń-Horodyńska, E., Zachorowska-Mazurkiewicz, A. *Innowacje w rozwoju gospodarki i przedsiębiorstw: siły motoryczne i bariery*. Warszawa: Instytut Wiedzy i Innowacji, pp. 155-170.

PKPP Lewiatan (2011). Słabe i mocne strony sektora MSP w Polsce. Szanse i zagrożenia rozwojowe. Warszawa: PKPP Lewiatan, 2011.

PKPP Lewiatan (2013). Czarna lista barier dla przedsiębiorczości 2013. Warszawa: PKPP Lewiatan, Warszawa, 2013.

Pokorski, J. (2015). Budowanie potencjału innowacyjnego firm w Polsce – wyniki Programu Operacyjnego Innowacyjna Gospodarka. In Zadura-Lichota, P. (ed.). *Innowacyjna przedsiębiorczość w Polsce. Odkryty i ukryty potencjał polskiej innowacyjności*. Warszawa: PARP, pp. 87-88.

Radas, S., Anić, I.D., Wagner, V. (2015). The effects of public support schemes on small and medium enterprises. *Technovation*, vol.38, pp. 15-30.

Szczucki, J., Gajewski, M., et. al. (2013). *Instrumenty inżynierii przedsiębiorstw. Ocena realizacji instrumentów inżynierii finansowej w ramach NSRO 2007-2013*. Warszawa: PAG Uniconsult sp. z o.o. & Taylor Economics sp. z o.o., 2013.

Dz. U. 2014, poz. 226., z 2015 r. poz. 1308, Ustawa z dnia 30 maja 2008 roku "o niektórych formach wspierania działalności innowacyjnej" (Journals of Laws 2014, item 226, 2015, item 1308, Act of 30 May 2008 "On some forms of supporting innovative activity").

Dz. U. 2008 nr 116 poz. 730, Ustawa z dnia 30 maja 2008 roku "o niektórych formach wspierania działalności innowacyjnej" (Journals of Laws 2008, no. 116, item 730, Act of 30 May 2008 "On some forms of supporting innovative activity").

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# 26. WHY WAS THE CASE VAHOSTAV - SK, A.S. IMPORTANT FOR THE FUTURE OF ENTERPRISE RESTRUCTURING IN THE SLOVAK REPUBLIC?

**Abstract:** Restructuring is an alternative to bankruptcy. The core of the framework is to provide legal protection of debtor's position from creditors. The process of restructuralization is rather complex – with phases defined in the Act. The main objective of the paper is to present restructuralization of enterprises in the Slovak republic and via the case VAHOSTAV – SK, a.s. (the Slovak constructing company) describe reasons – economic and non-economic for modification of the current approach.

Keywords: creditors, debtors, restructuralization

JEL Classification: L21, M21

#### 1. Introduction

Restructuralization is a process of an enterprise entity recovery and is an alternative to bankruptcy. The core of the framework is to provide legal protection of debtor's position from creditors. Settlement with creditors is much faster and covers higher percentage of payables than in bankruptcy. The objective of restructuralization is to satisfy creditors and create business conditions that support operation of an enterprise.

Restructuring of an enterprise can be performed in the Slovak republic: on the basis of the decision of enterprise owners outside of the court (the entrepreneurial decision) and on the basis of the decision of a court (via approval of a court). The difference is in the fact that in the first alternative restructuring is performed within operative activities of an enterprise (based on autonomous owners' decisions).

The main objective of the paper is to present restructuralization of enterprises in the Slovak republic and via the case VAHOSTAV – SK, a.s. (the Slovak constructing company) describe reasons – economic and non-economic for modification of the current approach.

#### 2. Literature review

Restructuring is a way to solve enterprise problems. There can be different aspects of an enterprise crisis. Based on the specific aspects (see results from the research: Bibeault, 1999) the reasons of an enterprise crises consist of following factors: internally created problems that could management influence - 52%, the balanced ratio between external and internal factors - 15%, the balanced ratio between external and internal factors outside the management control - 8%, accident adversity - 1%.

The Act. No 7/2005 "On bankruptcy and restructuring of an enterprise" is a legal document according to which an enterprise can be restructured in the Slovak republic (SR). Since 2005 there have been 530 enterprises approved by law to enter restructuralization. An average repayment of receivables has reached 30%.

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The idea of enterprise restructuralization is vital especially for transitional economics (see: Majstorovič et al., 2016; Hu, Hassink, 2015). The concept is not limited to a predefined sector; can be applied in different sectors and also reflects interests of a state, owners and employees (see: Ushijima, Iriyama, 2015; Kavadis, Castaner, 2015; Massad, 2015).

## 3. Methodology of the research

The paper is based on the approach: analyze and summarize general principles, problems of enterprise restructuralization and reflect them to the specific case of the Slovak enterprise VAHOSTAV – SK, a.s.

There were analyzed Acts, published outputs of stakeholders and state bodies. The framework of the research can be stated by the following steps:

- formulating and clarifying the topic,
- review of literature and data relevant to the subject,
- collecting primary data specific for restructuring in the Slovak republic and specifically for VÁHOSTAV – SK, a.s.,
- analyzing quantitative and qualitative data
- present history of the approach that determines the future procedures of enterprise restructuring in the Slovak republic.

#### 4. Restructuralization process

The idea of restructuralization is applied in almost all countries within EU.

Table 1. Development of enterprise restructuralization in the SR

Year	2007	2008	2009	2010	2011	2012	2013
Delivered and non-proceeded proposals for restructuring total	12	17	82	137	139	-	-
Approved restructuralization	8	10	58	104	99	90	113

Source: The Ministry of Justice SR

The reason of this paper is straightforward – during March and April 2015 huge political disputes started due to VAHOSTAV - SK, a.s. Its background can be identified in not reimbursed payables to small and medium enterprises (contractors/subcontractors). Due to restructuralization it was expected that up to 1 241 subcontractors will be reimbursed to 15% of the total amount of real receivables. The extra political meetings of Slovak parliament were organized to find solutions acceptable for – employees of VAHOSTAV – SK, a.s. (15 000), small and medium enterprises – subcontractors and VAHOSTAV – SK, a.s. owners.

The prime minister was involved in the process – his attitude has developed towards this problem. At the beginning (March 2015) he sent a message to media that this is purely an economic problem and therefore the government will not interfere. At the end of April at the media and in communication with different Associations the prime minister was the only the government representative (as the head of the crisis team) who negotiated and communicated with public. His involvement deepened with intensity of the problem – economic at the beginning, political at the end.

The process of restructuralization (according to the Act 7/2005) consists of the following phases:

- restructuring review is prepared by an administrator,
- proposal for authorization of restructuralization,
- initiation,
- approval of restructuralization,
- registration of receivables in this phase debtors register their receivables; the role of administrator is to compare the receivables to accounting and other documentation and with the list of debtor's payables. The administrator is responsible based on the law to accept or cancel the delivered receivables. (The VAHOSTAV SK, a.s. administrator of restructuralization approved debts in 93,3 mil.€; banks debts are secured so their receivables were approved to 92,3 mil. € and fully refinanced (situation at the beginning) but entrepreneurs of small and medium enterprises and craftsmen should be repaid to 15% of registered receivables),
- the meeting of creditors expresses the interests of creditors,
- elaboration of restructuralization plan the content is based on the Act.; for each group of receivables is compared legal position and the amount that will be reimbursed,

- the approval meeting the vote is separately performed according to the group of approved receivables,
- confirmation of the plan by court,
- fulfillment of obligations and commitments.

#### 4.1. VAHOSTAV - SK, a.s. - brief description

The core business of VAHOSTAV – SK, a.s. consists of constructing activities: preparatory work for construction, demolition and earthworks, implementation of buildings and their changes, exploration and underground work, preparation and building of tunnels.

VAHOSTAV – SK, a.s. is the daughter company of FIASIS a.s. that owns 100% of its capital. Within consolidated financial statements (18 companies) are presented financial results.

Table 2. Balance sheet (selected items) – VAHOSTAV – SK, a.s.

	31.12.2014	31.12.2013
Assets		
LT Assets	65 447 194	63 998 254
Current assets	81 935 104	84 216 385
Total	147 382 298	148 214 639

	31.12.2014	31.12.2013
Liabilities		
Capital, reserves	3 536 099	16 571 144
LT Payables	40 835 012	18 954 368
ST payables	103 011 187	112 689 127
Total	147 382 298	148 214 639

Source: FinStat

Table 3. Income statement (selected items) – VAHOSTAV – SK, a.s.

	31.12.2014	31.12.2013
Sales	126 056 419	157 892 939
Subcontracts	32 868 704	40 292 073
Materials, energy and inventories	49 860 652	72 930 237
Profit after tax	-13 035 045	-13 830 232

Source: FinStat

**Table 4. Financial ratios** 

	31.12.2014	31.12.2013
Current ratio	0,80	0,75
Debt equity ratio 1	11,55	1,14
Debt equity ratio 2	0,02	0,13
LT payables/Liabilities	0,28	0,13
ST+LT payables/Liabilities	0,98	0,89
	<u>.</u>	
Subcontracts/Sales	0,26	0,26
Materials, energy/Sales	0,40	0,46

Source: FinStat

From Table 2 – Table 4 we can follow:

- the decrease of own capital is dramatic; the reason was the loss of the company in the current year (also in the previous years),
- the value of assets and liabilities is almost constant in years 2013-14,
- there is a dramatic increase of long-term payables; this is a sign of current and future problems of the company,
- the development of the ratios (see equations (1),(2)):

$$debt \ equity \ ratio \ 1 = \frac{long \ term \ payables}{capital} \tag{1}$$

$$debt \ equity \ ratio \ 2 = short \ term + \frac{long \ term \ payables}{capital}$$
 (2)

- expresses the "dangerous" trend because own capital is extremely low; external financial resources are huge and the impact on the company (its liquidity) can be devastating;
- the massive decrease of cost items materials and energy is unclear (although positive trend) and does not correspond to the decrease of sales (as %).

In the case of VAHOSTAV – SK, a.s. - its constructing activities were oriented towards the roads segment up to 70% of its turnover (with adequate tangible assets for this investment activities). That was the reason why VAHOSTAV – SK, a.s. should continue in the constructing sector of the Slovak republic.

### 4.2. Problems of restructuralization – backgrounds

Problems of VAHOSTAV – SK, a.s. can be split to economic and political nature (moral factor is also important).

Economic consequences:

- payments to subcontractors are limited because of restricted financial resources,
- because of legislation VAT of subcontractors was paid,
- not all subcontractors registered their receivables what undermines the entrepreneurial activities in constructing companies/sector,
- as a consequence the subcontractors will receive partial amount (at the beginning of negotiation 15% of registered amount); this has impact on their liquidity and also their risk adverse approach towards future business activities.
- the financing of constructing highways is based on mix of state and EU finance and therefore the reliability and timing of financial flows is positive for any suppliers and its possibility to manage cash flow (expected but not reality).

Political consequences:

- current leading political party (constitutes government) declares itself as social-democratic party;
   therefore it can be assumed that a lot of their voters (owners and workers from small and medium companies, craftsmen) would be the most influenced by the VAHOSTAV SK, a.s. restructuralization,
- the one of the most influential supporters (unofficially) of the leading party is the major owner of the company; this fact was the headline of opposition activities in communication to public,
- the attitude and position during these disputes were with the impact on political preferences; originally economic and technical problems have transformed to political ones.

One of the most frequent arguments explaining the current situation of VAHOSTAV – SK, a.s. were many statements of different representatives (political, economic) that prices provided in public procurement bid were under evaluated (under real costs).

The Ministry of Transport, Construction and Regional Development reply (from that time period) was, that all cost items were controlled by experts from Ministry, Procurement Office of SR and JASPERS (office from EU) because the construction was co-financed by EU funds. The case VAHOSTAV – SK, a.s. is subject of investigation - at the initiative of the Prosecutor.

VAHOSTAV – SK, a.s. consists of 15 companies – financial flows among them and the mother company can be one of the reasons to the current financial situation of the mother company. The owners` structure is complicated and not transparent.

#### 4.3. Current solution - future risks

The basic framework of "Memorandum" was signed 22. April 2015 with participants: government of SR, Slovak guarantee and development bank, CEO of VAHOSTAV – SK, a.s., involved banks, president of Craftsmen association, head of Entrepreneurs in the Constructing Sector and the representatives of VAHOSTAV – SK, a.s. creditors.

The framework declares:

- in case that repayment of creditors receivables are under 50%, the rest to 50% will be recovered from the future profits of the company; there is no period of limitation,
- the receivables of secured creditors will be reimbursed to 85%,
- the receivables can be capitalized to 49% of equity,
- unsecured creditors can sell their receivables to the state bank Slovak guarantee and development bank; the reimbursed will be 50% of receivables in cash; this possibility is valid immediately till the end of 2015.

Other items concerning the problem:

- companies will be able to disburse profits to owners only after paying subcontractors 100% of all receivables,
- selling receivables to state bank so called "Mailbox companies" will be excluded from the process,
- the Slovak guarantee and development bank will get financial resources from extra tax of commercial banks,
- companies with the turnover to 75 000 € / year get the possibility to pay VAT after receiving money on account for their services without penalty,
- companies included in restructuralization (based on the law) will not be able to take part on public procurement (for relevant period).
- constructing companies will create the fund to repay receivables to small and medium companies during the process of restructuralization,
- owners of companies will not be allowed to capture process of restructuralization company via borrowings to their company,
- possibility to give up the current administrator of a company.

The proposal to get in cash immediately 18,5% from the classified receivables and the rest will be repaid from expected profit in the future creates potential risks of insufficient financial resources and possibility of other problems that will discontinue repayment of payables to subcontractors.

The proposal to transfer receivables to shares can be relevant for financial investors. The supply of shares to subcontractors (to repay receivables) seems to be unreasonable in practice. Their priority is "core business" and these are construction activities. The ownership of a small amount of shares plus uncertain future of the company VAHOSTAV - SK, a.s. and a lack of financial know-how seems to be the potential risk for small and medium enterprises.

Additional tax to banks means for banks additional costs that can be postponed to customers (expected); the prices of banking services may increase; with the impact to inflation.

It is not clear how the procedures will be performed in case that company will not be able to pay receivables; how will Slovak guarantee and development bank operate in these conditions; the amount of state debt depends on the solution of EU statistical office.

It is not allowed to companies to take part at public procurements during the phase of restructuralization. It seems rather contradictory to the original idea – to save a company and fulfill all receivables of debtor; this decision is not proactive but it is in fact punishment and assumes (informally) that all companies in restructuralization are in this phase not because of business consequences but dishonest practices; this measure seems not to be relevant with the idea of restructuring.

In the construction community it is unofficially said applications to projects were with prices that do not cover costs. There is no proof that the ground of the problems was due to "tunneling" of companies – cash is transferred to private accounts. It is said in professional circles that the company entered the bids with prices under real costs. The strategic vision could be in liquidation of competitors (to subsidize unprofitable projects form other constructing activities). Liquidation of competitors will cause increase prices for the future – this idea with intended political support could be one of the reasons of the current situation of the company.

These proposals are linked to economic, legal, ethical aspects. The economic aspects deal with micro- and macro environment of an enterprise. Legal aspects are directly linked to Business Code and the Act "On bankruptcy and restructuralization". Indirect aspects (more important in the long run) reflect the legal obligations and their possible impact on private ownership (owners of enterprises proved illegal transactions). The solution also influences the attitude towards business and the ethical reliability of state institutions.

The risk that surprisingly was not minimized was the risk due to the system of cash flow. The current steps content the following bodies: the state investor – general contractor – subcontractors + craftsmen. That means that for constructing activities pays a state investor to a general contractor (without being able to control flow of cash flow). Therefor one of the possibilities would be to fuel cash directly from state investor to subcontractors (based on the general contractor approval). Because of this risk I see the current solution as potential source of problems in the future – influenced not only micro – but also macroeconomics.

The update of relevant act was approved by the parliament at 27.04.2015.

#### 5. Conclusion

In the paper was identified that the case was not only economically but also politically sensitive. The objective of all participants in this process is to find balance between political, social and economic objectives. In the case VAHOSTAV – SK, a.s. economic aspects started to develop political ones. Based on this case there were up dated the Acts in order to secure suppliers/subcontractors and to perform the process of restructuralization transparent. As the results there were applied steps that do not minimize risk for the future in similar scheme as was applied between the state body (Ministry), VAHOSTAV-SK, a.s. and subcontractors. The case VAHOSTAV – SK, a.s. also proved the lack of academic discussion to this problem in the Slovak republic.

#### References

Act No (7/2005). *On bankruptcy and restructuralization* [online]. [cit. 2015-11-13]. Available: http://www.vyvlastnenie.sk/predpisy/zakon-o-konkurze-a-restrukturalizacii/.

Bibeault, D. B. (1999). Corporate turnaround - how managers turn losers into winners. Washington D.C.: Beard Books, 1999

Financial Statements - Váhostav-SK, a.s. [online]. [cit. 2016-02-17]. Available: http://www.finstat.sk/31356648.

FinStat (2016). [cit. 2015-11-13]. Available: http://www.finstat.sk/31356648.

*Handling the bankruptcy agenda in district courts.* [online]. [cit. 2016-02-17]. Available: http://www.justice.gov.sk/Stranky/Informacie/Statistika-konkurznych-konani-OS.aspx.

Hu, X., Hassink, R. (2015). New perspectives on restructuring of old industrial areas in china: A critical review and research agenda. *Chinese Geographical Science*, pp. 1-13.

Kavadis, N., Castañer, X. (2015). Who drives corporate restructuring? co-existing owners in French firms. *Corporate Governance (Oxford)*, vol. 23, iss. 5, 417-433.

Majstorović, D., Vučkovac, Z., Pepić, A. (2016). From Dayton to Brussels via Tuzla: Post-2014 economic restructuring as Europeanization discourse/practice in Bosnia and Herzegovina. *Journal of Southeast European and Black Sea*, vol. 15, iss. 4, pp. 1-23.

Massad, M. (2014). Company restructuring as part of a comprehensive change plan during periods of transition in leadership: The case of al quds pharmaceuticals company. In G.C. Khoury, M.C. Khoury (eds.). *Cases on management and organizational behavior in an Arab context*, pp. 294-315 [online]. [cit. 2016-02-17]. Available: http://www.igi-global.com/chapter/company-restructuring-part-comprehensive-change/94840.

*Ministerstvo spravodlivosti SR* (2016) [online]. [cit. 2015-11-13]. Available: http://www.justice.gov.sk/Stranky/Informacie/Statistika-konkurznych-konani-OS.aspx.

Ushijima, T., Iriyama, A. (2015). The roles of closure and selloff in corporate restructuring. *Journal of the Japanese and International Economies*, vol. 38, pp. 73-92.

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# 27. THE IMPORTANCE OF TEACHING PROCESS MANAGEMENT AND INFORMATION COMMUNICATIONS TECHNOLOGY

Abstract: The aim of this paper is to draw attention to the general attributes for education in any field, because practice needs people who known context, controlled opportunities for decision making, they can further educate and have a basic knowledge of management. Clearly the common attributes of education are knowledge of ICT technologies control. management control theory and systems theory. The aim of the paper is not to doubt the importance of other knowledge, such as language skills, knowledge of psychology or logic, but to highlight the importance of education in management, process modeling and IS/ICT. Students can use social networks, but often do not know the possibility of using IS/ICT for management. The aim is to refer to the processes, management, IS and ICT as the common attributes for higher education. The aim is to appeal for more attention on options and control theory already in education. The benefit of this article should be based on reports in the literature and based on experience, using controlled interviews and the discussions at scientific conferences summarize the findings of the need for more education in the universities modern theory of management. University educated person should practice drive. Modern method of management is process management and the modeling of systems and processes. Novelty of paper is the finding that clearly illustrates the systems and processes are currently used and presented in practice, so we recommend included in the modeling of the higher education processes and systems.

Keywords: process management, learning, process modeling, information systems/information-communication technologies

JEL Clasification: I20, I21, A22, A23, M10, M15, M16

#### 1. Introduction

Is process management on the decline? Many managers are disappointed while introducing process management, they feel "lost" in the technology. So where is the cause of disappointment? The volume of corporate data is growing really quickly, in two years often fourfold, it is a fact. ICT progress is rapid and open more and more opportunities for management. But up to 90% of the data are unstructured. Many managers have established processes as a goal, rather than the possibility of effective management. Formation processes becomes the administrative operation, not the possibility of detachment. Instead of managers think about the process and tried to make them more effective, they reduce costs. In fact the correct adjustment of process is thereby essential. For the correct implementation of information systems, it's an analysis processes that is preceded. Incorrectly analyzed data bring bad outcomes that lead to incorrect business decisions. Traditional data and processes must therefore be effectively combined with large data set. This paper considers the possibilities, importance and the need of teaching modern management theory and management. Graduate of any university should be able to manage.

Some people might argue that systems of today are so intuitive and holistic that is enough to fill them and so everyone knows it. But is it reality? It would be only dearly paid banks of data. For any management, the inputs are necessary. We must know how to properly use the data, the possibilities and aims we have for the use of these data.

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Of course it is different to lecture these theories, for example, for lawyers, doctors and different for future engineers in field of technology. It's a matter of didactics. Surely you will agree that each of them will manage, for example, his own company or will be the director of the factory and everyone will operate with human resources and information and communication technology. Everyone will realize certain processes. Why not to know about them as much as possible?

Already in 1995, Bill Gates said, "To all my advice, try to know as many of the technologies that our lives one way or another touch. The more you know about them, the less you can baffle. The role of technology is to give people greater flexibility and productivity".

#### 2. Problem statement

It goes without saying that each institution has to focus on education, science, research and practice. As already stated, the role of any university is to educate future managers in the sector. Management theory is a scientific discipline that can be learned. A person can have a talent for sport, music, as well as talent management for organizations, companies, human resources. Despite the talent but we know that's not enough, if the talent, must be developed. People around the world are constantly trying and trying to find the right path management throughout the company. But as we all know, it is a very complicated process and thus theories are confronted with practice and always to the time lag, often in historical context.

It is now obvious phenomenal tool for the management team and the ICT technologies. Although not necessary but forget that they are a tool, not the executor of the management process. Management is always on individual personalities. One has to learn some area of knowledge, skills and then be able to manage.

Education in universities should be preceded, of course, education in the field (for example bachelor degree) but a general extension should be focused on education management processes in the art (human resources, manufacturing processes, economic processes, logistics processes, learning processes, etc.).

We know that educational institutions offer a variety of staff development programs for employees to keep up with educational innovation and ensuring quality education. It should make use of these institutions and teachers at universities and thus implement new knowledge directly to education.

#### 3. Literature review

According to many national and international scientists and experts in the field of information and communication technologies for governance is continually looking for ways and procedures for the management and effective use of ICT.

A critical summary of the failure of process management are now dealing with many experts. In Slovakia, we are talking about the need for a change of management for the decades, but only few companies and organizations really introduce them. That's fact. What is the real problem in introduction of process management? The lack of knowledge? Incorrect implementation of process management, which has become the administrative matters or the fulfillment of the criteria for the introduction of ISO? The philosophy of process management? Education in this area? The specialized publications can be found pursuit of direct application and process management in schools, and secondary schools (Solar et al., 2013).

As an example failures of process management, which should serve us to the elimination of submanagement shortcomings and to correct implementing whatever the mode of governance in higher education and in education at universities.

Failures of process management can be summarized (Železnik, 2012) to the following:

- Unwillingness to implement radical changes in the reorganization.
- Improper deployment of IS, without altering the way of organization.
- Misunderstanding and misuse of business processes that are the basics for creating added value.
- Unclear organizational strategy, vaguely defined long-term objectives.
- The instability of the business environment, improper decisions without quality analysis. This problem is apparent especially in state and local government (Rosičová, 2012).
- Management of the entire process degenerated to ISO management with the transfer of responsibility for managing processes on quality controller. As research suggests the concept of "process management" in local offices, 39% of offices understood the introduction of process management and process electronization and 20% implementation of quality management (Knežová, 2012).

- Companies that help to apply the solutions often proposed solutions to implement all newly copied
  and reality do not provide practical solutions (solutions with a lack of "common sense") (this issue
  is mainly a question of funding projects often illogical).
- Process modeling is unnecessarily deep in details and the project will end by describing business processes as established and printed documentation without further use.
- The life cycle of the project of implementation of process management is ignored by time and becomes a formality for lack of funds and interest in its further maintenance.
- Misunderstanding that without changing the corporate culture process management cannot be implemented.
- Nonunion enterprise IS/ICT business processes (Lemańska-Majdzik, Okręglicka, 2015).

In summary of failures, it is clear which path should follow the content of the course, which should prepare university graduates to managerial posts.

At universities, of course, there is enough space for education of these issues but it is necessary to appeal to their importance, as the practice still points to the insufficiency of knowledge in these areas. Only few graduates are able to apply to their job individually in the fields who studied. Finally, throughout the EU many projects are realized to promote employment of graduates. Supporting projects of requalification of graduates is not the right way in my opinion. By processes in the organization of schools should be continually reviewed the content of educational needs. Effectiveness of processes should be already increased at universities. Measuring of the effectiveness is a challenge for education. Mirror for education is a practice and practice should lead to continuous improvement. Tools exist and need to practice and teach them.

### 4. Methodology of research

By methods of: observation, gaining experience from the practice and study of literature, we proposed options how and where to draw evidence for the education of the alleged issue at universities. By proposal of models for the management and by design thematic areas in a given area, we illustrated how we should to educate continually, subsequently the students could continue with lifelong learning and build on already acquired knowledge. As an example, we indicate failures in the application of process management in practice. It is important therefor we are able to properly prepare the materials for training in this area. Next example explains the appropriate way how to search the documents for correctly oriented content, based on the analysis of education reflected in offers by educational institutions for commercial, lifelong learning. Based on these analyses it is possible to prepare the models from practice and content material suitable for education at universities.

Educational organizations offer seminars and workshops that provide the education that is often absent in universities such as:

- strategic innovation and opportunity,
- restructuring and reengineering,
- improvement of performance of process,
- development of corporate culture through soft skills.

It is obvious that the present requires lifelong learning and development, but the base should be in schools.

These organizations should be linked to universities and practice, their role is to provide continuing education. As they are commercial, they provide services of education that requires practice and should therefore be directed to the college in question, "What experience is required?", kind of links between school and practice.

An example of this includes the provision of education in a commercial company (http://www.ipaslovakia.sk/) to process management as a tool for increasing the performance of the company.

The aim of the seminar is:

- You will learn how to plan, manage and improve business processes simply and efficiently.
- The practical examples try selected methods and tools for process management in administrative and production processes.
- You will be able to identify weaknesses in business processes, innovate and improve their processes.

- You will be able to define the added value of selected business processes for internal and external customers.
- The example of a simple process team will show the basic principles of teamwork, focused on functional business process management.
  - The seminar program is:
- The process management, its objectives and basic principles of the optimal process Companies, administrative and production processes, identifying key wastage in the current process, draft a possible process improvement (activities, objectives of the activities responsible, term implementation).
- The method of process describing, parameters and process performance metrics, value stream mapping, process design organization, implementation of options of process organization, process improvement, process teams, process versus project organization, practical examples.
- Analysis and standardization of work within business processes, planning and organizing positions, job descriptions, coordinating and motivating people for process improvement
- Practical examples, training games

The seminar is intended for: executives of business units, managers of administrative and production staff, selected employees support service in both production companies, selected executives, buying staff, organization and management of business processes and manufacturing staff departments improvement, quality and personnel departments of Industrial Engineering and others, who wish to improve the organization and management of business processes.

The example points to the needs. Education in the IS/ICT is often at universities reached the level bases in MS Office pending a semester. Does it really enough?

Each management also focuses on quality and quality assurance, for example, it uses models for implementing and maintaining quality assurance. Models of application of quality use processes as a tool for realization.

Let show the facts that define the need of responsibility and modern education in management, IS/ICT, processes and modeling because:

- Information systems are directly related to process management and processes, so it is necessary that the general knowledge will be at the highest level, not only at specialists, but also by:
  - managers,
  - economists, etc.
- Implementation of IS must be preceded by processes, their modeling and optimization.

Let teach these options as soon as possible because their use is indispensable. Remind what a process is:

- Each work activity can be described as the process of transforming inputs into outputs.
- Each process has its owner and consumes certain resources.
- Process owner has its defined activities, responsibilities and powers that are connected to each other in the organization.
- Each process is now largely implemented through information systems.
- Each process can be improved, changed, revised.

Processes that have always been here, which is newer, is process management which can be defined as management, where processes especially business processes have a key role.

On process-managed organization we viewed from the perspective of:

- information,
- management,
- economics.

Start from the fact that the organizational structure and information systems are "only" infrastructure processes. These facts need to be implemented in education.

How processes help in the management?

Well prepared and defined processes help organize strategy of further development, for example by means of SWOT analysis.

It is also important to remember that modeling process is the basis for management. The information in the IS does not arise, it is only mediated. Information systems provide information about their surroundings, not about him. The task of Information Systems is based on data on the offer

to provide information in the relationship between the various elements of reality. The data input, the output is the same data, plus the added value of the relationships between data. We model the real world with its objects.

#### 5. Discussion and conclusion

"Human resource management is defined as strategic and logically coherent approach to managing the most valuable, what organizations are - people who are in work organization and who individually and collectively contribute to the achievement of organizational goals" (Armstrong, 2007).

Human resource management once again represents specific people management processes. When defining the main thesis we must correspond to the company:

- recruitment of employees,
- education of employees,
- maintaining and stabilization of employees,
- participation in the labor process,
- use employee.

In greater companies and organizations of these activities we use individual employees, but it is important to understand their work, able to guide their actions in context. Often smaller companies in all these activities must be carried out directly by the owner.

Criticism of the current higher education is often targeted at low utilization of independence of graduates. Graduates then go to work in positions that do not correspond to their education. These are positions that do not require a university graduate education often for reasons that graduate is not able to organize, manage, and secure their position in society. He was unable to manage even himself.

Even smaller company needs in the management system that can be supported by model, revising processes and etc. It helps answer a draft implementation for example on questions like (Figure 1).

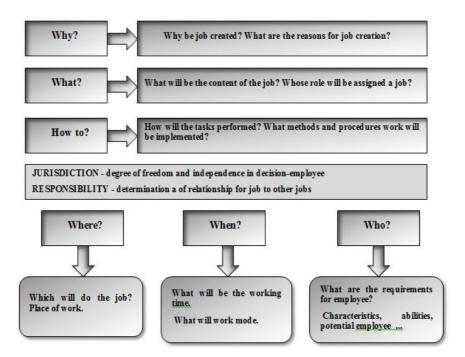


Figure 1. "How and why to create a job?" - A simple model

Source: Own work

This example model gives us instructions on how to proceed when creating a new job, but also to adjustment in accordance with operational requirements setting process. It is not good to underestimate the modeling school, as IS and management requires strong abstract thinking needs to be developed.

In game-based learning, the learner's engagement is increased and learning is made meaningful by applying game-like features such as competition and rewarding through virtual promotions or achievement badges.

Many managers also currently underestimate modeling. Owner of smaller companies often deemed it unnecessary. But it is mainly for reasons that they fix on modeling and not on the substance and content. All attributes in the process of activities often provide owner of course, but the definition of a model can confront things with practice. The model replicates reality, creates a space for reflection and creates possibilities to improve things.

The topic of modeling could be use as well as in other areas for example in the case of regional development and in many important industries. As Havierniková (2012) stated the industry of the Slovak Republic is one of the production sectors of the economy. Due to the reason mention above, it is necessary for summarizing of the aim of the article, we need to create a model for modern education and universal management tools and implementation of these instruments in education.

General findings can be summarized as follows:

- every college graduate should have sufficient knowledge of control theory
- each graduate should have skills of really high user level about information and communication technology.
- each graduate should have knowledge of the use of information systems at a high management level.
- each graduate should be aware that any implementation of the information system must be preceded by processes, their modeling and optimization.
- each graduate should have knowledge of systems theory.

The following figure 2 suggests individual attributes for education and also defines the role of the business processes of the organization.

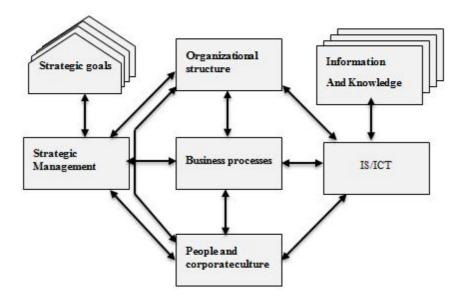


Figure 2. The role of business processes in the organization

Source: Own work

The EU is building e-government, but does not pay sufficient attention to user education – the user of the these new ways of governance. eGovernment still does not change the laws, but their fulfillment is conducted by using new possibilities. The managing of people comes as first, but today it is necessary to be familiar with the management capabilities of people using the IS/ICT. IS/ICT is a very good servant but a bad master. The more we use them the more they serve and create space.

In implementing the education process management it is necessary to summarize the most common misconceptions about the process management. As Havierniková (2014) stated, on the process management paricipates managing as well as paritcipated subsystem. Although process management has been for years to a maximum discussed term in the business area, which extends to the glorification of his, did not bring awaited result at the time. Many organizations that are enthusiastic for this concept remain disappointed.

But the practice of the reasons of using new IS/ICT highlights the potential of BPM (Business Process Management), which organizations can ensure not only increase yield but, ultimately, increase the total value added in the strategy of organizations. That's the reason that BPM has still future.

If we want to learn how to manage on schools, we need to look very closely at the management of universities and then adapt it to the needs of experience with maximum of use of existing opportunities.

The post has been dedicated to the possibility, the importance and the need to teach at the university modern management theory and management, and a strong emphasis on training in the use of IS/ICT. Graduate of any university should be able to manage. Progress in the area of IS /ICT does not stop but you need to know their correct use. Strong use of social networking without adding value of information is alarming. Almost everyone is a user, but we have little knowledge in the field of processing and using of information.

#### References

Alanne, K. (2016). An overview of game-based learning in building services engineering education, *European Journal of Engineering Education*, vol. 41, iss. 2, pp. 204-219.

Armstrong, M. (2007), Řízení lidských zdrojů.10.vyd. Praha: Grada, 2007.

De Rijdt, C., Dochy, F., Bamelis, S., Van der Vleuten (2016). Classification of staff development programmes and effects perceived by teachers, *Innovations in Education and Teaching International*, vol. 53, iss. 2, pp. 179-190.

Haviernikova, K. (2012). Selected aspects of clusters initiatives in the field of industry in the Slovak Republic. In *METAL* 2012: 21st International Conference On Metallurgy And Materials. Brno:TANGER; VSB - TU OSTRAVA; ASM Int; Czech Soc New Mat & Technologies (CSNMT), pp. 1838-1845.

Havierniková, K. (2014). The selected aspects of regional management in the context of clusters in the Slovak republic. *Nové trendy 2014: 9. ročník mezinárodní vědecké konference. Sborník příspěvků.* Znojmo: Soukromá vysoká škola ekonomická, pp. 55-64.

Knežová, J. (2012). Procesne riadenie v územnej samosprave - vybrane otazky. In *Ekonomické aspekty v územnej samospráve III. Recenzovaný zborník príspevkov z vedeckej konferencie*, Košice: UPJŠ FVS, pp. 181-190.

Lemańska-Majdzik, A. Okręglicka, M. (2015). Business process management in an enterprise - Determinants of the implementation and expected advantages In Kocourek, A. (ed.), *Liberec Economic Forum 2015*. Proceedings of the 12th International Conference. Liberec: Technical University of Liberec, pp. 305-314.

Levársky, S. (2014). Má už procesné riadenie najlepšie roky za sebou? [online]. [cit. 2016-02-10]. Available: http://www.zive.sk/clanok/73096/ma-uz-procesne-riadenie-najlepsie-roky-za-sebou (konzultant v spoločnosti DATALAN).

Neilson,G.L. (2000), Up the Organization! A Seven-Dimensional Model for the Centraless Enterprise. [online]. [cit. 2016-02-10]. Available: http://isites.harvard.edu/fs/docs/icb.topic942758.files/ISMT%20E-100%20Information%20Systems%20Management%20--%20Syllabus.pdf.

Řepa, V. (2012). Procesně řízená organizace, Praha: Grada Publishing, a.s., 2012.

Řepa, V. (2016). Business Process Modelling Notation from the Methodical Perspective. [online]. [cit. 2016-02-10]. Available: http://link.springer.com/chapter/10.1007/978-3-642-22760-8\_18#page-1.

Repa, V. (2007). Modeling objects dynamics in conceptual models, *Advances in information systems development*, vol 2: new methods and practice for the networked society, pp. 139-152.

Rosičová, J. (2012). Kvalita v manažmente verejnej správy. *In Zborník z konferencie 22. 3. 2012 In Look Days Košice*. *Marketing, manažment a súvislosti* [CD-ROM]. Košice: INTER M & K, spol. s r.o., pp. 1-7.

Sarrico, C.S., Alves, A.A. (2016). Academic staff quality in higher education: an empirical analysis of Portuguese public administration education, *Higher Education*, vol. 71, iss. 2, pp. 143-162.

Smejkal, V., Rais, K. (2010). Řízení rizik ve firmách a jiných organizacích., Praha: Grada Publishing, a.s., 2010.

Sodomka, P. (2006). Informační systémy v podnikové praxy. Brno: Computer Press, 2006.

Solar, M., Sabattin, J., Parada, V.(2013). Maturity model for assessing the use of ict in school education, *Edocational Technology & Society*, vol. 16, iss. 1, pp. 206-218.

Teller, J.(2013). Portfolio risk management and its contribution to project portfolio success: An investigation of organization, process, and culture, *Project Management Journal*, vol. 44, iss. 2, pp. 36-51.

Železník, O. (2012). Procesné riadenie, čo s ním? *In: Procesné riadenie 2012 : medzinárodná odborná konferencia : zborník prednášok a príspevkov :* 18.až 19. október 2012, Zemplínska Šírava. - Košice: SAPRIA, pp. 1-7.

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# 28. NON-GOVERNMENTAL ORGANIZATIONS' COOPERATION WITH LOCAL BUSINESSES AS A PART OF CORPORATE SOCIAL RESPONSIBILITY

**Abstract:** The first part of the article presents the characteristics of NGOs. Their functioning and aims were discussed. The second part of the paper puts forward NGOs' cooperation with local companies within the concept of Corporate Social Responsibility. It shows models and stages of development of such a cooperation. The third section of the article presents examples of relationships between non-governmental organizations and local companies.

Keywords: NGOs, local companies, CSR, NGOs' cooperation with businesses

JEL Classification: L31, M14

#### 1. Introduction

In recent days, one may notice an apparent cooperation between non-governmental organizations and local companies. Although these measures are taken quite rarely, non-governmental organizations quite often opt for the cooperation, which occur within Corporate Social Responsibility concept.

Corporate Social Responsibility is a term strictly connected to the strategy of organization, as well as its successful management. This concept includes a broad range of issues and entails taking actions within, as well as outside the company. Companies voluntarily allow for the CSR concept. These companies also take social, ethical, and ecological aspects into consideration, while being in contact with the stakeholders. To a large extend, the organizations strive toward reaching the balance between effectiveness and profitability, and social interest. Relations that rely on this concept may also include local businesses, and non-governmental organizations.

Local businesses anticipate the highest profit possible. This stands for their main aim. Non-governmental organizations on the other hand, in the majority of cases, do not anticipate profit, but a fulfillment of social help. Although these two institutions rarely cooperate with one another, sometimes cooperation is apparent. There are many reasons for which the businesses and non-governmental organizations are engaged in partnership, and are willing to collaborate. This kind of attitude may be caused by the willingness of the organization to gain benefits and profits through such cooperation. To a large extent, the creation of partnership Is born out of the concept of Corporate Social Responsibility. What is more, it is its part, and binding element.

The aim of the nearby article is to thoroughly analyze and describe the cooperation between non-governmental organizations and local businesses. To present the given topic, available literature, as well as internet sources have been used.

# 2. Characteristics of the non-governmental organizations

The economic structure of the country is divided into three sectors. The first sector includes public institutions, the second one economic institutions aimed at gaining profit, while the third sector is represented by the social (non-governmental) organizations. These organizations are defined as the institutions of the non-profit, non-governmental, or voluntary sector. Third sector is characterized by the variety of financial sources, organized autonomy, and a vast financial independence. Non-

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governmental organizations are not subject to supervisory authorities. The supervision is conducted only by the public administration in order to verify the legal status of actions conducted by these institutions (Roszkowska-Hołysz, 2002, p. 34).

According to some scholars, the history of the beginning of the non-governmental organization goes back to the ancient times (around 2000 years BC), and was recognized within activities conducted by the Egyptian society that was associated with being involved in the preparation for the holidays, or various religious celebrations. The scholars also link the origin of such institutions in Europe with the development of the religious orders (XV-XVII AD), which conducted philanthropic activities, and served to help the poor and the sick (Kurleto, 2008, pp. 35-36).

Help aimed at the poorest social class became very popular in the middle of the nineteenth century in Poland, and in Europe. The period of positivism, initiated the beginning of social activity. However, its dynamic development and the increase of the number of non-governmental organizations occurred in the second half of the XX century. It was caused by the shift within economic politics of a number of countries, and the cease of its funding from the public fund (Borzaga, Santuari, 2003, pp. 39-40).

The term of the third sector was defined repeatedly. Iwankiewicz-Rak created following definition: "Social sector (third sector of the economy) formed itself as a supplement of the private and public sector in response to the incomplete implementation of the social tasks by the government" (Domański, 2010, p. 26).

The third sector was also defined in Poland in the adopted by the Council of Ministers on the 4<sup>th</sup> of November 2008 "Strategy of the support of the development of civil society for the years 2009-2015". It is treated as:

- private and institutionally independent (non-governmental structure) institutions included in this sector can receive support from the government or collaborate with the experts from the public administration:
- unprofitable and non-market-based the aim of the organization is to satisfy the social needs, not to maximize profits (gathered incomes are not divided between the founders, all of the members, or the board);
- receiving support capital support or the help of volunteers, generally from the charitable, philanthropic, or beneficial sources (Salamon, Anheir, 1996, p. 27).
- The basic features of non-profit organizations which differ from commercial institutions are:
- functioning not for profit a profit is not the goal of the organization, and surplus is not divided among the given stakeholders of the organization;
- the indicator of the success in the non-profit organizations, it is difficult to clearly define the determinant aimed at defining whether the given goal has been achieved;
- the variety of stakeholders stakeholders are not only clients, owners, or workers, but donors, benefactors, public institutions, state-run institutions, media, different non-governmental institutions, society;
- acquiring financial sources the main providers of the financial sources are the sponsors, funders, and donors;
- culture and values there are differences within the organizational culture, and there appear to be a
  diversity of the meaning of moral and ethical values;
- the nature of the board in the managing authorities, there appear to be individuals that do not draw salary for their work (Courtney, 2002, pp. 47-50).

In general, the third sector deals with solving social problems, as well as aims at helping those individuals who need help the most, while maintaining market rules. The main and basic feature distinguishing it from the other sectors is that, it donates all the profits from the managed organization to the statutory aims (Domański, 2010, p. 26).

# 3. Cooperation between non-governmental organizations and local companies within the scope of Corporate Social Responsibility

Modern world is characterized by globalization and being robust. As a result of the following shifts, the network of relations between various groups is in the process of development. Public sector (public administration), market sector (business), as well as social sector (non-governmental organizations) interpenetrate, and gradually enhance the relationship between them. Companies, as well as non-

governmental organizations tend to encounter increasingly complex social and environmental problems. Approach of all the sectors toward one another is to a great extend connected, to the role of business in society being perceived in a different light. The expectations of the customers and the public eye impose on the companies obligation to take responsibility for its results and the effects of its activity. These expectations have its reflection in defined rules, standards, and norms.

Corporate Social Responsibility may be defined as actions that transcend business' pure economic issues to contain activities planned to gain social profits. Quoted definition is based on CSR operations toward society which emphasizes the broader notion of sustainability. CSR can be aimed at specific business groups or natural persons (Bai, Chang, 2015, p. 508). The strategic Corporate Social Responsibility approach confirms that economic gains of organizations and issues of society can be interrelated to achieve competitiveness within stakeholder and market segments (Jamali, El Dirani, Harwood, 2015, p. 127).

Non-governmental organizations are constantly facing the challenge of responsibility and better management. The fact that they quite often interact with business companies, demonstrates that they notice bigger possibilities and profits that come as a result of such cooperation. It is also a fact that both subjects can teach one another (Ćwik, Januszewska, 2014, pp. 9-10).

There are several models of cooperation between business and non-governmental organizations. James Austin is an author of one of the most popular typology of relations. He classified the models of Corporate Social Responsibility concept, based on seven levels: level of business's engagement, meaning for the business's assignment, invested resources, scope of activities, mutual influence, strategic meaning, and management. James Austin believed that there are three levels of sophistication of cooperation between business and a non-governmental organization. It is the philanthropic, transactional, and integrating cooperation (Austin, 2000, p. 72).

One of the simplest CSR models is a philanthropic model. In this case, the level of engagement is low and limit itself to giving money to the non-governmental organizations. The actions taken by companies usually do not have defined aim linked to its strategic aims. On this rank CSR, do not give business bigger profits, thus the companies decide to transfer to transactional and integrating model. Transactional model based on transactional, beneficial for both sides form of relation. Free movement of benefits occur. The cooperation between organizations expands. The companies become more engaged in social programs and activities conducted by non-governmental organizations. In the integrating model, partnership occurs. This stage requires from both sides a rather big commitment (Austin, 2000, pp. 73-75).

There are many reasons for which non-governmental organizations decide on cooperation with local companies (and the other way around). For both subjects, such cooperation can serve as a mean to expand engagements by using the synergy effect, creating value added for the society, environment, or local community, or creating innovative options and mutual inspirations. The cooperation may give these institutions focus on some issues from a different perspective as well as an exchange of the experiences and skills, which a given organization or company lack. Interaction based on the concept of Corporate Social Responsibility increase social trust for both subjects (Ćwik, Januszewska, 2014, p. 11).

From the perspective of the non-governmental organizations, benefits gained from the cooperation with local companies include:

- increasing the effectiveness of action through the support of the implementation of organization's mission;
- access to the business's resources such as: knowledge, expertise, material, financial resources;
- increase of the profession's functionality;
- improvement of the efficiency and quality of the action;

While the profits gained by the local businesses from the cooperation with non-governmental organization include:

- easier access to the local society and other groups of stakeholders (non-governmental sector is increasingly trustworthy for the society);
- possibility to solve social problems by gaining knowledge on these issues;
- creating better image and reputation;
- making use of the experiences of non-governmental organizations concerning the fulfillment of social projects, and the cooperation with volunteers (voluntary service) (Ćwik, Januszewska, 2014, p. 11).

Non-governmental organizations are most frequently cooperation- oriented. Cooperation with subjects, that are companies, make it easier, among other things, to define social sensitivity in the business's missions. It fosters the process of cooperation. Equally important is the attachment of business to values, promoted by it.

Good cooperation should be based on mutual knowledge of the sector and organization, in which one of the partners acts. Non-governmental organization should be familiar with the specifics of conducting the business activity, and understand the goals of its partner. An important flaw in conducting activities is a good communication, and looking for solutions, that both of the sides find beneficial. Non-profit companies should present only long-term deals of partnership, so that the businesses would feel comfortable while making a decision regarding both sides. Equally important is the image of the company (Rudnicka, Reichel, 2011, pp. 18-19).

The stages of cooperation between non-governmental organizations and local businesses, are based on three levels. The first stage is forming a cooperation. Organizations are looking for partners in order to fulfill social projects. On this level, they need to show, that they are a reliable partner. They can achieve that by: placing extensive information about the institution on the website, publishing activity reports on the regular basis, running activities while including ethical rules, running recommendations given by current business partners. On this level business and non-governmental organizations should act according to Corporate Social Responsibility rules.

The second stage is the realization of the project. It requires signing a deal. It can be a cooperation, sponsoring, donation, or a barter deal. The annexes to deals are the defined budget and the schedule of activities. Partners analyze and define the scheme of conducts.

The third stage is the termination of cooperation, or evaluation. Evaluation consists of summing up and assessing partnership. Both subjects assess the values of the project using defined criteria, in order to expedite, expand, or better understand it. They also gather analyses and interpret data, but also compare results of the project with initial assumptions (Ćwik, Januszewska, 2014, p. 32).

Cooperation between non-governmental organizations and local businesses does not always generate benefits only. It is worth for both of the institutions to analyze the risk that can occur during the realization of common activities. An exemplary, negative results can be a loss of credibility by the non-governmental organization, in the case of too accommodating and complainant attitude. It can also encounter a loss of independence through the relinquishment from the basic mission and values in favor of the requirements, imposed by the business. Other disadvantages appearing in such relations can be a loss of time and money, unpredicted excesses, increase of bureaucracy, and formalization of actions in the case of complicated mechanisms of accepting e.g.: donations, leak of information involving matters of commercial secrecy, or the negative reaction of media (Ćwik, Januszewska, 2014, p. 12).

#### 4. Relations between non-governmental organizations and local firms

#### 4.1. Research methodology

The aim of the nearby article is to thoroughly analyze and describe the cooperation between non-governmental organizations and local businesses. The main research method used in the study was a statistical analysis of the data contained in the Report of the research conducted within the project 'Support for partnerships - knowledge, tools, practice'. The article also presents a case study on the cooperation between business and non-governmental organizations within the concept of Corporate Social Responsibility.

#### 4.2. Examples relations between non-governmental organizations and local firms

Throughout the world, there are many examples of a relationship between non-governmental organizations and local companies within the scope of Corporate Social Responsibility. All the subjects engaged in cooperation manage for them to be seen, and to reach the biggest number of receivers possible.

A survey research was conducted in Lubuskie Voivodeship in Poland in 2015 as a part of the project "Support for partnerships – knowledge, tools, practice". The aim of the research was to identify preferences expressed by representatives from the business world and the NGO sector when it comes to embarking on mutual cooperation, in particular rationale for such decision and ensuing consequences. Reasons for the cooperation between non-governmental organizations with local businesses in Lubuskie Voivodeship are shown in Figure 1.

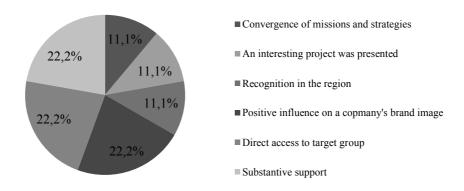


Figure 1. Reasons for starting cooperation with NGOs (by businesses)

Source: Nieporowski, 2015, p. 8

The research conducted by the CSR Profit Foundation proved that there are multiple reasons for starting cooperation with non-governmental organizations. 22,2% of those surveyed think that cooperation with the NGO sector is beneficial for a company's image. It facilitates direct contact with target groups and NGOs can be a substantive support. Almost half of the above-mentioned percentage starts cooperation with non-governmental organizations because their activity is convergent with mission and strategy of a company. The same number of respondents stated that given organization presented an interesting project and it is well known in their region.

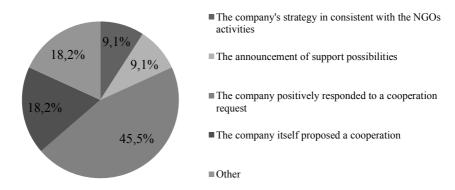


Figure 2. Reasons for establishing cooperation with businesses (by NGOs)

Source: Nieporowski, 2015, p. 9

From the NGOs' point of view, cooperation with businesses in Lubuskie Voivodeishop looks slightly different. Reasons for the cooperation between NGO with local businesses in Lubuskie voivodeship are shown in Figure 2. 45,5% of the third sector entities started cooperation with businesses for the simple reason – given company simply replied to their inquiry. 18,2% of non-governmental organizations established cooperation with companies because of their previous cooperation. The smallest group of respondents, only 9,1%, stated that the basis for cooperation was the mission and strategy of the firm convergent with the mission and strategy of the organization as well as publication of the advertisement presenting a possibility of support. Non-governmental organizations declared that their cooperation was usually short-term and mainly involved financial support.

The research also included analysis of areas where two parties cooperate more often than not. Partnerships are usually established in three main areas: education, social innovations and social inequalities. Each of these areas was mentioned by over 20% of respondents.

Assessment of the cooperation by companies and non-governmental organizations turned out to be of crucial importance. It is interesting that similar number of those surveyed perceived their cooperation as very good and as bad (about 30% in both cases). As a result, it is hard to gauge the level of cooperation and make a final appraisal of collaboration between companies and non-governmental organizations in Lubuskie Voivodeship.

Lubuskie Voivodeship is a model place where cooperation between the second and the third sector of the economy is very diverse. Some similarity is noticeable only in areas where partnerships are strong and prosperous.

An initiative presented by Interniti company targeted at NGOs exemplifies cooperation between companies and non-governmental organizations in Lubuskie Voivodeship. Interniti is a company specializing in creating Internet services and vertical portals as well as customized internet applications, internet stores and the like. Between January and June 2014 the company has implemented technological support system for local non-governmental organizations. As a result of the project Interniti established cooperation with six non-governmental organizations operating in Lubuskie Voivodeship. Partnership facilitated the creation of IT product which enabled NGOs to be present on the Internet thanks to having their own websites. The website is freely run and updated, enables communication with groups of stakeholders and enables organizations to present their activities without a need for having programming skills. Service help and access to back shop became important advantages for NGOs. On the other hand, improving the image of the company, building lasting relationships with social environment as well as popularizing company's CSR strategy was of importance for the business world.

Lubuskie Voivodeship is one of the examples of areas in Poland where cooperation between the NGO sector and businesses is evident and noticeable. Both parties care to raise awareness of such practices in the hope of potential benefits (*Podsumowanie prac nad projektem strona WWW dla NGO*, 2014).

In Poland cooperation between the second and the third sector is receiving increasingly more approbation. At the same time these actions are noticeable nationwide despite the fact that efforts are made mostly locally. There are many examples of this phenomenon.

Ogólnopolska Federacja Organizacji Pomocy Dzieciom i Młodzieży Chorym na Cukrzycę (All-Poland Federation of Help Organization for the Children and Youth Ill with Diabetes), each year on occasion of International Diabetes Day that occur on the 14<sup>th</sup> of November, organize social campaign under the name of "Słodki Tramwaj" ("Sweet Tram"). The campaign is conducted in many cities throughout Poland. Everyone can check their blood sugar level for free in a marked vehicles, and later go for a ride in them. Those participating in the event, can get educational materials on the subject of diabetes, its prevention, possible symptoms, and risks. The project is very popular, and interest in it has been enormous. The sponsors of the event is Bayer Diabetes Care company, Novo Nordisk company, and a website dedicated to the subject of diabetes – mojacukrzyca.org. These companies are engaged in a given initiative by financing the educational materials, equipment for checking blood pressure, and by advertising and circulating the scheduled campaign (Diabetycy.eu, 2014).

Another example is the campaign "Podaruj Dzieciom Słońce" ("Give Sun To Children") organized by Fundacja Polsat (Polsat Foundation). The campaign aims at helping ill children. The main sponsor of the campaign is the global company Procter & Gamble (P&G), which offers product of well known brands. All of them which are marked by the sun take part in the campaign, and part of the profit from the sale, is donated to the treatment and rehabilitation of children (Fundacja Polsat, 2015).

The success of the "Give Sun To Children" campaign, resulted in Polsat Foundation and Procter & Gamble still cooperating with one another. Confirmation of a good cooperation between these two subjects can be seen in another campaign "Z dumą wspieramy mamy" ("We Proudly Support Mums"). The campaign provides mothers with home-like conditions during the time their children stay at the hospital. First such room was constructed in Łódź, in the Instytut Centrum Zdrowia Matki Polki (Institute of the Center of Health of Polish Mother). Łódz is a city, where the company P&G is engaged in various social campaigns. It is strongly associated with, and participate in the campaigns conducted in this city (Fundacja Polsat, 2015).

Presented campaigns, or projects, are one of many examples that take place in Poland, and around the world. They indicate that the cooperation between businesses and social campaigns, that receive support from different social and business groups, is becoming more popular.

#### 5. Conclusion

Cooperation is a process, which requires mutual engagement in the conducted activities and initiatives. In order to achieve the goal, subjects need to invest their time, human, and financial resources.

Interaction is becoming more profitable. Opportunities to establish cooperation between the third sector and different subjects occur more frequently. It can be caused by the increase of meaning of this sector, and more apparent social sensitivity of the business representatives, which guarantee long-term and effective interaction.

Non-governmental organizations embarking upon cooperation with businesses, should not only remember about the guaranteed profits, but also about the negative results of taken actions. It is important for both subjects to credibly and meticulously assess the future success of the projects before embarking upon any initiative.

Despite the fact that cooperation on local scale between companies and NGOs is usually short-lived, both parties try to engage, increasingly more often, in various initiatives and cooperation. It is obviously connected with modern and ever-changing trends in conducting the business. However, above all, it is related to potential profits for companies and NGOs resulting from implementation of such CSR concepts.

#### References

Austin, J. (2000). Strategic Collaboration between Nonprofits and Business. *Nonprofit and Voluntary Sector Quarterly*, vol. 29, no 1, pp. 69-97.

Bai, X, Chang, J. (2015, June). Corporate social responsibility and firm performance: The mediating role of marketing competence and the moderating role of market environment, Asia Pacific Journal of Management, vol. 32, iss. 2, pp. 505-530.

Borzaga, C., Santuari, A. (2003). New Trends in Non-Profit Sector in Europe. The Emergence of Social Entrepreneurship. In: Noya, A., Nativel, C. (eds.). *The Non-Profit Sector in a Changing Economy*. Paris: OECD, 2003.

Courtney, R. (2002). Strategic Management for Voluntary Nonprofit Organizations, London-New York: Routledge, 2002.

Ćwik, N., Januszewska, J., (2014). Współpraca organizacji pozarządowych z biznesem. Poradnik efektywnej współpracy [online]. [cit.2015-12-20]. Available:

https://odpowiedzialnybiznes.pl/wpcontent/uploads/2014/04/BiznesNGO FOB.pdf.

Diabetycy.eu (2014). [online]. [cit.2015-12-23]. Available:

http://www.diabetycy.eu/index.php?option=com content&view=article&id=521&Itemid=606.

Domański, J. (2010). Zarządzanie strategiczne organizacjami non profit w Polsce. Warszawa: Oficyna a Wolters Kluwer business, 2010.

Fundacja Polsat (2015). [online]. [cit.2015-12-23]. Available:

http://www.fundacjapolsat.pl/Aktualnosc,5466/Z\_Duma\_Wspieramy\_Mamy,1454408/index.html.

Fundacja Polsat (2015). [online]. [cit.2015-12-23]. Available:

http://www.fundacjapolsat.pl/Chce Pomoc Podaruj Dzieciom Slonce,5559/index.html.

Jamali, D. R., El Dirani, A. M., Harwood, I. A. (2015). Exploring human resource management roles in corporate social responsibility: the CSR-HRM co creation-model, Business Ethics: A European Review, vol. 24, iss. 2, p. 125-143.

Kurleto, M. H. (2008). Organizacje pozarządowe w działalności pożytku publicznego. Warszawa: Lexis Nexis, 2008.

Nieporowski, P. (2015). Wsparcie dla współpracy partnerskiej – wiedza, narzędzia, praktyka. Raport statystyczny z badania. Zielona Góra: CSR Profit, 2015.

*Podsumowanie prac nad projektem strona WWW dla NGO*, (2014) [online]. [cit.2015-02-22]. Available: http://docplayer.pl/5238057-Podsumowanie-prac-nad-projektem-strona-www-dla-ngo.html.

Rak, M. (2011). Relacje organizacji pozarządowych z administracją publiczną i firmami biznesu. *Zeszyty Naukowe Wyższej Szkoły Bankowej w Poznaniu*, nr 22, pp. 69-70.

Roszkowska-Hołysz, D. (2002). Funkcjonowanie organizacji pozarządowych w Polsce. In Fic. M. (ed.). Funkcjonowanie instytucji non-profit do norm i standardów Unii Europejskiej, Zielona Góra: Uniwersytet Zielonogórski, 2002.

Rudnicka, A., Reichel J. (2011). *Jak przygotować program współpracy organizacji pozarządowej z przedsiębiorstwami*. Centrum Strategii i Rozwoju Impact, Łódź, 2011.

Salamon, L. M., Anheier, R. K. (1996). The Emerging Nonprofit Sector. An Overview. Manchester: University Press, 1996.

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# 29. POSITIONING OF REGIONS OF UKRAINE IN COMPETITIVE ENVIRONMENT

Abstract: The study helped to identify the necessity for positioning of a country and its regions in the international environment. Creation of a positive image of the country in contemporary conditions is gaining importance and becomes an objective need for competitiveness increase, which leads to the country's entry into the global economic environment as a valuable partner. Positioning of the regions allows promotion of beneficial features of the country as a whole, creation of a certain image that would be a powerful way to influence world public opinion, which altogether will promote investment in development of regional economy. The position Ukraine in the world ranking system was analyzed by using the ranking of World Bank Group (Doing Business) and assessment of global competitiveness (World Economic Forum). The main problems identified are inconsistent and contradictory decisions of authorities, internal conflicts, escalating conflict with Russia and cancellation of numerous economic ties etc. The main benefits lie in advantageous geographical location, powerful scientific and technical potential, cultural heritage, etc. This can be considered as the basis for developing a positioning strategy for the country in the international environment. The article stipulates that the most appropriate and effective form of positioning is the positioning of the country through its regions. Granting relative autonomy to the regions through decentralization significantly increases and intensifies competition in both interregional and international market and encourages development of social and economic potential, search for new forms and instruments of achieving social welfare.

Keywords: positioning, regions, strategy

**JEL Classification: M31** 

#### 1. Introduction

One of the main conditions for successful development of a country in a global environment is the increase of its competitiveness, based on creation of interior advantages in order to satisfy the growing needs of foreign and domestic customers.

In a modern world a country's competitiveness is one of the most influential concepts in economics of development and applied politics. The reason for this is that it embraces not only economic indicators, but also evaluates economic results of non-economic events, such as political processes and public administration, education level, scientific base, rule of law, informational infrastructure, which are necessary for stable development (Poluneev, 2005).

Under such conditions, a country's competitiveness is determined, on the one hand, by the level of its adaptation to global market processes and, on the other hand, by the effectiveness of domestic market environment, which appears in the harmonization of regional structural system based on the principles of free competition.

Kotler says that in a turbulent environment the territories have a task to introduce to the market something really great and unique (Kotler, 2005).

According to the author, this problem can be resolved by strategic marketing. One of the critical elements of strategic marketing is the desire of territory to achieve unique position and positive image on the huge European market (Kotler, 2005; Giffinger, 2010; Romanova, 2015).

Unfortunately, in Ukrainian society little attention is given to such important marketing tool as positioning. Globalization and integration trends penetrate all areas of modern social life, thus,

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stressing the necessity of presentation of the country and its regions in different format - emphasizing their competitive advantages, main values and priorities that distinguish them from other territories.

Therefore, the author in the research of Ukraine's positioning in the global market and analysis its regions' position in the national market bring attention to the importance and urgent need of the use of modern marketing approaches to the country's and its regions positioning.

# 2. Methodology of Research

The author selected rating evaluation and situational analysis as the research methodology in order to evaluate the current position of Ukraine in the global economic environment and determine its strong and weak points. Competitive analysis with integral index of region's competitive potential was also used in the research. The integral index was calculated on the basis of general indicators, grouped by the main seven blocks of development (according to the author's opinion): human capital, natural resource potential, business and investment attractiveness, regional innovation systems, international integration, infrastructure, socio-political environment.

The calculations of general indicators were made for each block of assessment of competitive potential by standardizing certain individual indicators, assigning them weights and adding them together. As the basis for calculation we used the method, described in details by Polish scientist - Pluta (1989).

In the analysis the researcher used official statistical data of State Statistics Service of Ukraine.

#### 2.1. Different Approaches to the Region Positioning

From the emergence and development of marketing as a science, the concept of "positioning" is identified as product positioning as well as positioning of territories, regions and locations.

In Encyclopedia of Marketing, the concept of "positioning" is considered in terms of the functional approach and is characterized as a search for such market position for the company, product or service that will be beneficial in relation to the position of competitors (Baker, 2002). The author clarifies the important detail: the positioning has to be carried out with the consideration of the target group. Positioning can be considered as a place that product takes on the market and how it is perceived by the relevant group of customers or market segment (Kendyukhov, 2006).

Despite the differences in approaches, there is a common understanding that as the result of positioning the product obtains competitive advantages not from a position of its properties (physical or operational), but based on its perception by the consumers. This is stressed by the authors of positioning concept Ries and Trout. They define positioning as the development and creation of product image so that it occupies rightful place that differs of the competing products in the mind of the buyer (Trout, Ries, 2007).

Nowadays the regions act as products that have consumer properties and are able to meet the needs of the target market. Because of the heterogeneity and potential opportunities regions can be classified by various characteristics. They are also entitled to cyclical development that meets the "product life cycle". But is it possible to apply the principles of product positioning to the regions and how in this case we can define the concept of "region positioning "? The answer to the question lies in the view of the region as an object of sale. According to Pankrukhin, it is important to remember that the territory is a very particular "product". The peculiarity is that its consumers have to live in the particular place, which is different from the consumption of other conventional products. The biggest difference is the complexity of the area "consumption" (Pankrukhin, 2010). In other words, along with customer value the buyer receives "the load", which is not so easy to get rid of, and sometimes impossible.

Positioning of the region is a continuous process of creation of a positive image, based on the identification of its unique capabilities and development of a strategy for creation of distinctive image and its fixation in the mind of the consumer. Positioning can have various objects such as regional enterprises, goods and services, recreational facilities, traditions and culture.

Positioning is considered a part of regional marketing. It becomes more relevant these days due to the processes of decentralization and granting relative independence to the regions, which leads to the increase of inter-regional competition and identification of disparities in regional development. In such circumstances regional marketing aims to address two interrelated objectives - providing competitive advantage in the external environment and optimization of the internal structure of regional economies for their successful social and economic development. The first direction can be exercised when each

territory determines a set of proposals and benefits, competitive ideas that can meet the expectations of a large number of investors, new businesses and visitors (Kotler, 2005; Hooley, 2005).

The second direction is presented by the approach that the best results in socio-economic development are showed by the territories, whose marketing efforts are aimed at a comprehensive solution of pressing problems. These include the effective implementation of the main functions of the territory as a place for residence, leisure and business; improvement of governance and infrastructure; increase of the competitiveness of local enterprises. As the examples we can observe the organization of marketing in the regions of USA, Germany, Poland, Russia, etc. (Deineka, 2004; Safiullin, 2015; Sykes, 2008).

According to the abovementioned statements, regional marketing solves the complex problem of region's development. Thus, positioning process from a systematic approach is one of the subsystems for promotion of the main objectives of the region. This is indicated by Kotler, considering the developing of strong and attractive positioning and image as a component of regional marketing (Kotler, 2005).

A search for effective positioning should be conducted through the use of three systems. Entry and exit system will examine processes of resources input, internal restructuring of the system and creation of a unique brand that will occupy a certain place in the minds of the buyers. Adaptation system will determine the nature of system's restructuring according to the changes in the environment conditions. Communications system will bring about the results of the system functioning to the users.

Therefore, a systematic approach expands understanding of the essence of positioning, assigning it the role of the structural unit that provides interconnection and interaction of all elements of regional marketing and creation of a general description of the system which, in turn, affects the positioning of the country as a system as a whole. In our opinion, this approach allows making an axiomatic statement that the most appropriate and effective form of positioning of a country is the positioning through its regions. Thus, positioning of the regions may be considered as one of the main conditions for improving the country's competitiveness.

#### 2.2. Positioning of Ukraine in the International Rating Systems

Internal development strategy of Ukraine should be globally oriented, both in terms of countering new disruptive effects of globalization and pragmatic in terms of using new features and benefits that it provides (Dergachova, 2010).

At the present stage of development of Ukraine the absence of positioning strategy presents a significant obstacle to the entry into the international economic environment as a full partner. Creation and implementation of current positioning strategy of Ukraine is hampered by a number of internal and external problems. Internal problems of permanent nature include the absence of a clear positioning strategy for Ukraine and effective cooperation of public authorities with non-governmental organizations, community organizations, business and the media; shortage of funds for decent financing of the development of positioning strategy and its implementation. The second group of internal problems includes the aggravation of the military conflict in the east, which in turn became the main prerequisite for another problem - increase of emigration flows and the loss of intellectual capital of the regions.

External problems are the problems that prevent establishment of a positive image of the country, namely discoordination, incoherence of authorities, exacerbation of the conflict with Russia and cancellation of numerous economic ties. In addition to that, low economic ratings of the reputable international independent organizations also restrain creation of positive positioning of Ukraine.

Generally, the ratings fulfill a dual function: on the one hand, they determine the key success factors of the country, on the other – they act as an information link for the positioning strategy. Let's consider some of the most popular rating systems.

Global study of the countries "Doing Business", which is annually performed by the World Bank, is based on the analysis and evaluation of the opportunities and business environment. According to "Doing Business", during the period of 2009-2015 Ukraine annually improves its business conditions. In the ranking of the ease of doing business in 2015 it ranked 83 among 189 countries, leaving behind Brunei Darussalam and China. Based on ten estimates Ukraine got 63.04 points, which is 24.3 points below the world leader in the ease of doing business – Singapore and 35.43 points above the country with the lowest rating - Eritrea. Obtaining an insolvency permit and building permit were considered

as the 'bottlenecks' for successful business conducting. A company's registration and obtaining a loan were the easiest steps, according to the rating evaluation.

The Global Competitiveness Index measures the ability of national economies for dynamic growth in the medium term. According to the study, the Global Competitiveness Index of Ukraine in 2009-2015 remains unstable. Ranking of 140 countries showed that in 2015 the country ranked 79 place after Slovakia and Botswana.

Figure 1 shows the position of Ukraine according to the Global Competitiveness Index in 2009-2015. As we can see, the low rating of basic factors that characterize the quality of the institutional environment, infrastructure, macroeconomic stability and the state of health and education prevents the increase the competitiveness of Ukraine. Among the variables that characterize the basic factors, the lowest rating belongs to macroeconomic stability and institutions due to inefficient management of public finances and inflation.

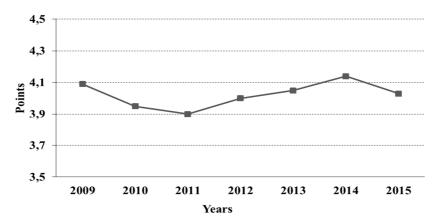


Figure 1. The Global Competitiveness Index of Ukraine in 2009-2015

Source: World Economic Forum, 2016

We consider regional positioning the most effective form of positioning of Ukraine. Provision of relative independence to the regions, their involvement in the global economic system, on the one hand, greatly enhances and intensifies competition in both interregional and international environment and, on the other hand encourages regions to develop socio-economic potential, look for new forms and tools of enrichment and achieving social welfare.

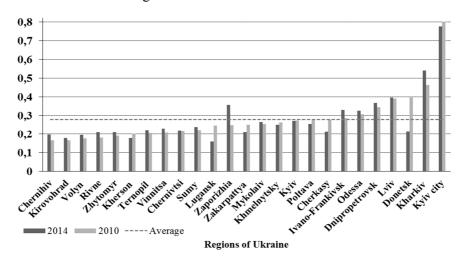


Figure 2. Integral Index of Competitive Potential of the Regions of Ukraine

Source: Own work

We conducted the research and analysis of the regions' ratings with the use of the integral index of the competitive potential for the period of 2010-2014 (Figure 2).

The conducted research makes it possible to identify that significant negative dynamics over the analyzed period of time is present in two heavy industrial regions: Donetsk and Lugansk regions, the

territories that are under military conflict. The figure shows that the leaders in 2014 were the regions with industrial, scientific and innovation potential: Kyiv city, Kharkiv, Lviv, Dnipropetrovsk, Zaporizhya regions. The regions-outsiders were the ones with agrarian specialization, their rating is lower than the country's average: Volyn, Kirovograd, Rivne, Kherson and Chernigiv regions. There are significant disparities in regional development in terms of human capital development, business, international integration, innovative potential (Figure 2).

The study found that significant regional differentiation is affected by their geographical location, natural resources potential, social protection, industrial development, development of IT sector. The main benefits were determined that can contribute to achievement of a high level of competitiveness of the country and increase of its attractiveness for investors: developed transport infrastructure, effective system of higher education, high level of intellectual and scientific potential and availability of high quality innovation infrastructure. In order to express the key advantages of regions the use of active positioning tools is required and is as proposed in the further study.

## 2.3. Proposals for the Development of the Strategy of Regions Positioning

In order to increase the competitiveness of regions, it is necessary to reach the level of active positioning and promotion of regions. The use of mechanisms of active positioning means action-oriented functioning of all interested parties of this process: regional government, businesses, and scientific community in the following areas: creation of common conditions for regional economic development; constant support of current businesses; active attraction of new businesses.

Active positioning, based on the interests of all parties involved in regional development leads to the appearance of a new level of needs – needs of society, which can be divided into the needs of internal and external users. In order to be more effective in the creation of common conditions for regional economic development, it is necessary to have a clear understanding of what the users want from the region, and then to develop these identified areas.

In Table 3 you can see a matrix of strategic decisions depending on the level of satisfaction of needs on the market. Taking into consideration the level of satisfaction of the needs, we can identify the main priorities which will differentiate the region from others. In order to implement the activities which support economic development and promotion of the region it is necessary to create a Positioning strategy which, according to the Strategy of socio-economic development of the region and the level of satisfaction of internal and external users, develops measures for its implementation directed towards improving the brand of the region and ensuring other regional development goals. During the creation of the Positioning Strategy it is necessary to take into consideration the general conditions for regional economic development: availability of qualified specialists, region's infrastructural conditions, location of the region, the cost of labor, level of life in the region, market size and location of business partners, legislative support of businesses, availability of segments to conduct business, the level of integration ties and innovative environment, etc.

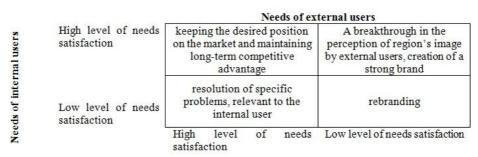


Table 3. Matrix of strategic decisions

Source: Own work

In order to implement the regional Positioning strategy, based on the level of satisfaction of users' needs it is necessary to identify main blocks of activity:

1) Formation of region's image, which helps to cement its status and form a new market image associated only with this territory. The procedure of image formation requires identification of regional aerial limits, analysis of the current condition of the region, the types of resources

available to the region, creation and implementation of action strategy, monitoring and, if necessary, change of regional image;

- 2) Mediation and cooperation requires systematic support of existing and new contacts, attraction of new participants, and use of modern PR techniques;
- 3) Internal regional marketing helps with systematic promotion of the region with the help of marketing instruments (Product, Place, Price, Promotion, People, Personnel, Patterns);
- 4) Regional support of innovative business is directed towards creating a regional management structure friendly to businesses, creation of special tax regulations, creation of joint projects (government and businesses), constant communication with clients, service guarantees, etc.;
- 5) Creation of business-partner network which involves taking into consideration interests of businesses and finding out the necessity of a need for such network, realistic planning of resource inflow;
- 6) Introduction of technology transfer, which means increasing opportunities for "technology transfer" and allowing Ukrainian companies to reach new markets.

With the growth of regional competitiveness, their offers for businesses and potential investors become more similar and interchangeable, that is why professionalism of regional promotion comes to the forefront. That includes professionally developed Positioning strategy for each region with identification of key success factors which will guarantee regions' long-term competitiveness.

Regions, like products and services, need specific promotional activities which fit into today's global competitive realities. Effective regional promotion leads to more investments. And so businesses and products or services that they produce, will be valued more than others in the region. Clearly identified strategic position of the region, according to which it will be promoted, helps to form its unique value orientation.

# 3. Conclusions

Competitiveness of a country is based on the development of internal benefits, adaptation to the global market processes and creation of a positive brand to satisfy the needs of internal and external users. One of the main tasks of marketing which lead to the increase of a country's competitiveness, is effective positioning.

Systematic approach widens understanding of positioning and allows us to make an axiomatic assertion that the most appropriate and effective form of a country's positioning is its positioning through its regions.

Low economic ratings according to trusted independent international organizations and the lack of positioning strategy prevents Ukraine from entering international economic space as a full partner. That is why the regions need to use the strategy of active positioning which will help increase its competitiveness and create a positive brand of the country as a whole.

The Positioning strategy needs to be developed considering the level of satisfaction of needs of internal and external users which will allow us to identify the main values and priorities, which will differentiate each region from others.

#### References

Baker, M. J. (2002). The IEBM Encyclopedia of Marketing. Sankt-Petersburg: Piter, 2002.

Deineka, O. (2004). Regional Marketing: Current Trends, Problems and Perspectives. *Social-economic studies in transition period. Regional social systemsю*, vol. 1, iss. 3, pp. 377-382.

Dergachova, V., Sheremet, T. (2010). Ukraine in the System of International Competitiveness: Position Evaluation, Reasons and Ways for Improvement. *Economic journal NTUU "KPI"*, vol. 7, pp. 59-66.

Doing Business (2016). *Measuring Business Regulations* [online]. [cit.2015-06-15]. Available: http://www.doingbusiness.org/reports/global-reports/doing-business-2016.

Giffinger, R., Gudrun, H. (2010). Smart cities ranking: an effective instrument for the positioning of the cities. *ACE: Architecture, City and Environment*, vol. 4, iss. 12, pp. 7-26.

Hooley, G., Saunders, J., Piercy, N. (2005) *Marketing strategy and competitive positioning*. Dnipropetrovsk: Balance Business-Books, 2005.

Kendyukhov, O. (2006). New Approach to Identification of Trademark Positioning. Marketing in Ukraine, vol. 2, pp. 27-30.

Kotler, Ph., Asplund. K., Rein, I., Haider. D. (2005). *Marketing Places. Attracting Investments, Industry, Citizens and Tourism to Cities, States and Nations of Europe.* Sankt-Petersburg: Stockholm School of Economics in Saint-Petersburg.

Pankrukhin, A. (2010). Territory as a product: general features, examples and marketing instruments [online]. [cit.2015-12-18]. Available: http://www.marketologi.ru/upload/information\_system\_16/7/8/5/item\_785/information\_items\_property\_1424.pdf.

Pluta, W. (1989). Comparative multivariate analysis in econometric modeling. Moscow: Finance and Statistics, 1989.

Poluneev, Y. (2005). *A Country's Competitiveness as a National Idea* [online]. [cit.2005-03-18]. Available: http://gazeta.zn.ua/ECONOMICS/konkurentosposobnost\_strany\_kak\_natsionalnaya\_ideya.html.

Romanova, N., Brachun, T., Dmitrieva, E. (2015). Modern City Positioning Case Study as a Tool of Territorial Marketing: Magadan, Russia. *Mediterranean Journal of Social Sciences*, vol. 6, iss. 4, pp. 245-249.

Safiullin, A., Salahieva, M. (2015). Methodology of Competitive Positioning of Types of Economic Activities of the Territory. *Asian Social Science*, vol. 11, iss. 11, pp.68-75.

Sykes, O., Shaw, D. (2008). Investigating Territorial Positioning by Sub-state Territories in Europe. *Regional and Federal Studies*, vol.18, iss. 1, pp. 55-76.

Trout, J., Ries, A. (2007). Positioning: The Battle for Your Mind . Sankt-Petersburg: Piter, 2007.

World Economic Forum (2016). *Report* [online]. [cit.2016-01-02]. Available: http://www.weforum.org/reports/global-competitiveness-report.

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# 30. COMMON ASPECTS OF THE EUROPEAN UNION CLUSTER AND COMPETITION POLICIES

**Abstract:** Competitiveness contributes significantly to the dynamic development of European prosperity. Thus the competition policy is the area of economy which determines the development of the European Union Member States. In the field of innovation and technology European Union focuses on supporting the overall competitiveness of European industry. New approach of competition policy focuses mainly on its standards such as antitrust, merger control and state aid control measures. Based on the comparative analysis of European Cluster policy and EU Competition policy mutual interaction, the object of the paper is to assess the impact of the EU Competition policy effects on the EU Cluster policy regarding the EU competitiveness enhancement in the international economics system. Technological advance, knowledge based production, innovation implemented into new technologies are the outputs of effective synergy how the EU cluster policy can be involved in the EU competition policy. Those are the tools leading to increasing economic growth, sustainable social and economic development and higher quality of life of European Communities inhabitants.

Keywords: EU competitiveness enhancement, international economics, social and economic development, technological advance

JEL Classification: F63, F68, L22

#### 1. Introduction

Competition policy is closely linked to the EU goal of creating a Single Market for goods, services, capital and labor. The powers conferred on the European Commission and the European Court to decide issues of competition policy are central to European Policy. Competition policy can contribute to economic growth by stimulating productivity and investment. In our work, we dedicate to theoretic determination of basic terms referring to competition, resp. competition policy, as well as to development of European competition policy and setting up the basic competition rules and laws, emphasizing and focusing especially to European Union Competition Law.

Clusters consist of dense networks of interrelated firms that arise in a region because of powerful externalities and spillovers across firms (and various types of institutions) within a cluster (Krajco, 2013). Clusters drive productivity and innovation. Firms that are located within a cluster can transact more efficiently, share technologies and knowledge more readily, operate more flexibly, start new businesses more easily, and perceive and implement innovations more rapidly. The EU Cluster policy is supposed to provides a platform bringing together regional, national and European actors, with the objective to define and implement a European cluster policy agenda. Haviernikova (2014) argues that the role of the Commission in this process is mainly to facilitate all forms of cooperation that could lead to more competitive clusters in Europe, by providing neutral economic analysis on existing and emerging clusters, identifying good practice, providing intelligence on opportunities for cooperation and facilitating networking at practical and strategic levels.

# 2. Research and methodology

This paper surveys the status and workings of EU competition policy and explores the implications arising from the creation of the Single European Market (SEM). Initially, an economic rationale is presented for intervention in private industry, whether this is seen primarily as a policy to promote competition or as a corrective action for monopoly abuse. The next section provides an EU Cluster

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policy analysis. This is followed by a section discussing the parallels and synergies regarding the EU Cluster and Competition policies symbiosis. Within the hypothesis we suppose that the EU Competition and Cluster policies create a proper environment and conditions to launch effective cluster programs. The goal of this paper based on the EU Cluster and Competition policies comparison analysis to figure out their positive impact on the EU economic environment as the way how to achieve higher social and economic development and living standard of EU inhabitants. To accomplish this goal, methods such as analysis, comparison, synthesis and logical deduction are to be used. Subsequently the analysis will lead to synthesis and prognosis by means of abstraction method eliminating the less important factors in order to set general statements and opinions.

## 3. Background and development of the EU Competition policy

Free competition is a key element of an open market economy. It stimulates European economic performance and offers consumers a broader choice of better quality products and services at more competitive prices. European Union competition policy ensures that competition is not distorted in the internal market by ensuring that similar rules apply to all the companies operating within it. Title VII, Chapter 1 of the Treaty of the Functioning of the European Union lays down the basis for the Community rules on competition (Jovanović, 2014). Competition puts businesses under constant pressure to offer the best possible range of goods, services at the best possible prices, because, if they don't, the consumers have the choice to buy elsewhere. Cihelkova and Hnat (2008) argue that some firms attempt to distort free competition and adopt anti-competitive behavior in order to impose their own rules on the market. Firms carrying out similar activities may come to arrangements with each other to control prices or to divide up the market among them. A firm that holds a dominant position on the market may also abuse this position and exclude its competitors from particular market (Fojtikova, Kovarova, 2014). Therefore, the European Union has put in place regulations to both prosecute firms and also prevent them from engaging in anti-competitive behavior. Furthermore, mergers and acquisitions of one firm by another may restrict competition by creating or strengthening a dominant actor on the market. The Union therefore controls and, if necessary, prohibits or subjects to certain conditions, concentration with a Community dimensions (Hitiris, 2003).

The European Union's competition policy has been an important part of the EU's work ever since it was set out in the Treaty of Rome in 1957. The treaty instituted a system ensuring that competition in the common market is not distorted (Ivanova, 2011). The aim was to create a set of well-developed and effective competition rules, to help ensure that the European market functions properly and provide consumers with the benefits of a free market system. Competition policy is about applying rules to make sure companies compete fairly with each other (Baldwin, Wyplosz 2009). This encourages enterprise and efficiency, creates a wider choice for consumers and helps reduce prices and improve quality. According to Larry (2007) these are the reasons why the EU fights anticompetitive behavior, reviews mergers and state aid and encourages liberalization:

- Low prices for all: The simplest way for a company to gain a high market share is to offer a better price. In a competitive market, prices are pushed down. This is not only good for consumers when more people can afford to buy products, it encourages businesses to produce and boosts the economy in general.
- Better quality: Competition also encourages businesses to improve the quality of goods and services they sell - to attract more customers and expand market share. Quality can mean various things: products that last longer or work better, better after-sales or technical support or friendlier and better service.
- More choice: In a competitive market, businesses will try to make their products different from the
  rest. This results in greater choice so consumers can select the product that offers the right balance
  between price and quality.
- Innovation: To deliver this choice, and produce better products, businesses need to be innovative in their product concepts, design, production techniques, services, etc.
- Better competitors in global markets: Competition within the EU also helps make European companies stronger outside the EU and able to hold their own against global competitors.

One of the paramount aims of the founding fathers of the European Community - statesmen around Jean Monnet and Robert Schuman - was the establishment of a single market. To achieve this, a compatible, transparent and fairly standardized regulatory framework for Competition Law had to be created.

The first major decision under Article 101 (then Article 85) was taken by the Commission in 1964. They found that Grundig, a German manufacturer of household appliances, acted illegally in granting exclusive dealership rights to its French subsidiary. In Consten and Grundig (1966) the European Court of Justice upheld the Commission's decision, expanded the definition of measures affecting trade to include "potential effects", and generally anchored its key position in Competition Law enforcement alongside the Commission (Fojtíková, Lebiedzik, 2008). Subsequent enforcement of Art 101 of the TFEU Treaty (combating anti-competitive business agreements) by the two institutions has generally been regarded as effective. Yet some analysts assert that the Commission's monopoly policy (the enforcement of Art 102) has been "largely ineffective" because of the resistance of individual Member State governments that sought to shield their most salient national companies from legal challenges (Lipková, 2011).

To all these challenges, the Commission has responded with a strategy to decentralize the implementation of the Competition rules through the so-called Modernization Regulation. EU Council Regulation 1/2003 places National Competition Authorities and Member State national courts at the heart of the enforcement of Arts 101 & 102 (McDonald, 2005; Dearden, 2005). Decentralized enforcement has for long been the usual way for other EC rules, Reg 1/2003 finally extended this to Competition Law as well. The Commission still retained an important role in the enforcement mechanism, as the coordinating force in the newly created European Competition Network (ECN). In its 2005 report, the OECD lauded the modernisation effort as promising, and noted that decentralisation helps to redirect resources so the DG Competition can concentrate on complex, Community-wide investigations. Yet most recent developments shed doubt on the efficacy of the new arrangements. For instance, on 20 December 2006, the Commission publicly backed down from 'unbundling' French (EdF) and German (E.ON) energy giants, facing tough opposition from Member State governments (Mitchel et al., 2006).

#### 4. The EU Cluster policy as a competitiveness enhancement challenge

The large majority of all the clusters we currently observe have developed without the help of any designated policies intended to create them. Given the mounting evidence that such clusters make a positive contribution to regional performance where they exist, pressure is increasing to design policies that can foster the development of clusters or increase their economic benefits (Spankova, Grencikova, 2014). First of all, we will define cluster policies as policies that fall into one of the following categories. Cluster development policies directed at creating, mobilizing, or strengthening a particular cluster, e.g. a national funding competition for the best life science cluster strategies. Cluster leveraging policies that use a cluster lens to increase the efficiency of a specific instrument, e.g. an R&D subsidy provided only to companies in regional clusters where the subsidy is likely to incur spill-over effects beyond the recipient firm (Mura, Buleca, 2012). Cluster facilitating policies directed the elements of the microeconomic business environment to increase the likelihood of clusters to emerge, e.g. regional or competition policies that remove barriers for competition between locations. Policies falling into the first category are traditionally at the core of what researchers have looked at.

To increase the innovative capacity and competitiveness as well as for the networking of the high-performing European cluster initiatives with each other, the European Commission provides various cluster and innovation-policy instruments in the different Directorates-General (Harakalova, 2014b). Explicit cluster policy programs have been around since the late 1990s. On the part of the European Commission the Directorates-General "Regional Policy", "Enterprise and Industry" and "Research and Innovation" are mainly responsible (Lipkova, 2012). In addition, most European countries have implemented cluster-specific policies and programs to support the development of sustainable, competitive regions in the national states (Harakalova, 2014a).

Regarding the EU Cluster policy management system an important event was the establishment of the European Cluster Alliance (European Cluster Observatory - ECA) in 2006 as an open platform based initiatives in order to maintain a political dialogue at European level, which should help to increase the excellence and efficiency of cluster policies that will lead to the creation of competitive clusters. ECA umbrella network, the INNO-Nets, which aims to strengthen cooperation in the field of cluster policies, to promote the knowledge of SMEs, the recovery of international knowledge, linking the industry and research institutions and supporting innovation in services. As part of the EU efforts to create more world-class clusters across the EU by strengthening cluster excellence, the Commission

launched in 2009, under the Competitiveness and Innovation Program, the European Cluster Excellence Initiative (ECEI). According to the European Commission (2015) to continue the successful work of this pan-European initiative which involved 13 partners from nine European countries ESCA - The European Secretariat for Cluster Analysis was established by one of the partners, VDI/VDE Innovation + Technik GmbH, to offer practical advice to cluster management organizations. Today, ESCA is a network of cluster experts from 28 countries.

A professional cluster management can contribute to such a development through projects and services that tap into the cluster's potential. The European Cluster Excellence Initiative, initiated by the European Commission DG Enterprise and Industry, developed methodologies and tools to support cluster organizations to improve their capacities and capabilities in the management of clusters and networks.

#### 5. Discussion

Competition policy, in conjunction with industrial policy, is at the core of the new competitiveness policy framework. The European Commission works to reduce distortions to competition within the internal market through merger control, antitrust enforcement, and state aid control. Why is it important? Cluster policy and competition policy are at the core of the new competitiveness policy framework; competition creates incentives for companies to innovate and increase productivity; and finally through state aid, antitrust, and merger control, the European Commission ensures undistorted competition in the Internal Market.

Adapting the competition policy to the current economic environment is a challenge for the European Union's authorities and also for those acting at national level. In order to make it more efficient they are trying to find the most appropriate means of ensuring the competitiveness growth of the European enterprises worldwide. Those policies at European, national, or regional levels, should be mutually supportive and reinforcing, and to influence the competitiveness, innovation and performance in Europe. Although clusters are mainly national and regional phenomenon, the EU seeks to contribute to the successful creation, development and mutual cooperation.

The way how competition and cluster policies can work on a synergic basis in practice can be illustrated in conditions of Slovak Republic. Slovak clusters were established in the last decade with varying degrees of competitiveness. They have emerged, despite the difficult situation - the absence of appropriate legislation, which would define and promote clusters as such. According to Slovak Innovation and Energetic Agency (2016), as the only body monitoring and promoting clusters, Slovak Republic has so far generated only 20 clusters, some of which, moreover, do not develop any activity. In fact, there are two types of cluster organizations in Slovakia: 1) clusters in tourism; and 2) technological cluster organizations.

As a success story in Slovak clustering we can mention the "Automotive Cluster of Slovakia" in Trnava. Its mission is to promote the development of subcontractors to the automotive industry, which is the pillar of Slovak economy and export and help ensure their continued competitiveness at home and abroad through peer groupings of industrial enterprises, universities, scientific research institutions and other stakeholders in the private and public sector.

In tourism area there is working a "Liptov cluster". The current vision of its development is to build up from Liptov region a recognizable tourist destination along with the strategic objective to increase the Liptov region attendance by 2015 as twice as in 2009 (Havierniková, Strunz, 2014). It is necessary to mention that tourism clusters in Slovakia more or less work on the basis of tourist associations and not as typical clusters thus they are not as successful as technological clusters.

Generally Slovak cluster activities are limited and focused mainly on the promotion of cross-sector partnerships among businesses, the staff skills and qualification levels upgrading by means of experience exchange in the area of new technologies, processes and services usage. The main reason for the Slovak success story of industrial clusters was their immediate proper adaption to changed conditions of international business and especially international division of labor, even balanced and proportional industry location.

A significant difference exists between the empirical phenomenon of clusters and cluster policies and initiatives based on their creation or development. The discussions are often both terms are used interchangeably, which can create some confusion. Active clusters leave traces, which can themselves be statistically recorded, for example in the area of specialization or concentration of employment

within the sector (Krajnakova, Vojtovic, 2011). In contrast, cluster policy is an expression of a targeted, focused strategy, creating political priorities and allocating funding to support innovation, regional development or other policy objectives. In reality, however, can be found all possible combinations between clusters and cluster policies, as indicated by the examples: clusters formed spontaneously without any economic policy support; cluster policy sooner or later leading to real clusters; cluster policy with no statistically significant impact on the formation of a real cluster, etc. (Kutik et al., 2014).

#### 6. Conclusion

The European Union recognizes the importance of clusters and prospects for economic development and that due to the support of clusters is the subject of very intense debate both at European authorities. The European Union also supports the exchange of information, developing strategies processing and expert analysis including through support associations and initiatives that focus on the development of clusters.

As conclusion we can say that technological advance, knowledge based production, innovation implemented into new technologies are the outputs of effective synergy how the EU cluster policy can act as symbiotic parallel along with the EU Competition policy. Those are the tools leading to increasing economic growth, sustainable social and economic development and higher quality of life of European Communities inhabitants.

Finally, the paper provides a comprehensive, coherent and systematic overview of the basic principles and objectives forming the backbone of the EU cluster policy and the nature of its operation mechanism along with the Competition policy. Clusters play an important role when it comes to the access of SMEs to innovation and research, or the joint development of international markets. We have proved that building up clusters in the EU is the unique and sophisticated way how to improve and enhance competitiveness of European business companies within the international environment. We have figured out that the EU Competition policy by creating the proper environment enables to launch effective cluster projects and in our opinion that's the way how the crucial issue of EU Cluster and Competition policies synergy is to be met and implemented.

The EU Cluster and Competition policies as constant ongoing processes with a lot of new information and absent coherent cluster legislative in Slovakia appear to be limitations however, the current actual and sophisticated issue of the paper even in the future can be defined as research advantage. As paper is supported by Slovak Ministry of Education scientific grants research outputs are to be widely used in Slovak scientific and industry environment particularly the Slovak chamber of industry and trade is very interested in the final research findings.

#### Acknowledgements

This paper was supported by Slovak Ministry of Education scientific grants: VEGA: "Changes in the economic structure of Slovak regions and their impacts on the economic and social development" [No 1/0613/14] and VEGA "Risk management of SMEs in the context of their participation in clusters activities in Slovak Republic" [No 1/0918/16]

#### References

Baldwin, R., Wyplosz Ch., (2009). *The Economics of European integration*. 3rd edition. McGraw-Hill Higher Education, Berkshire UK, 2009.

Cihelkova E., Hnat, P. (2008). Future of the European union within the new regionalism context. *Politicka ekonomie*, vol. 56, iss. 1, pp. 67-79.

European Commission. (2015). *Competition policy*. Retrieved from: http://ec.europa.eu/competition\_policy, EU *Cluster portal*. Retrieved from: http://ec.europa.eu/growth/smes/cluster/, *Europe 2020*. [online]. [cit.2015-12-18]. Available: http://ec.europa.eu/europe2020/index en.htm.

Fojtíková, L., Lebiedzik, M. (2008). Společné politiky Evropské unie. Praha: C.H.Beck, 2008.

Fojtikova, L., Kovarova, J. (2014). Influence of China's Entry into the WTO on Cross-border Financing. In *Proceedings of the 14th International conference on finance and banking*. Ostrava: VŠB. pp. 74-79.

Harakalova, L. (2014a). New Form of the Common Agricultural Policy of the European Union After 2014. In *Proceedings of the 2nd international conference on european integration 2014 (ICEI 2014)*. Ostrava: VŠB. pp. 211-218.

Harakalova, L. (2014b). Institutionalization of foreign policy of European Union. In 15th International Scientific Conference on International Relations 2014 - Contemporary Issues of World Economics and Politics. Bratislava: Ekonom., pp. 235-241.

Haviernikova, K. (2014). The analysis of industrial branches in the Trencin region suitable for the cluster creation. In *METAL* 2014: 23rd international conference on metallurgy and materials. Ostrava: Tanger. pp. 1697-1702.

Haviernikova, K., Strunz, H. (2014). The comparison of selected methods used for identification of cluster potential in the regions of the Slovak Republic. In *SGEM conference on political sciences law, finance economics & tourism: Conference proceedings volume IV. Economic & tourism*, Sofia: STEF92 Technology, Bulgaria. pp. 693-699.

Hitiris, T. (2003). European Union Economics. 5th edition. London: Prentice Hall (Pearson Education Ltd.), 2003.

Ivanova, E. (2011). Interconnectivity of factors of competitiveness at the microeconomic and macroeconomic levels in slovakia. In *Conference: 9th International Conference on Economic Policy in the European Union Member Countries*. Ostrava: VSB, pp. 154-166.

Jovanović, M. N. (2014). The Economics of European Integration - the 2nd eddition. Edward Eglar Publishing, UK, USA.

Krajco, K. (2013). Measurement model, the cluster's performance in the international arena. In: *International relations 2013: Contemporary issues of world economics and politics*. Bratislava: Ekonom, vol. 1-4, pp. 397-401.

Krajnakova, E., Vojtovic, S. (2011). Development of Science and Education among the Priorities of State. In *Proceedings* of the 8th International Conference Efficiency and Responsibility in Education 2011: Jún 9-10,2011, Praha, ČR. Praha, pp.147-156.

Kutik, J., Klierova, M., Hostak, P. (2014). Public sector, public policy and public administration. In *SGEM conference on political sciences law, finance economics & tourism: Conference proceedings volume III Economics & Tourism.* Sofia: STEF92 Technology, pp.433-448.

Larry, N. (2007). The Economics of Europe and the European Union. Cambridge: Cambridge University Press, 2007.

Lipková, L. [et al.]. (2011). Európska únia. Bratislava: Sprint, 2011.

Lipkova, L. (2012). Innovation Policy of the European Union. Proceedings of the 1st international conference on European integration 2012. ICEI 2012. Ostrava: VŠB, pp. 171-178.

McDonald, F., Dearden, St. (2005). *European Economic Integration. 4th edition*. London: Prentice Hall (Pearson Education Ltd.), 2005.

Mitchel, W., Muysken, J., Van Veen, T. (2006). *Growth and Cohesion in the European Union (The Impact of Macroeconomic Policy*). Cheltenham: Edward Elgar, UK, 2006.

Mura, L., Buleca, J. (2012). Evaluation of Financing Possibilities of Small and Medium Industrial Enterprises. In *Procedia Economics and Finance*, no 3, pp. 217-222.

Slovak Innovation and Energetic Agency. (2016). *Cluster initiatives in Slovakia*. [online]. [cit.2016-02-22]. Available: https://www.siea.sk/klastre-na-slovensku/.

Spankova, J., Grencikova, A. (2014). Remuneration and motivation of employees in transport undertakings. In *SGEM* conference on political sciences law, finance economics & tourism: Conference proceedings volume III Economics & Tourism. Sofia: STEF92 Technology, pp.495-502.

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# 31. IMPACT OF FOREIGN PRIVATE INVESTMENT ON THE FULFILMENT OF THE SUSTAINABLE DEVELOPMENT GOALS IN DEVELOPING COUNTRIES

Abstract: The Sustainable Development Goals adopted by the General Assembly of the UN in September 2015 are based on the most important current global challenge – transformation of the society towards sustainable development. Their fulfilment requires significant investment resources. However, investment inflows to sectors related with the SDGs are relatively low in developing countries. The gap between investment needs and available resources would be filled by foreign private investment. However, involvement of private investors will lead to policy dilemmas – it will be necessary to find the right balance between political approaches creating investment favorable climate and approaches protecting public interests of the country. The aim of the paper is to show and interpret the possible relation between private investment and fulfilment of the sustainable development (goals) in developing countries. Paper's conclusions are based on literature review, on interpretation and comparison of selected statistical data with the use of methods of descriptive statistics.

Keywords: developing countries, private investment, sustainable development, SDGs

JEL Classification: F21, F63, Q01

#### 1. Introduction

Every day, we learn new information about the impact of the human society on its surrounding. In December 2015, Paris hosted very important United Nations Conference on Climate Change that launched new global agreement, which was focused on keeping global warming below 2°C. Nobody doubts that climate change is one of the most serious issues society is facing. However, it is necessary to recognize that environmental challenges are only one part of the global challenges connected with the objectives to transform our society and economies towards more sustainable ones. International community's complex effort in this transformation process was presented earlier by the Sustainable Development Goals that were adopted by the General Assembly of the United Nations in September 2015. These development goals are focused on 17 most important areas necessary for more sustainable future of our society, in developed as well as developing countries. They imply huge investment needs that have to be covered by public and private investment resources. Limited public funds and private resources of developing countries open space for the involvement of foreign private investment.

#### 2. Objective of the paper and methodology

The aim of the paper is to show and interpret the possible relation between private investment and fulfilment of the sustainable development (goals) in developing countries. Paper is divided into several parts. It starts with the explanation of the terms sustainable development, Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). Then paper draws attention to the challenges expressed by these goals for private sector, especially in the sense of its participation in investment into sectors related with them in developing countries. Paper also deals with the specific nature of SDGs sectors because it affects attractiveness of such investment for private investors, and also it leads to policy dilemmas of local policy-makers. Paper's conclusions are based on literature review (analysis of various scientific sources and reports of main international organizations), on

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interpretation and comparison of selected statistical data with the use of methods of descriptive statistics.

# 3. Own research: relation between private investment and Sustainable Development Goals

International community has ever been very active in formulation of various plans and projects focused on the objectives to improve living conditions of all people all round the world. Progress in changing our behaviour patterns towards more sustainable ones has not always been evident in all parts of our world although global discussion about sustainable development started in the 1970s.

#### 3.1. Sustainable Development

Human society has had impact on its surrounding. Industrialization highlighted this relation. Increased industrial production led to the increased use of natural resources as well as increased pollution of natural environment. Industrialization also laid basis for the differences in socio-economic development among different parts of the world. Some regions were affected by the industrialization less (than so-called economic centres) or were not affected at all. This fact led to problems with modern poverty in these – today so-called developing – regions. Globalization has further exacerbated these differences.

In the 1970s, scientists opened public discussion on the limits of growth, in the sense of exponential economic and population growth with limit supply of resources. In the 1980s, human society started to reform its relations to the environment and to itself. Concept of sustainable development was introduced. In 1984, the United Nations (UN) established an independent group of 22 people drawn from its member states. They were charged to identify long-term environmental strategies for the international community. This World Commission on Environment and Development launched breakthrough report - Our Common Future - in 1987. Commission's Report speaks about belief in people's ability to build future that is more prosperous, more just, and more secure. This Report is also responsible for the putting sustainable development firmly into the political arena of international development thinking (Elliott, 2013). Sustainable development is defined by the Report as follows:

Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits – not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be both managed and improved to make way for a new era of economic growth.

In the same paragraph, Report also speaks about poverty – it is not only an evil in itself, but sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes.

Nowadays, term sustainable development is used in the sense of environmental, economic and social well-being for today and tomorrow (International Institute for Sustainable Development, 2015) and explained to students with the use of simple scheme showing the confluence of these three constituent parts of well-being.

#### 3.2. From Millennium Development Goals to Sustainable Development Goals

However, international community has not been always successful in meeting targets and challenges brought by the Report mentioned above. Natural environment has been further damaged; poverty, economic marginality and vulnerability of developing countries have been further deepened despite provision of development assistance and attempts to improve international economic order. At the United Nations Millennium Summit, heads of the UN member states adopted eight so-called Millennium Development Goals (MDGs) for the years 2000-2015. Formulation of the MDGs promoted public discussion on sustainable development as well as mobilizing activities in order to reduce poverty and achieve notable development in human well-being in the world's poorest countries. Nowadays, the MDGs are considered as the most successful development agenda that has been ever implemented and a lot of statistical data show improvement in human development in many

developing countries. International community expressed its ongoing interest in transforming society towards more sustainable one by the formulation of the Sustainable Development Goals (SDGs). These goals, built on the MDGs, were adopted by the UN General Assembly in September 2015. They were set for the period 2015-2030. They balanced three dimensions of sustainable development, and they would stimulate action over the next 15 years in areas of critical importance for humanity and the planet (United Nations, 2015a).

However, the UNCTAD<sup>2</sup> (2014) explains that the MDGs were not designed to create a dynamic process of investment in sustainable development and resilience to economic, social or environmental shocks. The MDGs were focused on a relatively narrow set of fundamental goals, such as eradication of extreme poverty and hunger, achievement of universal primary education, promotion of gender equality, reduction in child mortality, improvement in maternal health, fighting with several diseases, environmental sustainability, and they open global partnership for development. Therefore, the SDGs are considered to be a next logical step – step from fundamental goals to broad-based sustainable development. They declare a concerted effort to shift the global economy – developed as well as developing – onto a more sustainable trajectory of long-term growth and development. Swaminathan and Kesavan (2016) explain that the SDGs are rooted in the principles of environmental, social and economic sustainability. However, the SDGs still require the ongoing effort in fulfilment of the fundamental goals because some of them are similar to the former MDGs (see Table 1.).

Table 1. Sustainable development goals: short formulation of each goal

No	Goal	No	Goal	No	Goal
1	No poverty	2	Zero hunger	3	Good health and well-being
4	Quality education	5	Gender equality	6	Clean water and sanitation
7	Affordable and clean energy	8	Decent work and economic growth	9	Industry, innovation and infrastructure
10	Reduced inequality	11	Sustainable cities and communities	12	Responsible consumption and production
13	Climate Action	14	Life below water	15	Life on land
16	Peace, justice and strong institutions	17	Partnership for the goals		

Source: United Nations, 2015b

The SDGs also include goal focused on the necessity of the partnership between developed and developing countries in the fulfilment of them. However, the partnership between public and private sector is also necessary.

#### 3.3. Challenges expressed by the SDGs for the private sector

Fulfilment of the Sustainable Development Goals will require specific action of all actors of the international community. Public sector will be the most important and the fundamental actor of this action. However, the UNCTAD highlights that the role of private sector will be also indispensable, and even more important than any time before. Why? Domestic and foreign private investors appear to have sufficient funds to potentially cover some investment needs connected with the fulfilment of the SDGs. In terms of foreign sources, the cash holdings of transnational corporations are in the order of 5 trillion USD, sovereign wealth fund assets today exceed 6 trillion USD; and the holdings of pension funds domiciled in developed countries alone have reached 20 trillion USD (UNCTAD, 2014).

The SDGs have significant resource implications worldwide. The UNCTAD estimates that global investment needs are in the order of 5 to 7 trillion USD annually. In developing countries, they range

<sup>&</sup>lt;sup>2</sup> United Nations Conference on Trade and Development - the United Nations body responsible for dealing with development issues.

from 3 to 4.5 trillion USD in sectors related with the SDGs. Nowadays, private investors' participation on investment in projects connected with sustainable development is relatively low, e. g. only about 2 percent of the assets of pension funds and insurers are invested in infrastructure (UNCTAD, 2014); they allocate hardly any of these assets in those projects realized in developing countries. The worst situation is in the world's poorest countries, so-called Least Developed Countries (LDCs)<sup>3</sup>, and other vulnerable countries. These countries have the lowest financing capacity. Foreign private investment should serve as complementary financing for the public investment and providing overseas development assistance. Nowadays, the LDCs receive less than 2 percent of the world total foreign direct investment (FDI) and FDI inflows are smaller than official development assistance (see Table 2). Therefore, international community calls for greater foreign private investment in the LDCs because FDI can complete domestic investment, public as well as private financial resources. Kardos (2014) considers FDI as a vital source for development and even for sustainable development. Why? FDI can bring knowledge and technology, create jobs, boost productivity, strengthen competitiveness, and based on certain assumptions it could promote GDP growth and improvement of local living conditions there.

Table 2. FDI inflows to LDCs, share in world total, years 2008-2014 (in percent)

Year	2008	2009	2010	2011	2012	2013	2014
Share in world total FDI inflows	1.2	1.4	1.8	1.4	1.7	1.5	1.9

Source: UNCTAD, 2015

Mobilization of the private investment for the fulfilment of the SDGs is the first step in the involvement of private investors in this new global development agenda. The second step will be more difficult because it will be necessary to ensure that outcomes of investment will be beneficial for sustainable development. This process will be very complicated in developing countries, suffering often from bad national governance. Monterrey Consensus on Financing for Development, launched in 2002, considers good governance - sound economic policies and solid democratic institutions - as principal conditions for sustainable development. Key threats connected with this process include following (UNCTAD, 2014):

- Weak absorptive capacity of investment benefits in developing countries (there is a risk that the gains from investment will not be shared by local actors).
- Risks associated with private investment in specific SDGs sectors (sectors such as education, health, water supply and sanitation are very sensitive, therefore careful preparation and appropriate regulatory framework will be necessary).
- Need to engage stakeholders and manage trade-offs effectively (especially effects of the investment on local communities, smallholders etc.).
- Inadequate investment impact of the measurement and reporting tools.

However, foreign private investment resources are only one of the ways how private sector should help with the fulfilment of the SDGs. Personnel resources and technological possibilities are other very important elements of the contribution of the private sector for the SDGs.

#### 3.4. Investment into sectors related with SDGs

Investment into SDGs sectors means investment in economic infrastructure, agriculture and food security, climate change mitigation and adaptation, eco-systems and biodiversity, health and education. There are great differences among individual sectors in the sense of currently allocated investment and future investment needs (see Table 3).

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<sup>&</sup>lt;sup>3</sup> In 2015 list of LDCs contains 48 countries. They have around 880 million inhabitants (which is 12 per cent of the total world population), but they create less than 2 percent of the total world GDP and only 1 percent of world total trade.

Table 3. Investment in key SDGs sectors (in billions of USD and percent) in developing countries

Sector	Estimated current investment (billions of USD)	Period 2015-2030 Total investment required (billions of USD) B	Investment gap (billions of USD)	Average private sector participation in current investment (percent)
Power	260	630–950	370–690	40–50 %
Transport	300	350-770	50-470	30–40 %
Telecommunications	160	230-400	70–240	40–80 %
Water and sanitation	150	410	260	0–20 %
Food security and agriculture	220	480	260	75 %
Climate change mitigation	170	550-850	380–680	40 %
Climate change adaptation	20	80–120	60–100	0–20 %
Ecosystems/Biodiversity		70–210		
Health	70	210	140	20 %
Education	80	330	250	15 %

Source: UNCTAD, 2014

For example, total investment in economic infrastructure – power, transport, telecommunications, water and sanitation – is nowadays under 1 trillion USD per year for all sectors, but it will need to rise to between 1.6 and 2.5 trillion USD annually over the period 2015-2030. It will lead to the existence of the gap between total investment requires and estimated current investment. This gap opens space for the participation of private investors.

Increase of the investment in infrastructure in the LDCs is one of the biggest challenges for international community. Dabla-Norris et al. (2011) explain that strengthening of the investment in infrastructure is critical for sustained economic growth because deficiencies in infrastructure (energy, roads, communication) reduce productivity – improvements in infrastructure not only directly raise the productivity of human and physical capital, but also indirectly, e.g. due to lower transportation costs. Participation of private investors in the transport sector counts from 60 to 80 percent in developed countries. In developing ones, it is only between 30 and 40 percent. If it is taken into account the fact that the public investment in the poorest countries is usually connected with its low quality and efficiency, it has to be said that these facts lead to huge underinvestment in transport sectors in these countries. This is one of the most significant barriers for their sustainable development and poverty reduction.

Also other SDGs sectors are critical for sustainable and inclusive economic growth in developing countries. Sachs (2014) explains that earlier basic education was considered to be a key element of development. Nowadays, it is known that basic public education is not enough because workers need highly specialized skills. They can be improved by appropriate projects that require participation of private sector, they have to combine public and private funding.

International community should also help with the transformation of the agricultural production of developing countries towards more sustainable one. Why? Its sustainability is important for food self-sufficiency, security and for local employment in developing countries. E.g. it is estimated that in Ethiopia 41 percent of its inhabitants suffer from hunger and 85 percent of them are dependent on agriculture as a resource of their livelihood. Nowadays, the investment gap in agricultural sectors is estimated to be around 480 billion USD in developing countries. Therefore, closure of this gap is necessary if the international community wants to fulfil the SDGs. However, Karlsson (2014) highlights that nowadays foreign investment in primary agriculture is often export-oriented. This fact has positive as well as negative impact on local community. This FDI can increase export revenues, production and productivity, employment generation, introduction of modern technologies, and, due to spill-over effects, it can affect local producers positively. On the other hand, it leads to the weaker self-sufficiency in food production (especially in the sense of self-livelihoods of farming families) of developing countries.

#### 3.5. Policy dilemmas and implications

If it is being discussed about importance of the involvement of the private investors in SDGs sectors, it has to be taken into account that some SDGs sectors, such as education mentioned in previous chapter, provide public services and goods. Therefore, they are not so attractive for private investors because of inadequate risk-return ratios, entry barriers set by official authorities, lack of investors' expertise etc. Specific nature of these sectors leads also to several policy dilemmas of official authorities in developing countries. UNCTAD (2014) identifies set of these dilemmas, which are, e.g.:

- Private sector service provision in health care and education can have negative effects on standards unless strong governance and oversight is in place. Therefore, involvement of private investors has to be connected with the creation of capable institutions.
- Participation of the private investment in essential infrastructure industries (power or telecommunication) implies transfer of public sector assets to private sector. It is very sensitive matter not only for the authorities of developing countries, but also for the authorities of the developed ones.
- Involvement of private investors in water and sanitation infrastructure is again very sensitive because of the basic-needs nature of goods provided by these sectors.

It is necessary to find the right balance between risks and benefits of the involvement of private investment in SDGs sectors. Therefore, special preparation of entry conditions, supervision and regulation are necessary. The key role belongs to national political authorities. Because they set priorities, standards, conditions for economic activity by locals and foreigners alike...they set a framework and incentives that may be conducive to the entry and the positive contribution of foreign investment to development (Sacerdoti, 2014). UNCTAD (2015) identifies that all reported investment measures aim at improving entry conditions and facilitating foreign investment, but a lot of countries have paid little attention so far to the importance of channelling investment into sectors important for sustainable development. Experts also speak about the necessity to strengthen the global investment policy environment if foreign direct investment of private investors should participate in fulfilment of the SDGs. At least, because of the fact that developing countries are less able to cope with inadequate practices of large foreign private investors. Low capacity of developing countries to solve problems with tax avoidance is the best known case.

#### 4. Discussion

The fulfilment of the SDGs will be dependent on the participation of the foreign private investors because of the lack of public funding in the world's poorest developing countries. Foreign direct investment inflows to these countries seem to be one of the important financial resources for the transformation of their economic growth and development towards more sustainable ones. Moreover, FDI affects quality of them. For example Mugabe (2002) says that FDI improves corporate governance, environmental and labour standards, etc. It generates taxes increasing public revenues and also helps improve the management of the social society net. On the other hand, Mugabe (2002) admits that in the absence of strong regulatory measures FDI leads to environmental degradation and undermines social development. Therefore, discussion about involvement of private investment in fulfilment of the SDGs should be focused not only on necessity of this involvement but also on the possible negative aspects of it.

Mobilization of private investors towards the SDGs will be complicated not only by specific nature of this investment, but also by the fact that a lot of developing countries are not attractive for FDI because of the low quality of infrastructure and labour force, macroeconomic and political instability, inappropriate investment policy;, inefficient legal system and corruption. These factors affects FDI inflows negatively. Therefore, overall business environment has to be improved in many developing countries if private investors should invest into sectors related with the SDGs there.

It will be also difficult to evaluate the overall social, economic and environmental impact of the private investment inflows to developing countries, especially if it is generally known that their principal objectives are not focused on poverty reduction, economic and social sustainability. Therefore, individual approach to each investment has to be applied in order to find out its benefits for the SDGs fulfilment.

#### 5. Conclusions

Life in European countries is more secure than lives of inhabitants of nearly all developing countries. European people do not suffer from the lack of basic human needs satisfaction. They use modern technologies that make their lives more comfortable and their society more sustainable. Therefore, society of developed countries should help with the fulfilment of the SDGs in developing countries. It is not only their moral obligation but also it is the strategic need. The SDGs imply significant investment requires especially in developing countries. Private investors from developed countries have sufficient funds and assets that could be used. Current level of private investment involvement in SDGs sectors is very low, not only in developing countries but also in developed ones. However, current underinvestment of SDGs sectors is much higher in the world's poorest countries. It is necessary to mobilize private investment (especially foreign because of the limited domestic savings) in order to laid basis for sustainable development in these countries. Gap between investment needs and available resources is a barrier for the fulfilment of the SDGs there. However, specific nature of SDGs sectors makes this mobilization more complicated. At first, it will be necessary to prepare economic and legal framework for the involvement of private investors. Then, some dilemmas of local policy-makers have to be discussed and solved. International investment order has to be also prepared in order to protect vulnerable developing countries (with lower institutional capacity) against malpractices of foreign investors. Of course, it will be necessary to ensure that benefits of private investment will lead to sustainable development. If the international community copes well with these challenges, it will ensure more secure world for future generations.

#### References

Dabla-Norris, E., Brumby, J., Kyobe, A., Mills, Z., Papageorgiou, Ch. (2011). *Investing in Public Investment: An Index of Public Investment Efficiency*. IMF Working Paper No WP/11/37. International Monetary Fund: IMF Working Papers.

Elliot, J. A. (2013). An Introduction to Sustainable Development. London: Routledge, 2013.

International Institute for Sustainable Development (2015). What is Sustainable Development [online]. [cit.2015-12-09]. Available: https://www.iisd.org/sd/.

Kardos, M. (2014). The relevance of Foreign Direct Investment for sustainable development. Empirical evidence from European Union. *Emerging Markets Queries in Finance and Business*, vol. 15, pp. 1349-1354.

Karlsson, J. (2014). *Challenges and Opportunities of Foreign Investment in Developing Country agriculture for Sustainable Development*. Working Paper No 48. Food and Agriculture Organization of the United Nations: FAO Commodity and Trade Policy Research Working Papers.

Mugabe, J. (2002). The keys to Africa's sustainable development: Science, technology, and investment. *Africa Report: Assessing the New Partnership*, pp. 55-69.

Sacerdoti, G. (2014). Investment Protection and Sustainable Development: Key Issues. *Bocconi Legal Studies Research Paper*, no 2445366, pp. 1-9.

Sachs, J. D. (2014). Sustainable Development Economics [online]. [cit.2015-12-09]. Available: http://www.project-syndicate.org/commentary/promote-sustainable-development-economics-by-jeffrey-d-sachs-2014-11.

Swaminathan, M. S., Kesavan, P. C. (2016). Achieving the sustainable development goals. *Current Science*, vol. 110, iss. 2, pp. 127-128.

United Nations (2003). Monterrey Consensus on Financing for Development. New York and Geneva. United Nations, 2003.

United Nations (2015a). *Transforming Our World: The 2030 Agenda for Sustainable Development* [online]. [cit.2015-12-09]. Available: https://sustainabledevelopment.un.org/post2015/transformingourworld.

United Nations (2015b). *Sustainable Development Goals* [online]. [cit.2015-12-09]. Available: http://www.un.org/sustainabledevelopment/sustainable-development-goals/.

United Nations Conference on Trade and Development (2014). World Investment Report 2014. Investing in the SDGs: An Action Plan. New York and Geneva. United Nations. 2014.

United Nations Conference on Trade and Development (2015). World Investment Report 2015. Reforming International Investment Governance. New York and Geneva. United Nations. 2015.

World Commission on Environment and Development (1987). *Our Common Future* [online]. [cit. 2015-12-09]. Available: http://www.un-documents.net/our-common-future.pdf.

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# 32. SMALL MARKETS AS A GENERATOR OF GLOBALIZATION PROCESS

**Abstract**: The main problem of the paper is that globalization has effected the world's market, now all markets are relatively small by comparing it with the international. Therefore, the main objective of paper is to create a competiveness strategy that is oriented to the small market. The author's results indicates that usually researches position small markets as weak, however this is not the case. The global reports of competiveness, manufacturing and logistic indicated that large markets tend to developed in the manufacturing area, while small markets develops in the distribution of information, products and services. The author's developed competiveness methodology offers to stop competing and work together. Small markets may develop even further in the logistic instruction, while large markets should position themselves as the leaders of manufacturing. Moreover, markets should start to share information and divide the profit and responsibilities between themselves. By implementing, the author's offered methodology and mindset sustainable competiveness advantage may be achieved.

Keywords: competiveness, food industry, globalization, logistics, small markets

JEL classification: F12, L11, D40

#### 1. Introduction

The world's economics is growing and rapid technology change requires a new perspective to competitive advantage maximization possibilities. Today a new perspective to the small market competitiveness is needed, because there are countries that are developing rapidly and some a failing in the market. Regarding the competitive world index Netherlands remains in the 8th place, Lithuania has dropped from 41th place to 48th. Even united states lowered her ranked from the 3th place to the 5th. Nether less, Belgium increased from the 17th till 18th place (Schwab, 2015). Regarding this information, it is important to determine the competitive advantage maximization strategies of the small markets. The analyzed literature indicated that the small markets are usually mentioned as the weaker part in the globalized environment and that the large markets has more influence to the international market. Mura and Buleca analyzed the Slovak small and medium food enterprises and concluded that the SMEs are more working domestically and are showing only a simpler form of expansion in foreign markets (Mura, 2014).

Another research has been done about the small and medium firm's competiveness. Their work identified that firms that has strong marketing skills and are planning an logistic infrastructure may work in the international market, however small and medium firms lack these benefits (Rawwas, 2013;

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Havierniková, Srovnalíková, 2014). Therefore many developed competiveness strategies emphasizes that small markets are weak and has to develop strategies how to survive in the international market. However, a more detailed analyze is indicated other results. The truth is that small markets is the reason why globalization is happening and their activity in the international market and constant competiveness strategy development is like a catalyzer for the globalization process. There are researches done, that agrees with the idea that small markets must developed competiveness strategies to thrive and grow in the international market and not only try to survive (Vojtovic, 2013). Demas analyzed the small economies in the globalized environment and concluded that all markets are now relatively small by comparing with the international market and they are effecting even less the supply and demand (Ocampo, 2002).

The facts indicates that small markets are the generators of the globalization process. Regarding these findings a sustainable competiveness strategy methodology for small markets was developed. The strategy is a way for small markets to work with international firms and future researches may refer to this methodology when comparing small and large markets. This finding can be considered as a novelty to the scientific literature. To prove this statement the research goal is to create a competiveness strategy that is oriented to the small market. To achieve this goal several objectives will need to be accomplished. Firstly, the small markets concept needs to be reviewed and during the review the main singularities needs to be distinguished.

#### 2. Literature analysis

The main problem of the paper is that globalization has effected the world's market, now all markets are relatively small by comparing it with the international. Therefore, the main objective of paper is to create a competiveness strategy that is oriented to the small market. This paper is developed as literature review and is theoretical in character.

Firstly, the literature was analyzed regarding the classification of small markets. The problem is that the world has changed and the main power is not any more in the land, resources and population. These principals would have been a result in the past, but not today. This happened, because of rapid technology change and free trade. Before analyzing the singularities of small markets and determining the main aspects and possibilities of competitive strategies, is important to understand what exactly small markets is and how they can be categorized. The categorization of countries has been developed for quite a while. Damijan (1996) has combined size, population, GDP and developed an empirical statistical analysis and determined a method for countries categorizatio. However, the researched and imperial weight coefficients needs to be changed today, because the world has developed and the criteria's has shifted.

$$ASC_{i} = \frac{sA_{i} * w_{1} + sP_{i} * w_{2} + sG_{i} * W_{3}}{w_{1} + w_{2} + W_{3}}$$
(1)

ASC - index of a country's size

 $sA_i$  – Ratio of the country's size to the total world size

 $sP_i$  – Ratio of the country's population size to the world population size

 $sG_i$ - Ratio of the country's GDP to the total world GDP

 $w_1, w_2, W_3$  – Weight coefficients achieved by empirical statistics

Using formula 1 can be calculated and categorized the countries by their population, GDP and area. The results were modified and showed that out of 193 countries: 4 Large, 26 medium, 97 small and 66 micro states. Nevertheless, these results need to be changed a bit for better accuracy of today's world, because of these the categories were changed by Very large, large, medium and small. In addition, the interval were modified to get better results. The calculated statistics indicated that China, United States, Russia are very large markets, while for example India and Germany is a large market. Belgium and Netherlands are medium markets, however just until recently they would have been categorized as small. Now the small markets for example are Latvia, Lithuania, and Estonia. However, these results are also made only by regarding to the criteria's of area, GDP and size and many of them should be questionable, because they do not exactly represent the situation, because of this it is important to analyze the singularities of the countries

It is import to analyses the free trade concept. Small markets can now participate in international trade freely and it does not matter their size, pollution of area. The only thing that matters is how they use the resources and technologies that they control. The free trade concept is close related to the

public sector. The public sector in small markets usually is big and requires more expenses, but they are also interested to develop even more the countries policies to achieve better possibilities to use technologies and international trade. The strategy of developing technologies can be used by large and small markets. (Kordos, Karbach, 2014). Another important aspect of small markets is the cost of labor and firm size. In high developing countries the cost of land or labor can be high, because of the living expenses and high cost of education. The international comparison of hour labor indicates that in 2010 the hourly labor cost in Denmark was about 33 dollars per hour, in Germany it was about 23 dollars, China about 3 dollars (Bureau of Labor Statistics, 2011).

This information is important, because the cost may vary from the country size. The firm size is also closely related with the size of the country. Yo-Yi Huang and Deng-Shing Huan (2014) analyzed a competition equilibrium model and considered two types of firms: big with higher fixed cost but lower marginal cost, and small with lower fixed cost but with high marginal cost. They proved that free trade may not always benefit the big country and big firms. The smaller country may take more than proportional market share after free trade in the big-firm and small firm market, if the cost advantage dominates the disadvantage in the smaller home market. They also proved that an increase in the global market size may lead to more small-size firms, unless the elasticity of substitutions is large enough.

By using the concept of small markets, the main singularities can be identified. This part will indicated the possibilities of small versus large markets by comparing world competitive index (GCI). Competitive advantage is essential for every country in order to maximize its profit and power. The report groups the main competitive indexes and summarizes them by 12 criteria: Institutions, Infrastructure, Macroeconomic environment, Health and primary education, Higher education and training, Goods market, Labor market efficiency, financial market development, technological readiness, market size, business sophistication, innovation.

The Global Competitiveness Report assesses the competitiveness landscape of 144 economies, providing insight into the drivers of their productivity and prosperity. The report remains the most comprehensive assessment of national competitiveness worldwide. United States has lowered her ranked by two positions, while Germany has increased from 5th to 4th. Moreover, smaller countries has increased their competitiveness, Belgium from the 18th went to the 17th, while Netherlands has remained in the 8th place. In addition, a relative small but powerful country Sweden from the 10th place raised up to the 6th place. This information shows that utilization of technology and resources can maximize competitive advantage and not only the size of the countries (Ivanová, Koišová 2014).

The next index that needs to be review is logistics. Supply chain in today's economy is essential, because the main idea is to distribution information about your product and the quality of the product does not necessary need to be the highest. Because of this, it is essential to overview the logistics index of countries. The logistics performance (LPI) is the weighted average of the country scores on the six key dimensions: customs, infrastructure, international shipment, logistics competence, tracking & tracing, timeliness. The competitiveness index is a global factor relating not only to the industry, because of these the Logistic performance index is essential for a proper banalization of small markets. United states are in the 9th place, China 28th, Japan 10th. One of the best small markets examples are Netherlands and Belgium, these are significant small countries, but their overall logistics performance are one of the best. On the other hand, Lithuania is only in the 46th place of the LPI. The problem is that the logistic sector is lacking technological innovation, but on the other hand, a small market does not necessary need these technologies in the start, because they do not have large flows of orders. The first thing should be to optimize is the infrastructure and customs.

The last important index is the global manufacturing competiveness index. This is another area important for to analyze, because the small markets has cheap and professional labor that can increase their manufacturing level. On the other hand, small markets may have less advanced technologies, so the manufacturing index may be lower in some countries. The competitive index also depends on the countries strategies some of them may choose distribution, other services and part of them manufacturing. In order to quantify country competitiveness more precisely, manufacturing executives were asked to rate the overall manufacturing competitiveness of 38 countries, currently and in five years. The highest manufacturers were rated China, Germany, United states, India. While small countries like Netherlands was 23ed place and Belgium 27th. China is long known for the "China effect", if you are starting to manufacture a new product, it is likely that china will start manufacturing

the same product, but a cheaper one. Other industry is like Germany and India are forecasted to grow the manufacturing index, because these countries has positioned themselves a more manufacturing type. This can also be seen by the Logistic performance index, because China is only 28th place, nether less it is still a powerful country. A different version can be seen with Netherlands and Belgium, these two countries are not so competitive in the manufacturing area, but the logistic index shows a high competence. This is essential to understand, that small countries also has potential to become a powerful countries, but they need to conduct a strategy for competitive advantage maximization.

The competiveness, logistic and manufacturing indexes indicated that the small markets tend to distribute products and information, while the larger markets tend to manufacture. This information is essential in order to develop proper competiveness strategies. The next chapter will indicate the singularities of the small markets that can be used to achieve competiveness.

#### 3. Results and discussion

It is important to understand the possibilities of the small markets competiveness, therefore a case study regarding the food industry will be conducted. However firstly it is important to understand the market's structure and determine the best competiveness strategy. Depending on the industry the strategies of profit maximization can differ. Firstly, it is essential to distinguish the industry types. This can be done by overviewing the Global Industry classification standard (GICS). The GICS system consist of 10 sectors: energy, materials, industrial, consumer discretionary, consumer staples, health care, financial, information technology, telecommunication technology and utilities. There are total of 154 subgroups that consist of food, beverages, Tabaco etc.

This information is important, because every industry in different market may have different market structure and may require different strategies for competitive advantage maximization. Mura and Buleca analysis the trends in the Slovak Food industry. In today's world, small and medium food companies are working domestically and internationally, because the international market creates new opportunities faster growth and better market position. "According to their findings in business practice the Slovak food small and medium enterprises are economically active predominantly in Central European economic area and there are only simpler forms of expansion into foreign markets (Mura, 2014). These findings shows how competitive advantage strategy can differ for a company's size and industry. Other researches also analyzed the small and medium food industry in the Greek market. They evaluated their firms based on sustainable performance measurements – consumption, flexibility, responsiveness, product quality and total supply chain performance. The findings identified the food supply chain members who perform or underperform in relation to size. Specific reasons are provided for these sustainability performance differentials including the role of locality as well as the asset and resources intensity of some operations. In addition, they indicated that small firms are the top performers in terms of sustainability performance especially in the area of flexibility and responsiveness. Another key finding is that members of this chain underperformed in the product conversation time measure, irrespective of size (Bourlakis, et al., 2014). This is another issue related to food industry – the flow of orders intense and the quantity often is quite low. Because of this, many firms find difficulty with the supply chain. This may result in weaker competitive advantage for the food industry.

On the other hand, an industry with a lower order and product quantity also can use supply chain optimization as a competitive advantage strategy, but the strategy could differ from speed and precision to lower price or differential logistics. Lithuania is a small country that is a good example of the variety of companies and industries. In the last 10 year Lithuania has increased her overall active company quantity by 19636, also regarding the Lithuania's GDP growth the country is prospering. It is also important to indicate that the food industry's amount of companies has decreased in the last 10 years by 14.56%. Nether less the food export has increased averagely by 12.74% from 2009 till 2014 (Anon n.d.). Similar tendencies can be seen in other industries. Furniture manufacturing company's amount has increased by 39.8%, construction companies by 125.48%. In addition, there is an increased demand in warehousing and transportation companies – growth of 131.8% since 2006. This information is essential in order to understand competitive advantage. The economy is growing, there are more and more companies in the industry, nether less many of them bankrupt in the first years of business. The technologies has changed and it is needed to conduct new competitive strategies in order to maximize competitive advantage.

The next concept that needs to be overview for a proper competiveness strategy development is market structure. Different industry's has different market structure and it can be that the same industry in different countries will work in different markets. On the other hand, a large company that is working worldwide may work in different markets, regarding the country's economic structure. There are many researches done that identifies the priority of understanding the market structure. Tishler analyzed the R&D and innovation in the oligopoly market. "His model described the optimal R&D choice of firms operating in an oligopoly market for several substitute good, they predicted a convex relationship between competition and innovation; that is, innovation declines as a function of product market competiveness up to a certain level, and rises thereafter, when competition becomes intense. In other words, firms in an oligopoly market may engage in an "R&D war" and spend excessively on R&D when product market competition is tense" (Tishler, 2009).

These research also indicates the competitive strategies of oligopoly market, but they research a different area – technology development. R&D centers and innovation may help companies to increase competitive advantage, but the strategy and the investment size may differ depending on the market structure. These researches showed only one type of market peculiarities, but there are other types of markets that is essential to analyze.

Table 1. Market structure types and characteristics

Market structure	Number of Buyers & sellers	Type of product	Barriers to entry industry	Firm's influence over price	Industry's Example
Perfect competition	Many	Identical	None	None	Agriculture - crops, cereal
Monopolistic competition	Many	Differentiated	None	Moderate	Chicken, beef, pork
Oligopoly	Few	Identical or differentiated	High	Moderate to substantial	Dairy
Monopoly	One	Unique	Impossible	Substantial	Electricity

Source: Own work

There are a few researches done about the market structure in small countries. Eifert analyzed infrastructure and market structure in least developed countries. His research logic is based on the scale economies. The concept is demonstrated in a simple homogenous-products oligopoly framework with heterogeneous technologies, an explicit model of electricity service and a fixed set of large incumbent firms facing potential entry. The results of this research were: "the most interesting possibility is that incumbent firms may bargain with providers of public services for (inefficient) preferential treatment that keeps the playing field asymmetric. This story is consistent with the wellknown "missing middle" phenomenon in least-developed countries, and may contribute to weak product market competition and high prices" (Eifert, 2007). These results indicated the importance of market structure in different countries. In Lithuanian situation, the electricity industry can be called monopolistic, because for Lithuania's enterprises the entry to the market is impossible. Different situation may be in other countries. on the other hand, Lithuania's situation may also change if more neighborhood companies would start providing electricity services. Small countries can only achieve competitive advantage by working internationally, this is also closely related to foreign investments and allowing firms to join the market. Clustering process may not be so effective in a local market, but it can show a significant decrease in cost, when a small countries is working in a large market. To summary, Small Markets are similar to small and medium enterprise by their behavior. It is hard for them to influence the world economy, usually they are the one that follows. Nether less there are examples of countries that has developed a decent competitive strategy, that helps them compete with large nations (Strunz, Vojtovic, 2014). The basic overview of the singularities of small markets is necessary for the next phase of the research. A more depth analysis of a small markets food industry is necessary for a proper competiveness strategy.

The food industry has been chosen for several reasons. Firstly, that the food industry is now developing rapidly because the consumer started to desire for healthy food. Therefore, the technologies for agriculture, healthcare is growing rapidly, not only that but the demand for this kind of products has risen dramatically in the recent years. Many countries started implementing

sustainable development and other R&D centers for this particular demand. The analyzed results indicated that small markets tend to work with information and distribution of products, while large markets are more orientated to manufacturing. In addition, the food industry is usually an oligopoly market if you analyze it at the scale of small markets, however in the world market it can be treated as perfect competition. Because food and beverage products can be produced and soled by everyone, just the quality may be different, nether less there are many identical products, especially in the agriculture. Therefore, the idea is that small markets needs to lead the way and not just try to survive and let large markets to lead. The food industry is the best example where large markets could raise raw material for the food like crops, vegetables etc. While small markets may prepare it and distribute it around the world. The large markets has technology, experience and rapid development for proper manufacturing process. However, what they lack is time that is need for professional distribution of products. Here comes in the small markets, because of the internet, cheap labor and high education level (in some small countries), they can position themselves as professional distributors of information and services. By this way a sustainable competiveness strategy may be developed.

#### 4. Conclusions

The analyzed literature indicated that the world's markets are being effected by the globalization and all markets are now relatively small regarding the international market. In addition, the scale of economies can be used for positioning the small markets at a better position that would let them compete with large nations. The conducted reports of competiveness, manufacturing and logistic identified that some small markets are already seeing their potential and therefore they can compete with large markets. It was concluded that large markets tend to work in the manufacturing area, while small markets works with distribution of services, information and products. The case study of the food industry was chosen because it resembles the perfect competition concept and therefore proper competiveness strategies may be developed. The point is that life is not a game and there are any losers or winners. The matters is that markets should compete with themselves and not with the world. Then constant development is possible. Small markets can achieve competiveness advantage in the distribution area, while large markets may be the leaders of manufacturers. In the future, there is a possibility that there will be only a few manufacturing sites and billions of people will distribute the products and services. This concept is called "prosumer" and it is a new developing era for the markets. Nether less not all enterprises understand this concept and they are trying to compete witch each other and does not share information and experience together. Because of this the technologies are developing rapidly, however the economics growth rate is lacking speed, therefore a new mindset would change the world's situation and it could lead to a sustainable competiveness strategy development.

#### References

Benjamin, E. (2007). Infrastructure and Market Structure In Least-Developed Countries. California: University of California, 2007.

Bourlakis, M., Aktas, E., Gallear, D., Fotopoulos, Ch. (2014). Firm size and sustainable performance in the food supply chain: insight from Greek SMEs. *Production Economics*, vol. 152, pp. 112-130.

Bureau of Labor Statistics (BLS) (2011). United States Department of Labor, 2011.

Damijan, P. (1996). Majhne drzave v svetoni trgovini (Small Countries in the World Trade). Ljubljana: Kartina, 1996.

Havierniková, K., Srovnalíková, P. (2014). The immunity of family business in the conditions of economic crisis. *Problems of social and economic development of business*, vol. 1. Montreal: Breeze, pp. 179-183.

Ivanová, E., Koišová E. (2014). Interregional disparities in the Slovak and Czech Republic. In *Economic & Tourism*. SGEM conference on political sciences, law, finance, economics. Volume IV. Sofia: STEF92 Technology, pp. 405-412.

Ocampo, J. A. (2002). Small economies in the face of globalization. Peper presented at the Third William G. Demas Memorial Lecture at the Caraibben Development Bank *Cayman Islands: Economic Commission for Latin American and the Caribbean*, 2002.

Kordos, M., Karbach, R. (2014). The issue of innovation in international economics. In *Economics & Tourism*. SGEM conference on political sciences, law, finance, economics, Vol. III. Sofia: STEF92 Technology, pp. 653-660.

Lithuania Statistics (2014). Export size by product type. [online]. [cit.2015-01-18]. Available: http://osp.stat.gov.lt/.

Mohammed, Y.A., Karthik N.S. (2013). How do small firms possibly survive? A comparison study of marketing skills and logistics infrastructure of small and large wholesalers. *International Business Review*, vol. 22, iss. 4, pp.687-698.

Mura, L., Buleca, J. (2014). Trends in international business of the Slovak small and medium food enterprises. *Social and Behavior Sciences*, vol. 110, pp. 905-912.

Schwab. (2015). The global competiveness report 2014-2015. In , Geneva: World Economic forum.

Strunz H., Vojtovic, S. (2014). Vocational training and employment in the creative industry. In *Economics&Tourism*. SGEM conference on political sciences, law, finance, economics. Volume III. Sofia: STEF92 Technology, pp. 787-794.

Su-Ying Hsu, Shih-Jey Wu, Chu-Ping Lo. (2014). The nexus of market concentration and privatization policy in a mixed oligopoly. *Economic modeling*, vol. 38, pp.196-203.

Tishler, A., Milstein, I. (2009). R&D wars and the effects of innovation on the success and survivability of firms in oligopoly markets. *International Journal of Industrial Organization*, Vol. 27, pp.519-531.

Vojtovic, S. (2013). The impact of Emigration on Unemployment in Slovakia. *Engineering Economics*, vol. 24, no 3, pp. 207-216.

Wagner, U., Muller, E., Kimme, F., Riedel, R. (2014). Planning of logistics for Large-Scale Production of Metal-Plastic-Hybrid Components. In 74th Conference on Manufacturing Systems. Germany.

Yo-Yi Huang, Deng-Shing Huan. (2014). Big vs. small under free trade: market size and distribution of firms. *International review of economics and finances*, 2014, vol. 34, pp.175-189.

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# 33. ENVIRONMENTAL INNOVATION IN THERMAL POWER PLANTS OF THE SLOVAK REPUBLIC AND THEIR IMPACT ON THE QUALITY OF THE ENVIRONMENT

**Abstract:** The energy industry as a significant industry in the world and national economy is also one of the major polluters of the environment. Together with transport responsible for a major production called "Greenhouse gases" and thus contributes to the ongoing climate change our planet. Nevertheless, global energy requirements are still growing. This encourages dynamic innovation processes within this sector. One of the main innovations in the energy sector are pursuing environmental innovation reducing the negative impact of electricity production on the environment. The article deals with the most significant environmental innovations in two thermal power plants in the Slovak Republic from 2004 to 2014. At the beginning of the article are analyzed the negative effects of thermal energy on the environment and there are also analyzed options for reducing the negative impacts on the environment by using of new technological procedures and equipment. Identified environmental innovations are then considered in relation to the production of selected air pollutants and waste products. The paper used a method of analysis, thematic synthesis and comparing the information obtained. Based on the results, it is considered the pace and efficiency of these environmental innovation. Conclusion The article includes a brief reflection on possibilities for further research on those issues.

**Keywords:** environment, innovation, thermal power

JEL Classification: Q55, Q33

#### 1. Introduction

The energy industry is nowadays strategically important part of the global economy. Its status is constantly reinforced by increasing energy intensity especially in economically developed countries. Heat-power engineering represents the traditional way of obtaining and using energy by burning fossil fuels. This involves exhaustible, non-renewable resources of raw materials whose extraction, as well as energy recovery has a significant negative impact on the various components of the environment, including humans. Energy dependence incites the company to seek new alternative methods of obtaining energy, but also incites to various types of innovations of technologies used so far. Especially this is true in the case of the operation of thermal power plants that only through the noticeable innovations of technological procedures and equipments can still minimalize the serious negative impacts on the air, the water, the soil and the living organisms.

This article focuses mainly on the negative impact related to the air pollution and the production of waste products. We are noticing the period from the year 2004 until 2014. It is important to know the interaction between reducing emissions of basic pollutants in the air and the implementation of environmental innovations. We analyze the continuity of implementation of innovation during the particular monitored years and after that we review collected data in wider society-wide context. The aim of this article is to judge the effectivity, pace but also continuity of significant environmental innovations related to air protection and the production of waste products. Significant environmental innovation is every innovation which leads to evident reduction of environmental pollution. In this work there are used some methods of analysis, thematic synthesis and comparing of obtained informations.

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#### 2. Data and Methodology

The paper uses data and information assembled by Annual Reports of the Slovak power plants, a.s. and Report about the air quality and the share of individual sources on its pollution in the Slovak Republic. Then this work includes a period of crisis where we expected attenuation of innovations, but also decrease of emissions and also the year 2006 when the multinational company ENEL SpA entered the Slovak power plants, a.s.

On the basis of the objective of work listed above, we determined the methodical work approach in the following steps:

- 1) Analysis of the negative influence of the heat-power engineering on the environment and the problems of the environmental innovations.
- 2) Analysis of actual situation and the operation of thermal power plants in the Slovak Republic.
- 3) Analysis of the significant innovations of the air protection and waste management of thermal power plants.
- 4) Thematic synthesis of analyzed informations.
- 5) Comparing of the significant innovations with observed impacts on the actual situation of the environment.
- 6) Evaluation and interpretation of collected results.
- 7) Recommendations, conclusions.

### 3. Negative impacts of the heat-power engineering to the environment and environmental innovation

Within the energy industry, the heat-power engineering is the most polluting form of electricity generation. We can see negative impacts in all parts of the environment including living organisms and humans. The main fuel source are non-renewable ergo exhaustible resources of raw materials such as coal, brown coal or natural gas. Thermal power plants work on the principle of converting chemically bonded energy into heat energy or more precisely mechanical energy. Burning of fossil fuels leads to the release of chemical elements such as sulfur, carbon, nitrogen and heavy metals as well. These elements are released to the air where they react with other elements and then they get back to the earth's surface in form of compounds where they help to increase the "greenhouse effect". The main emissions arising from the burning of fossil fuels are SO<sub>x</sub>, NOx, CO, CO<sub>2</sub>, as well as methane (CH<sub>4</sub>), some heavy metals (Cu, Pb) and the solid pollutants. Methane is released into the air also by the extraction of brown coal and burning of biomass. Methane together with CO<sub>2</sub> belongs to the main greenhouse gases. NO<sub>2</sub> and SO<sub>2</sub> react in the atmosphere with a water vapor and they are involved in the formation of acid rains by the process of formation of acids. The acid rains change the pH value of the components of the environment after their fall on the earth's surface whereby they limit the life of organisms, then they change the accessibility of heavy metals in the soil and also contribute to poor harvests of some agricultural crops. Dust particles that are also dangerous are getting into the respiratory system of living organisms. Some radioactive substances (U, Th, Ra) are released to the environment by burning of coal (Marcinátová, 2006).

In the process of burning coal, the waste in the form of cinder, ash, slag and fly ash is forming in the thermal power plants. The content S is reduced by adding CaCO3 to the burning process and the waste product "energosadrovec" (calcium sulfate) is formed. The waste products have specific characteristics and impact on the environment. The waste products are partly used as an addition in building materials. The rest of waste products is landfilled. The fly ash mixed with water (where many elements as toxic As are released) has negative impact on the environment. The special category is waste water that has diversified composition. The term "eco-innovation" refers to innovative products, processes or organizational innovations that reduce environmental costs, increase the acceptance of society and contribute to sustainable development.

Adenle et al., (2015) says that innovation is not just about new outcomes and processes introduced to the world (absolute inovation), but also includes those that are new to a specific company or country (diffusion). In this paper we understand innovation in the same way. Meaning of this definition Horbach et al. (2012) define eco-innovation as product, process, marketing, and organizational innovations, leading to a noticeable reduction in environmental burdens. As Loučanová and Trebul'a (2014) reported eco-innovation can basically mean the development of new product, processes that are necessary for the creation of a product or reevaluation of the way the products are offered nowadays.

The authors listed above distinguish technological eco-innovations and organizational eco-innovation and technological eco-innovations are subdivided into corrective and preventive technologies. Preventative technologies include additional and integrated technologies. The additional technologies include arrangements as the methods of disposal and recycling that occur just after the actual production and consumer's process. The integrated technologies directly solve the cause of emissions during the production. A group of organizational innovations can involve the preparation of eco-audits or the establishment of environmental managerial systems. From now, according to more concise terminology we incline to the term of "environmental innovation" instead of "eco-innovations" because of the term "environmental" directly relates to the protection of environment while the word "eco" is broad and relates to the area of ecology. Anyway, environmental innovations are a modern instrument of environmental policy of firms and also significant competitive advantage. According to Chassagnon and Haned (2015) the literature often purports that innovation behavior is correlated with the stringency of environmental policy. Role of innovation in global environment of competitiveness emphasizes in prior studies Kordoš (2014), Kordoš and Karbach (2014), Sedláček (2014). These firms are favored by the state (taxes, fees for pollution) by application of innovative methods, technologies and procedures. They usually save resources whereby they ultimately increase their profit. As Amores-Salvadó et al. (2014) says through environmental innovations, the firm can improve its efficiency, achieve significant cost reductions, and meet the demands of those consumers especially sensitive to environmental factors, improving in this way its economic and financial results. Growth of energetics is also closely linked with regional development as note by Hošták (2015). Jänicke (2012) deals with growing eco-industry and borders of "green" economic growth.

# 4. Analysis of actual situation and the operation of thermal power plants in the Slovak Republic

In the Slovak Republic are operating two thermal power plants which are operated by company the Slovak power plants, a.s. The first thermal power plant is brown coal power plant Nováky in district Prievidza (Trenčín region) with an installed capacity of 518 MW. The second power plant is Vojany (Košice region) which consists of a coal power plant Vojany I with an installed capacity of 660 MW and power plant Vojany II burning natural gas with total installed capacity of 660 MW. The power plant Vojany II is not in operation nowadays because of the high costs of the operation. In the power plant Vojany I there are only four of the six units in operation. In both power plants is burnt biomass of type of wood chips in fluidized bed boilers.

Brown coal power plant Nováky burns brown coal and lignite that are supplied by Hornonitrianske bane Prievidza, a.s. These mines are regional supplier that are additionally supported under the principle of the so-called "general economic interest". The power plant Nováky burns heavy fuel oil and black oil that are used for heating and flame stabilization. The power plant Nováky has both dry bottom boilers and fluidized bed boilers in operation. Except the production and supply of the electric energy, it delivers hot water to heat three neighboring towns - Nováky, Zemianske Kostoľany and some industrial concerns. The power plant Nováky has got two basic parts: ENO A a ENO B. The part ENO A was the original part and started to operate in 1949. It contained 10 steam generating units and 8 turbines after completion of the construction. Later, the part B was built by the so-called unit technique (4 units together). Gradually, the old parts of the original part ENO A were shut down and part A was complemented by the fluidized bed boiler which also burns wood chips from home-made sources nowadays. In the part ENO B were gradually reconstructed units 1 and 2. These two units will operate also from 2016 when stricter emission limits of The Industrial emissions directive (European Union) will be in force. The operation of units 3 and 4 that were not modernized will not operate any longer.

The power plant Vojany has also two basic parts, one of them is partly functioning EVO I (4x 110 MW) and the second one is already shut down EVO II (4 x 110 MW). The power plant EVO I burns coal and partly wood chips imported from Donbass mining district. EVO II was originally built for burning coal too. Because of limited supplies of coal, EVO II was rebuilt to burning the heavy fuel oil (mazut) and finally even the natural gas as a fuel source. Since 2009 the units 5 and 6 of EVO I has gradually burnt the wood chip and nowadays it is almost 20% output of the total fuel. Within of reducing emissions are used two methods of desulfurization in the analyzed power plants. Dry bottom boilers use a limestone wet method of flue cleaning, fluidized bed boilers use a method of supplying limestone to the combustion chamber.

#### 5. Results

Table 1 shows the significant innovations to the air protection in both rated thermal power plants in the time period from 2004 to 2014. This period is the period from the beginning of continual monitoring of major emissions practically to the present day and at the same time it is still continuing period of economic transformation and significant economic changes. The entrance of multinational company Enel in April 2006 relates with the heat-power engineering in the Slovak Republic. As Table 1 shows us, in both power plants were introduced only five significant innovations that head towards improvement of the air quality from 2004 to 2014. The most significant innovations contain continual monitoring of the air around the power plants, the introduction of an environmental managerial system EMS and the introduction of burning of biomass in both power plants. We must judge the innovations with realistically achieved emissions with lower values.

Table 1. The significant innovations to the air protection

Year	Power plants					
r ear	Nováky	Vojany				
2004	start operation of denitrifying equipment in order to decrease NO <sub>x</sub>					
2005						
2006	continual monitoring of the air around the power plant	continual monitoring of the air around the power plants				
2007	the introduction of EMS system	the introduction of EMS system				
2008						
2009		continuous operation of burning biomass in fluidized bed boiler - gradual increase of share of burning biomass since this year				
2010						
2011	the introduction of burning wood chips in fluidized bed boiler – gradual increase of share of burning biomass since this year					
2012						
2013						
2014						

Source: Annual Reports - Slovak power plant, a.s.

Table 2 shows the production of basic air pollutants from equipments that burn fossil fuels of SEAS (tons per year) company. The knowledge of wider connections allows us to judge the impact of significant innovations. Decrease of SO<sub>2</sub> emissions in the period 2004 to 2006 was caused by the decrease of output in production in both power plants. Decrease of emissions in 2007 was mainly caused by decommissioning of two obsolete units at the power plant Nováky. Since 2008, SO<sub>2</sub> emissions were relatively stable until 2010. In 2010 we are noticing the increase of emissions caused by increased consumption of brown coal containing sulfur in power plant Nováky. In 2012 the power plant Nováky was also contributed to decline of emissions because the only dry bottom boiler has been in operation. The decline in 2013 is related to a significant increase of burning of biomass in fluidized bed boiler in power plant Nováky, up to 10% of the capacity of fuel and nearly up to 20% of the capacity of fuel in fluidized bed boiler in power plant Vojany. Decrease of output in production in power plant Nováky till 2007 caused decline of NO<sub>x</sub> emissions. We can not attributed the other marked decrease to innovations in thermal power plants. The economic recession caused the decline in 2009. The solid pollutants (SP) from the other emissions are interesting in relation to thermal power plants. Their decline in 2006 was caused also by the reconstruction of separating devices in the power plant Nováky. Likewise, the emissions decrease also in 2007 when two obsolete units were shut down in the power plant Vojany.

Table 2. The production of basic air pollutants from equipments that burn fossil fuels of SEAS (tons/year) company.

	2004	2005	2006	2007	2008	2009
SP	6636	11107	7239	748	626	543
SO <sub>2</sub>	45886	44906	40374	33179	35926	32872
NOx	10024	9816	7804	6537	5691	5210
CO	1126	1108	1251	1205	1228	814
	2010	2011	2012	2013	2014	
SP	379	451	340	313	313	
$SO_2$	36946	40184	33980	31381	25152	
NOx	4530	4856	4095	3449	3373	
CO	791	838	777	721	707	

Source: Report about the air quality and the share of individual sources on its pollution in the Slovak Republic

Table 3 shows the significant innovations in waste management in Nováky thermal power plant in the time period from 2004 to 2014. There is only one innovative process that we evaluate as significant in Vojany thermal power plant - introduction of an environmental managerial system in 2007. For that Vojany is not included in Table 3. We evaluate only four innovations in the thermal power plant Nováky as important. We consider the introduction of an environmental managerial system in 2007 as a significant innovation. Their direct impact on the condition of the environment is hardly valuable, as it has long term character and it is subject to monitoring of more components of the environment (soil, water, soil biota).

Relation between decrease of emissions as well as grow of innovations in waste management and arrival of Enel company in 2006 has not been confirmed.

Table 3. The significant innovations of the waste management

Year	Power plant Nováky
2003	
2004	
2005	
2006	
2007	the introduction of EMS system
2008	start operation of wastewater treatment plant, creating of waste product "energosadrovec" (calcium sulfate) as product of desulfurization
2009	
2010	
2011	
2012	reclamation of the original coal-ash settling basin
2013	
2014	reconstruction and modernization of the coal-ash settling basin Chalmová - Phase II.

Source: Annual Reports - Slovak power plant, a.s.

#### 6. Conclusion

Thermal power plants in Slovakia are still an important part of the energy system. Nowadays the share of the electric energy produced in these power plants represents approximately 29% of the total output of produced electrical energy. The obtaining of energy by burning coal or even low-quality brown coal belongs among the most unfavourable technologies in relation to the protection of environment. That is the reason why development of new technologies still exists to prevent the leakage of pollutants to the air and to the other components of the environment. In the last decade we can see effort to reduce the negative impacts of heat-power engineering in both monitored power plants. This involves especially substitution of classic fuel by renewable sources (wood chips) whose share in both power

plants is growing every year. The total operation of the thermal power plants gradually decreases what also helps to observance of constantly more stringent environmental limits. While both power plants have effective desulphurising technologies and filters to capture solid particles, in our work we did not notice a good will to introduce newer and more effective technologies. Burning of biomass in fluidized bed boilers was effectively displayed in the higher amounts in 2013. A significant innovation seems to be the total modernization of units 1 and 2 ENO B of power plant Nováky, but these units should primarily comply with new emission limits applicable from 2016. Modernization took place in 2015 and therefore is not included in our selected time period. At the same time, the obsolete units 3 and 4 were shut down. In the next work it would be interesting to evaluate also the production of emissions from the power plant Nováky in 2015 when two old dry bottom boilers were in operation because of the reconstruction of units ENO 1 and 2. These data are not available yet. The innovations in waste management were essentially noticed only in power plant Nováky. At the moment the influence of power plant Nováky is hardly valuable because the positive effects on the environment are manifested later and are subject to longer-term monitoring. The introduction of innovations in power engineering would generally not pursue only valid or upcoming legislative provisions. A significant role of especially technology-oriented environmental innovations is losing by this way. This role can be formulated as "to be always a step ahead" especially in the environment of actual economic competitiveness.

#### Acknowledgements

This article is one of the outputs of the project VEGA 1/0613/14 "Changes in the economic structure of the regions of Slovakia and their impact on economic and social development", and the Operational Program "Education" ITMS code: 26110230099 project "TnUAD in Trencin is committed to offering quality and modern education".

#### References

Adenle, A. A., Azadi, H., Arbiol, J. (2015). Global assessment of technological innovation for climate change adaptation and mitigation in developing world. *Journal of Environmental Management*, vol. 161, pp. 261-275.

Annual Reports - Slovak power plants, a.s [online]. [cit.2016-01-03]. Available: http://www.seas.sk/publikacie

Amores-Salvadó, J., Martín-de Castro, G., Navas-López, J. E. (2014). Green corporate image: moderating the connection between environmental product innovation and firm performance. *Journal of Cleaner Production*, vol. 83, pp. 356-365.

Chassagnon, V., Haned, N. (2015). The relevance of innovation leadership for environmental benefits: A firm-level empirical analysis on French firms. *Technological Foerecasting and Social Change*, vol. 91, pp. 194-207.

Horbach, J., Rammer, Ch., Rennings, K. (2012). Determinants of eco-innovations by type of environmental impact - The role of regulatory push/pull, technology push and market pull. *Ecological Economics*, vol. 78, pp. 112-122.

Hošták, P.(2015). Energy intensity as a parameter of regional development in Slovakia. In *SGEM conference on political sciences law, finance economics & tourism*: Conference proceedings volume II Finance, Economics and Tourism. Sofia: STEF92 Technology, pp.715-722.

Jänicke, M. (2012). Green growth: From a growing eco-industry to economic sustainability. Energy Policy, vol. 48, pp. 13-21.

Loučanová, E., Trebuňa, P. (2014). Eko-inovácie ako nástroj konkrencieschopnosti. Transfer Inovácií 29/2014, [online]. [cit.2015-01-06]. Available: http://www.sjf.tuke.sk/transferinovacii/pages/archiv/transfer/29-2014/pdf/076-080.pdf.

Marcinátová, Ľ. (2006) Energetika a jej vplyv na životné prostredie v roku 2005. Indikátorová sektorová správa. SAŽP, Banská Bystrica. [online], [cit.2016-01-06]. Available: https://www.enviroportal.sk/uploads/spravy/energetika-sektor.pdf.

Kordoš, M. (2014). Role of innovations in the EU industrial policy and competitiveness enhancement. In *Proceedings of the 2nd international conference on European integration 2014*. Ostrava VŠB, pp. 335-342.

Kordoš, M., Karbach, R. (2014). The issue of innovation in international economics. In *SGEM conference on political sciences law, finance economics & tourism*: Conference proceedings volume III Economics & Tourism. Sofia: STEF92 Technology, pp.653-660.

Report about the air quality and the share of individual sources on its pollution in the Slovak Republic (2015) SHMÚ, MŽP, Bratislava, [online]. [cit.2016-01-03]. Available:

http://www.shmu.sk/File/oko/rocenky/SHMU Sprava o kvalite ovzdusia SR 2013.pdf.

Sedláček, M. (2014). Význam inovácií v regionálnom rozvoji. *Sociálno-ekonomická Revue*, TnUAD v Trenčíne, vol.1, pp.79-95.

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# 34. CHANGES IN THE FIELD OF PUBLISHING IN LITHUANIA UNIVERSITIES: THE NEED OF A NEW PUBLISHING MODEL

Abstract: The idea of appearance of a pragmatic, labour market-oriented university is changing the conception of university publishing: currently, the publishing house sees its activities in the light of consumption, marketing and management; it is turning into an enterprise providing services, which is influenced by intensive development of information and communication technologies, expansion of consumer culture and market economy. This article deals with the field of publishing in Lithuanian universities and records changes in it, which are closely related to the need for a new publishing model. The qualitative research involving the heads of publishing houses of Lithuanian universities and university authorities supervising publishing activities in higher educational institutions was conducted. Based on research results, it was found that prospects of changes in publishing of Lithuanian universities should be implemented having accomplished the following three objectives: 1) reorganization of university publishing houses; 2) purchase of publishing services from other organizations (outsourcing); 3) proceeding to digital scientific publishing. In fact, seeking effective university publishing, it is important to initiate changes in it. Initiation of such changes should be perceived in the light of application of a new model of university publishing, which would ensure most efficient university publishing in dynamic market conditions.

Keywords: university publishing, publishing field, publishing model, changes of publishing

**JEL Classification:** I23

#### 1. Introduction

In the conditions of intensive changes in Lithuanian higher education a number of problem areas show up. They are particularly painful due to poor traditions of management and culture of organizations, rapid integration into the market of education and economy of the European Union, new information and communication technologies (Bulajeva et al., 2009). However, Lithuanian universities are strongly influenced by the development of information and communication technologies. In the opinion of Bulajeva Duobienė Targamadzė (2009), it determines the emergence of the pragmatic and labour market-oriented university. Such idea *is changing the concept of university publishing*: currently, the publishing house sees its activities through the prism of consumption, marketing and management, it is turning into a service company, which is influenced by intensive expansion of information and communication technologies, development of consumer culture and market economy.

The crisis related to the great recession of 2008 as a hazard No. 1 in the university publishing field is emphasized by Clement (2011), stating that several US university publishing houses were closed and the rest are looking for ways how not to move away from their main mission – publishing and spread of scientific literature, and at the same time are solving the issue of their survival. However, according to Clement (2011), this is almost an impossible puzzle for many of them: university publishing houses tried different publishing tactics and new strategies, but in market economy conditions their efforts were unsuccessful.

Today the future of the university publishing field is uncertain; therefore, it is most important not to turn back to the past but look to the future and create new publishing strategies; i.e., time has come to create a new vision of the university publishing field, which encompasses much more than publishing of scientific publications and traditional university publishing activities (Clement, 2011, p. 25). Thus, university publishing houses need to re-evaluate their activities in the digital environment and to

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assess how their activities cohere with the overall publishing field, what are their possibilities to remain relevant and, finally, how they can properly represent interests of the academic community and public interests in the near future (Brown, 2013).

Exploration of the topic and problem. Speaking about university publishing in Lithuania, it should be emphasized that book science (and in general communication and information sciences) particularly lack scientific researches on publishing, outlining the conception of university publishing in various aspects and analyzing activity areas of university publishing in Lithuania. A similar situation has formed not only in Lithuania but also in other Western European countries, the USA: problem aspects of academic publishing are insufficiently highlighted in researches on publishing.

This article employs the concept *university publishing field*, which is perceived as a space or place at the university, in which, according to (a) certain publishing model(s), the interaction of corresponding participants manifests itself, resulting in publishing of scientific literature. However, this field is formed by certain factors changing the university publishing field. This context shows that the university publishing field consists of the following constituents:

- participants of interaction (the author-publisher-consumer);
- external change factors (a new approach towards science communication; changing consumer interests and needs; a new approach to funding of publishing; transfer of market laws to higher education);
- publishing models (traditional, hybrid, digital) and functions (traditional, additional).

Participants' interaction emerges when the author brings the manuscript to the university publishing house, which is a structural division of the university. The latter edits the manuscript, designs and publishes it; i.e., disseminates to the consumer. Before submitting the manuscript to the university publishing house, the author has to pass reviewing and approval procedures at the university. The publishing house performs functions delegated to it and acts according to (a) certain publishing model(s).

Analyzing what external factors form the university publishing field, five competitive forces are selected as a starting point; i.e., potential new market participants, suppliers, customers, competition and substitutes, which in Porter's opinion, are the result of market competition (Puiu, 2010). Designing the said five competitive forces, identified by Porter, in the university publishing field, they are transformed into four external factors that affect the university publishing field and inspire changes in it. However, it should be underlined that although in this work Porter's model is given in its transformed form, it is evident that Porter's model is a valuable starting point, analysing changes in the university publishing field and factors shaping it.

According to Porter, possible new market participants and competition in the university publishing field are named as transfer of market laws to higher education, which in the analysed case means that the conception of activities of the university publishing house is changing: at the higher educational institution it becomes not a structural university division that is responsible for spread of science knowledge but the one providing services. Therefore, activities of the university publishing house have to be based on the principals of consumption, marketing and management and developed applying competitive strategy in order to survive in the future. The competitive force – substitutes – in the university publishing field are treated as new science communication models, which are perceived as the search for other publishing models and application in the scientific publishing segment, reacting to emerging models in the science communication paradigm. Changing interests and needs of consumers as one of the external factors affecting the university publishing field are associated with Porter's named bargaining power. Namely changing interests and needs of consumers promote university publishing houses to reconsider the concept of their activities in order present their publishing product in the market, considering current consumers' interests and needs, as well as possible.

Porter's distinguished bargaining power of suppliers in the university publishing field is perceived as growing publishing costs. These costs in the university publishing field consist of permanent development of information and communication technologies, which are changing the previous infrastructure of the university publishing house, resulting in additional staff training costs, costs for procuring new production equipment, the need for technical maintenance, emergence of new production projects (digital publishing, databases, etc.) and clear risk of discontinuing the previously prevailing production process proceeding from the traditional publishing model to hybrid and/or digital publishing model.

In summary, it can be stated that external factors affect the university publishing field, inspiring changes in it. Changing interests and needs of consumers promote university publishing houses to reconsider the concept of their activities in order present their publishing product in the market, considering current consumers' interests and needs, as well as possible. Therefore, activities of the university publishing house have to be based on the principals of consumption, marketing and management, developing its competitive strategy in order to survive in the future.

Theoretical background. In the context of scientific works of foreign authors the monograph *Books* in the digital age: the transformation of academic and higher education publishing in Britain and the United States by sociology professor of Cambridge University Thompson (2005) is the first to be distinguished. In addition to the conception of the academic publishing field, the author here also discusses essential characteristics of university publishing. Meyer in the article University Press Publishing, International Book Publishing. An Encyclopedia (1995), emphasized one of the aspects of the university publishing process: reviewing as the most important criterion for selection of science publications.

The topic of academic publishing can be traced in the works of Lithuanian scientists. Atkočiūnienė (2009) analyzed one of the aspects of university publishing: open submission of science works to the public and scientific literature digitization possibilities in the context of changes in science communication, Stonkienė et al. (2009) investigated changes in the message form of science communication. Stonkienė et al. (2009) treat changes in science communication through new subjects of science communication (communication "the scientist to the scientist"), the changing model of science communication and pervasive publicising of "gray" science works.

It is evident that so far Lithuanian book science was dominated by several problem areas of scientific researches:

- 1) history, theory and methodology of book science and documentation;
- 2) history and culture of the book;
- 3) written and printed heritage.

However, these problem areas of scientific researches lack researches on the topic of publication problems. This article is inspired by one of the professional activity areas – publishing, emphasizing one of its problem trends – the university publishing field. The university publishing field was selected as a significant and important segment of dissemination of scientific literature, contributing to the formation of the overall image of science and studies in the country. In this case, the situation of concrete manifestations of university publishing – of a concrete country, i.e., of the university publishing field in Lithuania – is born in mind. Since academic publishing is a process, there are possibilities of changes both at the individual level, the inner level or the level of university publishing groups and at the institutional level; i.e., publishing is also influenced by certain factors inspiring changes in the university publishing field. Such perspective helps to relatively better perceive the very object and design future prospects. The following main problem questions are raised: In which direction are prospective trends of the university publishing field plotted today? What is the possible new model for improvement of the university publishing field in Lithuania and what problems it would enable to solve upon its implementation?

The research object: the need for the new publishing model in the university publishing field in Lithuania.

The research aim: to identify the need for the new publishing model in the university publishing field in Lithuania.

Research objectives:

- 1. to define functioning and possible models of the university publishing field in Lithuania;
- 2. to present possible trends of the model of the university publishing field in Lithuania.

Research methodology. The research combined key research methods of the humanities and social sciences – analysis and synthesis of scientific literature, interview, qualitative content analysis – and applied them in a complex way.

# 2. The new publishing model in the university publishing field in Lithuania: the need and possibilities

#### 2.1. Methodology of research

The empirical research was conducted employing the qualitative research – experts' interviews – to qualitatively deeper and more comprehensively explain changes in university publishing and form the overall image of university publishing: the attitude of experts, who are related to publishing in the higher educational institution, to the current state of publishing in Lithuanian universities and its development prospects was investigated. It was particularly important to investigate it because research results enable to evaluate the publishing situation in Lithuanian universities and predict possible development trends. The latter undoubtedly depend on personalities related to publishing at the higher educational institution, who are directly involved in the development process of academic publishing, shape attitude towards university publishing, its possibilities and purpose of the whole of publishing phenomena.

The methodological conception in this research is constructed on the basis of the following defended statement: changes taking place in the university publishing field presuppose the need for the new model of university publishing. Key elements of the conception of this model define the new trend of development of the publishing field, combining reorganization of university publishing houses, implementation and management of third-party publishing services, and creation of the digital system of science publishing, based on hybrid publishing. Application of the new conceptual model would enable changes in the university publishing field, supporting and actively implementing principles of science communication.

The contingent of interviewed experts was chosen applying non-random sampling (conducting targeted selection): it consisted of persons who are actively working and have work experience in this area. It can be stated that the contingent of respondents is optimal – simply there are no other adequate level specialists in Lithuania. The research is based on the content analysis of interviews with administration of institutions and authorities of university publishing houses – persons who are directly related to the university publishing process. In this research they are referred to as experts, because they possess professional knowledge of the university publishing area, know its specificity, due to their professional experience have most competencies and can provide reliable knowledge of the investigated problem.

The sample of the qualitative study consists of 30 experts, clustered into two groups of 15 persons: experts of the first group supervise publishing issues in institutions, experts of the second group are heads of university publishing houses. General population of this research is small (15 institutions); therefore, seeking accuracy of research results, all persons who could provide sufficient information about the investigated problem were interviewed. The sample was formed regardless of investigated persons' age and gender. The research sample is accurate because it encompasses the whole population. The qualitative research – expert interviews – was conducted in May, June and August of 2010. The results of the qualitative research were processed and analyzed in July-September of 2010. However, it must be emphasized that this article presents only part of research results, focusing on the aspect of the need for the model for improvement of the university publishing field and highlighting possible concepts of this model.

The qualitative research aimed to explain changes in the university publishing field and form the overall image of the university publishing field in Lithuania, presenting possible models for improvement of publishing. Based on theoretical material, insights and expert interviews, it was sought to simulate prospects of university publishing in Lithuania; i.e. to disclose trends prevailing in the university publishing field, to predict possibilities for improvement of the current situation, to find out obstacles, all of it expressing through presentation of certain models for improvement of publishing. Expert opinion about university publishing was disclosed applying the qualitative research approach; the context of changes was evaluated using the semi-standardized interview method.

### 2.2. Functioning and possible models of the university publishing field in Lithuania: results of research

The research aimed to identify funding possibilities of university publishing in the institution. The qualitative category *Funding possibilities* was distinguished. Speaking about funding of publishing and its possibilities in the institution, 60 % of the supervisors of publishing issues in institutions and 20% of

the heads of university publishing houses accentuated that the institution was financially unable to fully finance academic publishing. This is confirmed by investigated persons' statements: Funding is limited, money for publishing – preparation and publishing – is limited; We don't have sufficiently strong funding; Most often, when the author decides to publish a monograph or something else, he/she looks for funding. They know that there is no such money in the academy. Reduction of university costs or funding allocated for publishing almost by half is also mentioned in theoretical works dealing with publishing issues of science and studies (Costs and business models..., 2004; Brown et al., 2007). Foreign scientists state that one of the ways to reduce publishing costs is development of the digital publishing model and trade in scientific literature online (Day, 2007).

35% of the supervisors of publishing issues in institutions and 30% of the heads of university publishing houses emphasize that the university publishing house has to search for and/or attract funding for publishing of scientific production externally, outside the institution (The pharmaceutical field rotates tremendous amounts of money; thus, considerable funds can be attracted to our publishing center by funding, for example, textbook publishing; Well, the very publishing house can have various orders from elsewhere; Certain funding sources have changed. The State Science and Studies Foundation no longer exists. Periodicals are supported differently. Therefore, we ourselves have to look for sponsors outside the university). According to 25% of the supervisors of publishing issues in institutions and 10% of the heads of university publishing houses, the university publishing house has to be financially independent as much as possible (Publishing activities could probably be slightly... more self-sufficient financially; It is sought to make the university publishing house self-financed...; we have to look for funding ourselves so that we survive. We can find only outside).

The empirical research is intended to identify experts' attitude to functioning and possible models of university publishing. During the analysis the qualitative category Models of the university publishing house in the institution, which is oriented to functioning of existing and possible university publishing models in the institution (a structural division with full funding; a structural division with minimal funding (the self-financing principle), a public institution, a commercial publisher) was distinguished.

It should be noted that 20% of the supervisors of publishing issues in institutions and 30 % of the heads of university publishing houses are satisfied with the model when the university publishing house acts as a structural division of the institution receiving funding from the university for publishing (It satisfies us as it is. It seems fair so far; ...it means the university division, publishing of which we subsidize, remains. It seems to us that we haven't made a mistake; self-financing model won't survive. This should be within the university). 15% of the supervisors of publishing issues in institutions and 15 % of the heads of university publishing houses point out that they are satisfied with the combined model: the university publishing house functions as a structural division of the institution, receiving minimal funding from the university and earning the remaining funding itself. This is so-called self-financing principle (I can say that our mixed model, called self-financing, when the publishing house is within the university, so far is most appropriate; And we came to a conclusion that the self-financing variant was most acceptable to us; I think that the self-financing variant is better for the very higher educational institution with regard to quality, quality of science, this is better – we are here interested in the outcome.). 10% of the heads of university publishing houses maintain that the university publishing house must operate as a public institution, the founder (one of the founders) of which is the university (...it would be best if it were a public institution, the current status of the university is budgetary institution. I personally prefer the variant when the publishing house is a public institution.).

However, during the interviews, 10% of the supervisors of publishing issues in institutions expressed their approach about the following possible model of university publishing in the institution: an institution refuses its university publishing house and buys publishing services from a commercial publisher (In university publishing it is also possible to simply pass to orders – contractual relationships with reliable larger commercial publishing houses; practically the university can be a commercial publisher, eliminating its former publishing division....).

Experts involved in the research had to indicate landmarks, looking for examples for future trends of the university publishing house, the future vision of their university publishing house and its activities in general. The qualitative content analysis highlighted experts' attitude towards possible future prospects of university publishing. Experts plot the prospect of university publishing in three possible trends:

- 1. 20% of the supervisors of publishing issues in institutions and 10% of the heads of university publishing houses accept the reorganization of the university publishing house (would help to both carry out traditional publishing functions and meet operative needs. Let's say, functions of communication with the public, some functions of public relations. To expand further: publishing of all kinds of advertising, brochures, etc.; We have to see broader, not just look at our higher educational institution. Because we have more or less exhausted the possibilities here);
- 2. 10% of the supervisors of publishing issues in institutions approve the procurement of publishing services from other organizations (outsourcing) (Universities, I think, would find it better to outsource these services: this way it would be easier and more comfortable; I think that services should be outsourced);
- 3. 30% of the supervisors of publishing issues in institutions and 30% of the heads of university publishing houses approve the transition to digital science publishing (I would imagine that publishing at the university should be turning into a more virtual one; so to say, electronic publishing, of course. More and more electronic publishing; One of the largest prospects for the university publishing house would be transition to electronic publishing).

Linking experts' attitude to possible future prospects of university publishing with theoretical insights of foreign scientists, it can be seen that experts' opinion only partially coincides with the results of researches of foreign scientists. The latter, plotting prospective guidelines of university publishing, consider that university publishing will fully move to digital science publishing while traditional publishing will be slowly completely displaced. This is confirmed by researches conducted by Ware (2005), Johnson and Luther (2007), Gould (2009), and Janke (2009), Campbell (2010).

Guidelines of university publishing plotted by experts involved in the research and foreign scientists' theoretical approaches regarding the future of university publishing presuppose the idea of the possibility of improving the currently existing model of university publishing in the country, which is highlighted by the ongoing change in university publishing in Lithuania. The possible corresponding model for improvement of university publishing in Lithuania would plot the trends (applying one of them or combining several together), based on which intensive changes in the university publishing field would take place.

#### 3. Conclusion and discussion

It was found that in the conditions of global public processes and constant changes, today's university publishing houses are developing areas that are related not to educational activities but are solving the issue of their survival. The guarantor of survival in the future can be a market-oriented company with a competitive marketing strategy, seeking to better meet the consumer's needs, paying much attention to the demand and costs. The university publishing house is to be treated not as a structural division of the university that is responsible for spread of scientific knowledge but as the one that provides services.

Content analysis of interviews disclosed that different models of university publishing, applied in every higher educational institution in Lithuania (a structural division with full funding; a structural division with minimal funding, i.e., a division applying the self-financing principle; a public institution; a commercial publisher) appropriately meet the needs of publishing in every institution. However, experts, talking about financing of publishing and the possibilities of the institution, emphasize that the institution cannot fully finance the publishing house of the university and accentuate that the university publishing house has to look for funding and/or attract funding for publishing of scientific production outside the institution, and that it should be, as much as possible, financially self-sufficient. Hence, such contradictory approach of experts with regard to funding models of university publishing houses enables to conclude that university publishing in Lithuania lacks a conceptual structural model, which would be developed in all institutions. This presupposes the idea about the necessity to undertake certain restructuring actions in publishing of the country's universities.

Empirical research results only partially coincide with global trends in publishing and findings of foreign scientists. The latter, plotting prospective guidelines of university publishing conceptualize (visualize) final transition of university publishing to digital science publishing, completely displacing traditional publishing. In addition to transition to digital science publishing, experts involved in the research emphasize two further actions, giving a sense to prospects of changes in university

publishing: 1) reorganization of university publishing houses; 2) purchase of publishing services from other organizations (outsourcing). Thus, the fact of changes in the field of academic publishing in Lithuania is confirmed by insights of experts involved in the research into guidelines and foreign scientists' theoretical approaches regarding the future of university publishing, which are interrelated and inspire the need to improve the current model of the country's university publishing field.

#### References

Atkočiūnienė, Z. O. (2009). Mokslo komunikacija: Lietuvos mokslo žurnalai mokslo komunikacijos kaitos požiūriu. *Informacijos mokslai*, vol. 49, pp. 70–83 [online]. [cit. 2015-10-10]. Available: http://www.leidykla.eu/fileadmin/Informacijos mokslai/49/70-83.pdf.

Brown, L., Griffiths, R., Rascoff, M. (2007). *University Publishing in a Digital Age* [online]. [cit. 2015-09-24]. Available: http://www.ithaka.org/ithaka-s-r/strategy/Ithaka%20University%20Publishing%20Report.pdf.

Brown, R. (2013). Stakeholders, Service, and the Future of University Press Publishing. *Journal of Scholarly Publishing*, vol. 44, iss. 2, pp. 107-113 [online]. [cit. 2015-09-09]. Available:

http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=d05c843b-2439-4ef7-95fb-202a2663e343%40sessionmgr112&vid=2&hid=103.

Bulajeva, T., Duoblienė, L., Targamadzė, V. (2009). Transformation of university: towards pragmatism and competence based education. *Pedagogika*, vol. 93, pp. 9-16 [online]. [cit. 2015-10-23]. Available: http://www.biblioteka.vpu.lt/pedagogika/PDF/2009/93/93.pdf?.

Campbell, B. (2010). *Scholarly Communication: The Future for Academic Authors* [online]. [cit. 2015-02-27]. Available: http://blogs.wiley.com/publishingnews/2010/12/22/scholarly-communication-the-future-for-academic-authors/.

Clement, R. W. (2011). Library and University Press Integration: A New Vision for University Publishing. *Journal of Library Administration*, vol. 51, iss. 5/6, pp. 507–528 [online]. [cit. 2015-09-09]. Available: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer/sid=b0807121-dd82-4962-82e6-8fea86139172%40sessionmgr114&vid=2&hid=103.

Costs and business models in scientific research publishing (2004). [online]. [cit. 2015-05-25]. Available: http://www.wellcome.ac.uk/publications.

Day, C. (2007). Digital Alternatives: Solving the Problem or Shifting the Costs? Paper presented at the conference. In *The Specialized Scholarly Monograph in Crisis: Or How Can I Get Tenure If You Won't Publish My Book?* Association of Research Libraries, Washington [online]. [cit.2015-03-02]. Available: http://www.arl.org/resources/pubs/specscholmono/day.shtml.

Gould, T. HP. (2009). The Future of Academic Publishing: Application of the Long-Tail Theory. *Publishing Research Quarterly*, vol. 25, pp. 9-14 [online]. [cit.2015-11-03]. Available: http://www.springerlink.com/content/107893/?Content+Status=Accepted.

Johnson, R. K., Luther, J. (2007). The e-only tipping point for journals: what's ahead in the print-to-electronic transition zone. Washington, DC: Association of Research Libraries, 2007.

Marks, J., Janke, R. A. (2009). The Future of Academic Publishing: A View from the Top. *Journal of Library Administration*, vol. 49, pp. 439-458 [online]. [cit.2015-01-27]. Available:

http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?hid=21&sid=fadc83fb-f648-4e7c-8382-e576de70b923%40sessionmgr4&vid=5.

Meyer, S. (1995). University Press Publishing. In Altbach, G. P, Hoshino, E. S. (eds.). *International Book Publishing. An Encyclopedia*. New York and London: Garland Publishing, 1995.

Puiu, S. (2010). The Model of the five Competitive Forces on Romanian Retail Market. *Annals of the University of Petrosani Economics*, vol. 10, iss. (1), pp. 289-298 [online]. [cit.2015-09-15]. Available: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer/sid=de822aaf-a809-44f4-9a5b-

c866b7949081%40sessionmgr113&vid=1&hid=114.

Stonkienė, M. (2009). Formalioji mokslo komunikacija teoriniuose modeliuose: kaitos įžvalgos. *Informacijos mokslai*, vol. 49, pp. 48-69 [online]. [cit.2015-01-09.]. Available: http://www.leidykla.vu.lt/fileadmin/Informacijos mokslai/49/48-69.pdf.

Stonkienė, M., Atkočiūnienė, Z. O., Matkevičienė, R. (2009). *Autorių teisės mokslo komunikacijoje: Lietuvos mokslininkų kūrinių, publikuojamų valstybės remiamuose moksliniuose žurnaluose, teisinė intelektinės nuosavybės apsauga*: Vilnius: Vilniaus Universiteto Leidykla, 2009.

Thompson, J. B. (2005). *Books in the digital age: the transformation of academic and higher education publishing in Britain and the United States.* Cambrigde: Polity Press, 2005.

Ware, M. (2005). E-Only journals: is it time to drop print? Learned Publishing, vol. 18, iss. 3, pp. 193-199.

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#### 35. THE BASIC ASSUMPTIONS OF BLUE OCEAN STRATEGY

**Abstract:** The aim of the paper is the presentation and characteristics of the basic assumptions of the concept of Blue Ocean Strategy. It is the proposal of the researchers: W. Chan Kim and Renée Mauborgne. It emerged a slightly more than a decade ago as a result of several years of research into strategic moves of enterprises. This concept is widely recognized all over the world, particularly in the circle of practitioners of management. Most of all, this is due to a high level of operationalization of this strategy. In the paper, there have been presented the basic assumptions of this strategy and the most important instruments allowing for efficient building of potentially effective strategy. The result of the application of this strategy is creating new, not previously occupied, operation space, free form competition. Since competition becomes unimportant the enterprise may concentrate its efforts on development. In this paper, there were applied some of the most general methods of the processing of research material, i.e. analysis and synthesis.

Keywords: Blue Ocean Strategy, management, strategic management, strategy

JEL Classification: L1, M11

#### 1. Introduction

The basic goal of the functioning of each enterprise is development and generating value for its owners. Both theoreticians and practitioners of management agree that the greater probability of achieving this goal occurs when the enterprise has a clearly specified vision of development. One can attempt to achieve this goal by extending the range of products of the company, an increase in the volume or value of sales, cost reduction, while concentrating on specific markets essential for the enterprise. The achievement of the goal becomes easier if there are specified the ways of conduct towards the environment of the company, particularly competitors and possessed resources, skills and competences. Summing up, the enterprise needs a vision, goal and plan and the way to achieve this goal. While using the language of management, the company needs the strategy. Hitt, Ireland, Hoskisson (2011, p. 4) define it in the following way: "A strategy is an integrated and coordinated set of commitments and actions designed to exploit core competencies and gain a competitive advantage. When choosing a strategy, firms make choices among competing alternatives as the pathway for deciding how they will pursue strategic competitiveness". The need for possessing the strategy by the company is underlined by Oblój (2007b, p. 19), who claims that: "The strategy is something which has the fundamental impact on life or death, success or failure of the company".

The problem itself consists in whether there is the canon of "a good strategy" regardless of its nature, i.e. irrespective of whether it is innovation, aggressive, defensive strategy or the one imitating typical solutions. The answer to this question is not easy, however, it seems that there can be isolated some characteristics which are common for, so defined, strategy.

The first canon of "a good strategy" is *intellectual simplicity*. The strategy, particularly, in the conditions of great uncertainty of the environment, must be complex but simultaneously simple, based on a few principles which form a coherent whole (Nogalski et al., 2004). For instance, Eisenhardt and Sull claim that, under present conditions, managers, instead of taking positions (the assumption of the positioning approach) or using competences (the assumptions of the Resource-Based View), should select a few key strategic processes and concentrate their efforts on them. These processes may refer to: innovation, product, partnership, entering new markets etc. On the other hand, simple rules should constitute the guidance system allowing managers to seize opportunities (Krupski, 2004). Another canon of a good strategy is *external coherence*. The strategy must be adapted to market trends, demographic changes, behavior of enterprise towards market changes, briefly speaking, it must be adjusted to the environment. The third canon of a good strategy is *internal coherence*. In the framework of a good

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strategy, programs and operating activities must support and strengthen each other, i.e. there is feedback. The last canon of a good strategy is *communication*. The strategy must be explainable for stakeholders of the company. Only in this way can it be understood and accepted by them. The test for communication is the possibility to present a strategy in a graphical form (Obłój, 2007a).

Both theoreticians and practitioners of management constantly search for the strategy whose implementation will provide high probability of achieving market success since the fulfillment of the above conditions does not guarantee success. It is also necessary to be able to combine resources in appropriate configurations, use own skills and competences but also if not, above all, use opportunities emerging unexpectedly on the market and disappearing from it.

After the period of the dominance of the planning, evolutionary and positioning approach and, recently, Resource-Based View (Ziółkowska, 2012; Tomski, 2013; Kuraś 2013) in management, there are about to appear the concepts which are not subjected to the previous classifications. They may include the school of real options and the concept of seizing opportunities (Krupski, 2004), or Blue Ocean Strategy (BOS) being the subject of the considerations of the present paper.

#### 2. Research methodology

The aim of the paper is the presentation and characteristics of the basic assumptions of the concept of Blue Ocean Strategy. This is the concept which emerged a slightly more than a decade ago and since then it has been gaining more and more interest. BOS is the concept of the enterprise strategy whose actual implementation significantly increases the probability of achievement of competitive advantage over business rivals. This concept, as opposed to the concepts dominating on the market so far, is characterized by a high level of operationalization. This means that the concept is not only a vaguely outlined theoretical construct but contains a range of clear, specific and precisely formulated guidelines and recommendations, easily to understand for everyone who would like to undertake the implementation of this strategy. These reasons have been considered sufficient to introduce and promote the discussed concept in order to expand the scientific discussion in this area.

Scientific cognition requires the application of appropriate research methods. In this case, there were applied some of the most general methods of the processing of research material, i.e. analysis and synthesis. The subject of the analysis was the concept of the discussed strategy in order to decompose the problem into smaller components to be able to determine the existing conditions, properties or cause and effect relationships. Mental analytical operations refer to deductive reasoning in here. While examining the problem there was also applied the method of synthesis, in this case characterized by inductive reasoning.

#### 3. Theoretical background

Over the years, the definition of the strategy has changed since the content of the strategy has also changed. Along with the changing conditions of competition, the ways of dealing with competitors were also subjected to change. Therefore, it should not be surprising that the achievements of strategic management now consist of many concepts of overall and functional strategies which have been the attempts to respond to the present requirements.

Due to the nature of the paper, there will only be briefly introduced the most important approaches to the concept of the strategy, i.e. the ones which have had the greatest impact on strategic thinking. Drucker (1954) understood the strategy as a complete plan which specifies what decisions can be taken. Chandler (1962) claimed that the strategy reflects long-term goals of the enterprise. Ackoff (1974), who proved that the strategy refers to long-term goals and ways to achieve them affecting the system as a whole, expressed a similar opinion. Andrews (1971) acknowledged that the strategy is a set of goals (tasks) included in programs and plans and constitutes the pattern of decisions referring to the strengths of the enterprise. Ansoff (1985) claimed that the selection model of strategic behavior depends on: budget, strategic adaptation and strategic discontinuity. Mintzberg (1987) understood the strategy as a conscious plan, identified with formal action, which is aimed at particular purpose to achieve a certain position in the future. Eisenhardt and Sull (2001) state that the strategy arises from the concentration on the most important strategic processes and development of simple rules that shape the processes. On the other hand, Johnson, Scholes and Whittington (2010) claim that the strategy is the action plan specifying a long-term direction and scope of the activity of the organization achieving competitive advantage due to the concentration and appropriate configuration of resources and competences.

According to Porter (2010), the goal of the strategy is to achieve long-term competitive advantage, among others, by means of performing activities other than competitors or similar activities but in a

different way. An important condition for formulating an effective strategy is the adjustment of own business to the specific target group. The idea is to provide customers with the values desired by them in a different way than competitors. The above mentioned author identifies only three typical basic (overall) strategies. It is the cost leadership strategy, consisting in aiming at reducing operating costs, differentiation strategy, consisting in offering products with more attractive properties than the ones offered by customers and concentration strategy, consisting in limiting own product range to the selected product for a small group of customers. In the opinion of this researcher, TQM, outsourcing, reengineering, change management, kaizen, lean management are not strategies but techniques, management tools, leading to an increase in operating efficiency (Porter, 1996).

Most of modern popular basic strategies, if not all of them, to some extent, are inscribed in any of the strategies discussed above. While not settling down whether the proposal for the strategy classification by Porter should be treated as the open or closed catalogue, however, it should be noticed that, in the practice of management, every now and then there occur new concepts of basic strategies.

Classic strategies are relatively well recognized and commonly applied. Therefore, they do not provide the enterprise with such opportunities for development as in the eighties or nineties. Nowadays, it is believed that companies should create innovation strategies. Innovation strategies are the result of neither wisdom of managerial staff nor thorough analysis. They are usually the effect of in-depth consideration of the existing business models and potential opportunities provided by the market. The starting point is always the existing model, dominating on the specific market. The transformation of the existing model into a new model requires the answers to three fundamental questions: what to take, what to add and what to change, to use new opportunities (Obłój, 2007a). One of such innovation strategies is Blue Ocean Strategy.

#### 4. Blue Ocean Strategy

The concept of Blue Ocean Strategy was developed by Chan Kim and Renée Mauborgne. The authors are strategy and management professors at INSEAD.<sup>2</sup> The authors themselves are very well known figures in the scientific world since they publish their papers in the leading global publishing houses. Apart from that, these researchers are strongly connected with business practice by playing the advisory role on the market. In 2005 they published the book entitled: *Blue Ocean Strategy. How to Create Uncontested Market Space and Make the Competition Irrelevant.* 3.5 million of copies of the book, translated into 44 languages, were sold within a decade. The book has won many prestigious awards and recognition among managers. It seems that these are sufficient arguments to take a closer look at this concept. Such a motivation has been the reason for taking up the subject of the present paper.

#### 4.1. Red and blue ocean - the boundaries of competition

The content of the discussed book was the outcome of using the results of fifteen years of research. It included more than 150 strategic moves in more than 30 industries and the period of the analysis covered more than 100 years. The authors also analyzed many scientific works concerning different dimensions of the strategy. They noticed that enterprises, while searching for sustainable growth, tend to apply head-to-head competition. However, in today's extremely competitive industries, these enterprises must compete for the shrinking pool of profits with even greater force. More and more frequently, long-term success in business is the result of giving up competition and creating new market spaces, previously not used. According to the creators of the concept, the only way to beat competitors is to stop trying to beat them (Kim, Mauborgne, 2010).

To explain their concept the authors refer to images. They propose to look at the economy as the world that consists of two oceans: the red one and the blue one.

Red oceans amount to industries existing nowadays. It is well-known market space. In here, the boundaries of industries are defined and accepted and the rules of competitive games well-known. The competitive fight is based on traditional assumptions. Enterprises are trying to outdo their competitors and grab the largest part of the existing demand whereas market space is becoming increasingly

<sup>&</sup>lt;sup>2</sup> L'Institut européen d'administration des affaires – one of the largest schools of management and business in the world, established in 1957 in France. In the rankings of Financial Times and The Wall Street Journal INSEAD it regularly occupies the top positions among the highest ranked schools in the world in terms of programs of Global MBA (in 2015 – the 4<sup>th</sup> position).

congested, growth prospects are increasingly uncertain. Offered products rapidly lose their distinctive features and become standard products and "life or death" competition is becoming the ocean full of blood of competing rivals.

On the other hand, blue oceans are industries not existing nowadays. It is unknown and not used market space, creating the demand and the opportunity for growth. Admittedly, some blue oceans are created beyond the existing boundaries of industries, however, most of them are made of parts of red oceans by expanding the boundaries of the existing industries. The authors give the example of Cirque de Soleil, nowadays one of the greatest cultural export products of Canada. The circus founded by a group of buskers in 1984, in less than 20 years, reached such a level of income for the generation of which the global leader of the circus sector Ringling Bros. and Barnum & Bailey needed more than 100 years. The success had its source in the fact that Cirque de Soleil did not try to take over the customers of the shrinking circus sector, historically satisfying the needs of children. They did not attempt to compete with them. They appealed to a completely new group of customers, adults and corporate clients who were able to pay several times higher price for unique experiences, not previously known. In this way, the company created new free market space, which caused that competition became irrelevant. In blue oceans, competition is irrelevant since the rules of the game are yet to be established (Kim, Mauborgne, 2010).

The authors have no illusions that there may exist only blue oceans. They even claim that red oceans will always be significant and they will always be the fact in the economic life. However, since the supply exceeds the demand in an increasing number of industries, competition will be necessary but insufficient to maintain a high level of results. Therefore, enterprises must go beyond the previous framework of competition and should create blue oceans (Kim, Mauborgne, 2010).

Dating from the eighties of the 20<sup>th</sup> century, there have been theoretically developed and practically applied different strategies based on competition. As a result, this area is relatively well recognized and, in spite of the fact that, from time to time, in scientific discussions, there appear threads identical with the discussed blue oceans, so far, there have not been proposed the framework and rules for efficient management of risk of creating blue oceans. Kim and Mauborgne did it as the first ones.

#### 4.2. Creating blue oceans

Blue oceans are nothing new in the economic life. Many industries, which are mature now, e.g. automotive, aircraft, phonography, petrochemical industry did not exist some time ago. Along with technical and technological progress we observe the emergence of increasingly new industries: mobile telephony, the Internet, biotechnology, trust funds, coffee bars. They used to be blue oceans providing their creators and first participants with development potential not limited by competition. At present, along with an increase in competition, that space has been filled up with red. In reality, industries constantly evolve, operational activities are improved, markets expand, subsequent competitors come and leave them. Not to lose one's own potential to fight against competitors it is worth searching for new space – one's own blue ocean.

Kim and Mauborgne examined the impact of creating blue oceans on the growth of the company, measured both with revenues and profits. For this purpose, there were analyzed market entries of 108 companies. The results are presented in Figure 1.

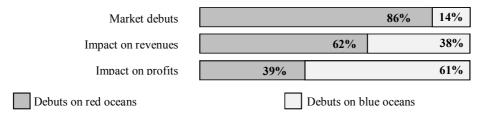


Figure 1. Profit and growth consequences resulting from creating blue oceans

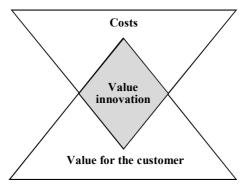
Source: Kim, Mauborgne, 2010, p. 23

From among all market debuts 86% consisted in minor improvements. They brought about 62% of the total revenues and only 39% of the total profits. The other 14% of debuts were directed towards searching for new unused space. They generated 38% of the total revenues and as much as 61% of the total profits. In spite of some constraints resulting from this simple analysis, the benefits resulting from creating blue oceans seem to be obvious.

The research of the total of 150 different strategic moves revealed that success in creating blue oceans depends neither on the industry nor the organization of the company. Creating and occupying free spaces has been the activity of the companies: new and mature, large and small, run by young and senior managers, operating in both attractive and unattractive industries, associated with simplicity and advanced technologies. However, they shared one common feature. All of them were characterized by a coherent, over time and independent of the industry, approach to creating free market space.

What distinguishes the winners from the losers in creating blue oceans is the approach to the strategy. The companies imprisoned in red oceans have applied the conventional strategic approach. The creators of blue oceans do not compare themselves with competitors using indicators or do not use commonly applied strategic tools. They use a completely different strategic logic which has been called value innovation.

Value innovation occurs when companies combine one innovation with utility, assessment and costs. It is contradictory to the widely recognized dogma which assumes the necessity to choose between value innovation and cost. Cirque de Soleil rejected this dogma while giving up animal shows and circus stars generating the highest costs in the circus sector, at the same time, offering the globally unique show, actually being the combination of the circus and the theatre. The company provided some new elements, untypical of the circus, such as the plot, intellectual, artistic, music and dance value, higher than the one in the traditional circus. In other words, Cirque de Soleil offers the best of the circus and the theatre, eliminating or reducing everything else. At the same time, it offers unprecedented utility value. This example reflects well the assumptions and characteristics of the discussed value innovation. It is graphically presented in Figure 2.



Simultaneous aiming at uniqueness and low costs

Figure 2. Value innovation

Source: Kim, Mauborgne, 2010, p. 36

Creating the blue ocean is about simultaneous lowering costs and increasing value for customers. The value for the customer results from utility and assessment of the range of products addressed to the purchaser. The value for the enterprise results from prices and costs of offered products. The whole may work if it is properly configured. In this sense, it is something more than only innovation. It is the strategy including the whole system of enterprise activities. Value innovation requires from companies to orient their entire system to achieve sharp rise in value, both for the customer and themselves (Kim, Mauborgne, 2010).

The summary of the above considerations is concisely presented in Table 1.

Table 1. Red Ocean Strategy versus Blue Ocean Strategy

Red Ocean Strategy	Blue Ocean Strategy
Competing in the existing market space	Creating free market space
Fighting against competitors	Competitors are no longer important
Using the existing demand	Creating and grabbing new demand
Necessity to find compromise between value and cost	Breaking the coercion between value and cost
Ordering the entire system of the company operations in	Ordering the entire system of the company
compliance with the strategic choice between	operations in compliance with its strive for
uniqueness and low costs	uniqueness and low costs

Source: Kim, Mauborgne, 2010, p. 36

#### 4.3. The instruments of Blue Ocean Strategy

The implementation of any strategy requires the performance of some activities in the specific sequence. It is also necessary to possess appropriate strategic tools. The classic approach to the strategy, based on competitive fight, owns such instruments. There is at least the model of Porter five forces, his concept of three basic strategies, matrix for strategic analysis etc. On the other hand, so far, there have not been the tools leading to creating new market spaces. Kim and Mauborgne created such tools. In the present paper, there have been presented the most important ones: a strategy canvas, four actions framework, eliminate-reduce-raise-create grid.

A strategy canvas is the major analytical scheme of value innovation and creating blue oceans. It is both a diagnostic scheme and the scheme of actions aimed at building Blue Ocean Strategy. A strategy canvas allows for graphical presentation of the most important competitive factors in the specific industry. At the same time, these are the areas of intensive investments realized by competitors. Simultaneously, we obtain the information on what consequently customers receive. Figure 3 presents a strategy canvas of the traditional circus.

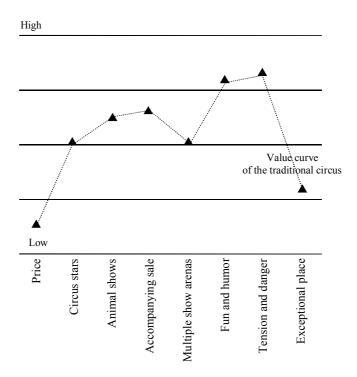


Figure 3. A strategy canvas of the traditional circus

Source: Kim, Mauborgne, 2010, p. 69

The basic element of a strategy canvas is the value curve which imitates the level of achievements of the leader or typical of the industry with reference to each essential competitive factor in the industry. For this purpose, it is necessary to identify these factors. It is assumed that these factors are the elements which are to determine success. They are often the area of significant investments and, therefore, at the same time, the source of costs. The value curve, built on the basis of these assumptions, allows to answer the question what competitors concentrate their efforts on. Therefore, it is the starting point for building Blue Ocean Strategy. For the circus sector, such factors are: ticket price, costs of gaining circus stars, animal shows, accompanying sales, multiple show arenas, fun and sense of humor, tension and danger, uniqueness of the place.

Four actions framework is the tool allowing for reconstruction of the elements of value for the customer and creating a new value curve. The starting point are four questions allowing for finding a compromise between variety and low cost: which of the factors can be eliminated, which of the factors can be reduced significantly below the standards in the industry, which of the factors can be raised significantly above the standards in the industry, what factors, previously not offered by the industry, should be created. The graphical presentation of the tool is shown in Figure 4.

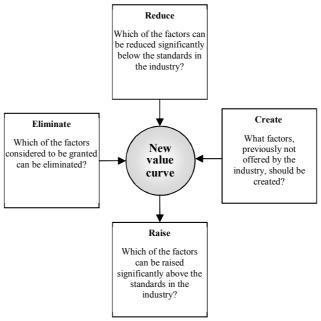


Figure 4. Four actions framework

Source: Kim, Mauborgne, 2010, p. 54

The first question leads to taking into account the elimination of the factor which, in the industry, is considered as very important, on which there are frequently based competitive actions which, however, may have become obsolete or lost its significance in customers' eyes. The second question is the one concerning the opportunity to simplify the range of products. Customers may not expect such sophistication from the product range and are able to give up on it. The third question is to give the answer referring to which elements should be strengthened and what is not the subject of interest in the industry nowadays. The fourth question helps to find completely new sources of value for customers, create new demand and enable the change in the price policy.

Eliminate-reduce-raise-create grid is the third key instrument in creating blue oceans. It is a type of addition to four actions framework. The grid forces the company not only to pose four questions concerning four actions mentioned above but also to take actions to create a new value curve. This grid brings about four types of benefits. At the same time, it compels variation and taking care of low costs. It allows to identify the companies focused exclusively on strengthening and creating and thereby raising the structure of costs – the effect is offering excessively sophisticated products and services. Another advantage is ease of understanding the idea of the grid. The last benefit coming from the application of this instrument results from the fact that filling in the grid requires the thorough analysis of competitive factors in the industry. In this way, there are often discovered dependencies and relationships not previously noticed (Figure 5).

Figure 5. Eliminate-reduce-raise-create grid: the case study of Cirque du Soleil

Eliminate     Star performances     Animal shows     Accompanying sales     Simultaneous shows in a few arenas	Raise · A unique place
Reduce  · Elements of entertainment and humor  · Tension and danger	Create

Source: Kim, Mauborgne, 2010, p. 63

The conclusions coming from the application of the above instruments enables the reconstruction of the value curve, allowing to create blue ocean. This curve should be different from the curve of competitors. Then, this means that it focused on alternatives and not aiming at making its competitive actions similar to the ones of rivals as it does in the case of classic competitive strategies. The example of the value curve of Cirque du Soleil satisfying these assumptions is presented in Figure 6.

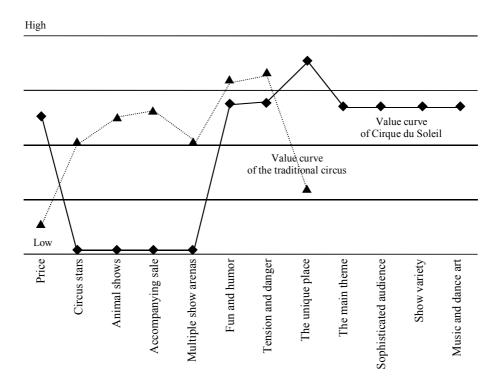


Figure 6. A strategy canvas of the traditional circus and Cirque du Soleil

Source: Kim, Mauborgne, 2010, p. 63

The effective Blue Ocean Strategy expressed by the value curve must have three complementary properties: concentration point, divergence and catchy advertising slogan. These three features serve as the initial criteria of the assessment of the commercial reality of the implementation of Blue Ocean Strategy.

Each good strategy cannot exert pressure on all competitive factors. It must select a small number of them, e.g. three and concentrate on them, make them its force.

The value curve of the company must significantly deviate from the curve of competitors. If it is similar to them, it means that searching for new space ended in failure and it will be necessary to drift on red oceans.

The advertising slogan must well reflect the uniqueness of the product range, it must advertise the range of products in a reliable way, and most of all, arouse the interest of potential customers.

#### 5. Conclusions

Undoubtedly, the enterprise needs a strategy. Without it, operations become accidental, chaotic, and heading for direction which is not specified or hardly specified rarely ends in success. Having the wrong strategy seems to be an even worse solution. Therefore, the enterprise not only needs the strategy but it needs a good strategy. Blue Ocean Strategy, presented in the paper bears the characteristics of a good strategy.

The basic advantage of this strategy is taking actions consisting in reconstruction of the value offered to customers. In this way, new market spaces, not occupied by competitors, can be created. This amounts to the emergence of new demand, new markets. Since there is not competition on these markets, the rules of competitive game are only about to emerge. Instead of competitive fight the enterprise can concentrate its efforts on its own development.

Another very important feature of the discussed strategy is a high level of its operationalization. The concept has a wide range of instruments which allow to formulate, implement and realize. It seems that this concept may become the origin around which there may emerge a new paradigm in strategic management.

#### References

Ackoff R.L. (1974). Redesigning the Future. A system approach to societal problems. New York: John Wiley & Sons, 1974.

Andrews K.R. (1971). The concept of corporate strategy. Homewood: Richard D. Irwin, 1971.

Ansoff, H.I. (1985). Zarządzanie strategiczne. Warszawa: Państwowe Wydawnictwo Ekonomiczne, 1985.

Chandler A.D. (1962). Strategy and Structure: Chapters in the History of the American Industrial Enterprise, MIT Press, 1962.

Drucker, P.F. (1954). The Practice of Management, New York: Harper & Brothers, 1954.

Eisenhardt, K.M., Sull, D.N. (2001). Strategy as Simple Rules. Harvard Business Review, vol. 79 (1), pp. 107-116.

Hitt, M.A., Ireland, R.D., Hoskisson, R.E. (2011). *Strategic Management: Competitiveness & Globalization. Concepts.* Mason: South-Western Cengage Learning, 2011.

Johnson, G., Scholes, K., Whittington, R. (2010). Podstawy strategii. Warszawa: Polskie Wydawnictwo Ekonomiczne, 2010.

Kim, W.Ch., Mauborgne, R. (2010). Strategia błękitnego oceanu. Jak stworzyć wolną przestrzeń rynkową i sprawić, by konkurencja stała się nieistotna. Warszawa: Wydawnictwo MT Biznes, 2010.

Krupski, R. (2004). Ewolucja poglądów na treść i rolę strategii przedsiębiorstwa, In Krupski, R. (ed.). *Krytyczna analiza szkół i kierunków zarządzania strategicznego. Nowe koncepcje zarządzania*, Wałbrzych: Prace Naukowe Wałbrzyskiej Wyższej Szkoły Zarządzania i Przedsiębiorczości: 2004, pp. 9-21.

Kuraś, P. (2013). Genesis and Basic Assumptions of the Resource-Based View in the Strategic Management of an Enterprise, In Otola, I. (ed.). *Determinants of Modern Management Concepts in the Enterprises. Resources – Strategies – Decisions*. Monography. Ostrava: Vysoka skola banska – Technicka univerzita Ostrava, 2013.

Mintzberg, H. (1987). The strategy concept 1: Five Ps for strategy. California Management Review, vol. 30, no 1, pp. 11-24.

Nogalski, B., Rybicki, J., Szpitter, A. (2004). Strategia jako system prostych zasad działania, In Krupski, R. (ed.). *Krytyczna analiza szkół i kierunków zarządzania strategicznego. Nowe koncepcje zarządzania*, Prace Naukowe Wałbrzyskiej Wyższej Szkoły Zarządzania i Przedsiębiorczości: Wałbrzych, pp. 23-33.

Obłój K. (2007a). O zarządzaniu refleksyjnie, Warszawa: Wydawnictwo MT Biznes, 2007.

Obłój K. (2007b). Strategia organizacji. W poszukiwaniu trwałej przewagi konkurencyjnej, Warszawa: Polskie Wydawnictwo Ekonomiczne, 2007.

Porter, M.E. (1996). What is strategy, Harvard Business Review, November-December, pp. 61-78.

Porter, M.E. (2010). Strategia konkurencji. Metody analizy sektorów i konkurentów. Warszawa: Wydawnictwo MT Biznes, 2010.

Tomski, P. (2013). O przewagach konkurencyjnych firm rodzinnych w kontekście teorii zasobowej. Przedsiębiorczość i Zarządzanie 14, vol. 6, iss. 2, pp.121-130.

Ziółkowska, B. (2012). *Podejście zasobowe w strategicznym zarządzaniu wartością przedsiębiorstwa*. Zeszyty Naukowe Politechniki Czestochowskiej, Zarządzanie, vol. 6, pp. 151-159.

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# 36. KEY FINDINGS ON UNETHICAL LEADERSHIP IN SLOVAKIA

**Abstract:** Article derives from a large-scale research project carried out on the sample of 810 Slovak managers working for a wide spectrum of organizations located in Slovakia. It reports on key research results in regard to unethical leadership that has far-reaching negative consequences for many organizational variables tied to human resources in companies. The main objective is to specify the nature of unethical leadership and to unveil its various forms in the current Slovak organizational environment. Paper builds on qualitative content analysis of narrative answers of respondents together with frequencies analysis in respect to recorded manifestations of unethical leadership. Our findings indicate that nearly one half of our respondents (47%) experienced unethical leadership from direct supervisors. The majority of reported incidents relates to three areas of managerial misconduct: 1. Unethical human resource management practices; 2. Unethical style of leaders' communication entailing cheating, shouting, verbal abuse and belittling of employees; and 3. Mistreatment of employees comprising issues of discrimination, mobbing, or playing politics. Our analysis of the nature of unethical leadership indicates which aspects of organization should be watched closely in order to minimize the occurrence of harmful leadership practices. Based on these results, practical implications and recommendations for managerial praxis are outlined.

Keywords: ethics, morality, human resources, unethical leadership

JEL Classification: M14, M54

#### 1. Introduction

Current academic leadership discourse focuses intensely on the values-oriented leadership approach that highlights the significance of ethical behavior of individual leaders in their quest for raising the positive and restraining the negative aspects of employee workplace behavior. In the debate on the nature, antecedents, and consequences of ethical leadership, the attention shifts naturally also to the "bad" aspects of leadership.

This article builds on the premise that specific manifestations of unethical leadership in corporate praxis have to be clearly delineated in order to offer managerial communities all around the world practical tools, which would be beneficial in the combat with immoral behavior of leaders. Article builds on a large-scale research project carried out on the sample of 810 Slovak managers. It reports

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on key findings in regard to the phenomenon of unethical leadership in Slovakia. Based on qualitative content analysis of narrative answers of respondents together with frequencies analysis in respect to recorded manifestations of unethical leadership, this paper aims for a deeper understanding of unethical leadership in its various forms as these were captured in the current Slovak organizational environment.

#### 2. Theoretical Insights

Building on diverse research methodologies and managerial ethics traditions, academic debate on unethical leadership has produced a variety of terms and concepts. Considerable eclecticism was brought into this discourse. As a consequence, the confusion of terms contributes to delineation of concepts that mutually overlap to a large extend. As Lašáková and Remišová (2015) noted after conducting an extensive literature review on the topic of unethical leadership, current discourse employs a mixture of interweaved notions and concepts, the term "leadership" being complemented by different adjectives. According to psychology-driven trend, leadership could be "narcissistic" (e.g. Campbell et al., 2011) and "psychopathic" (e.g. Mathieu et al., 2014; Boddy, 2011). Some concepts pay attention to "dark" leadership (e.g. Paulhus, Williams, 2002), to "bad" leadership (e.g. Erickson et al., 2007), or to "despotic" leadership (e.g. De Hoogh, Den Hartog, 2008). Many attention is paid also to latter concepts of "self-serving" leadership (e.g. Rus et al., 2010; Decoster et al., 2014), "toxic" leadership (Pelletier, 2010), "dysfunctional" leadership (e.g. Dandira, 2012), or "tyrannical" leadership (e.g. Kant et al., 2013). And last but not least, "destructive" leadership (e.g. Einarsen et al., 2007) is being currently researched extensively, too.

All of the abovementioned concepts evolve around the central issue of leaders' wrongdoing, while clear dividing lines between them might be sometimes problematical to identify. Building on critical analysis of unethical leadership definitions (Brown, Mitchell, 2010; Ünal et al., 2012; Eisenbeiß, Brodbeck, 2014) and related concepts of destructive leadership (Einarsen et al., 2007; Padilla et al., 2007; Krasikova et al., 2013; Schyns, Schilling, 2013), Lašáková and Remišová (2015, p. 323) define unethical leadership as "a process of intentional or unintentional, passive or active, and recurrent influencing that harms others, being it individuals, organization and/or society as a whole". This conception is based on leaders' violation of deontological and teleological principles. In general, the first principle regards actions that stem from ethical motivation of the subject to act, while the latter one relates to consequences of actions that do not harm others. In this context, actions of leaders that fail the test of deontological and/or teleological ethics are evaluated as unethical (Lašáková, Remišová, 2015).

Unethical leadership doesn't have negative effects only on direct subordinates of an unethical leader; it might have severe consequences also for entire organizations. Scientific literature offers many examples of such a destructive impact. For instance, Brown and Mitchell (2010) found out that unethical leadership impedes effective functioning of organizations in many aspects, absenteeism and low productivity being just two examples in this context. The "contagiousness" of unethical leadership across organizations was hypothesized by many researches, too. For instance, Ünal et al. (2012) asserted that unethical leadership may motivate subordinates to behave unethically. Further, in their interesting article, Sawaoka and Monin (2015) point out that working for an organization with an unethical top management may have serious consequences for the future career opportunities of employees, because people tend to perceive the unethical behavior of individuals in positions of power as a pattern for the behavior of a group as a whole. As Sawaoka and Monin (2015) note, higher ranking organization member's unethical behavior leads other organization members to receive more negative job-hiring recommendations. Hence, unethical leadership may negatively affect even the future career prospects of employees who work in companies that are led by people accused from ethics violation.

#### 3. Research Methodology

The research project, which this paper builds on, had a broad scope. It focused on ethical decision-making of Slovak managerial personnel as well as on various organizational factors affecting ethical and unethical leadership. Questionnaire was used as the basic method to obtain the data from organizational praxis. The sample consisted of 810 Slovak managers working at different management levels. Not all respondents filled in the demographic questionnaire items. However, based on the acquired data, almost 26% of the sample was populated by top managers, approximately 36% by middle managers, and 35% by lower level managers. They were working in organizations in both the public sector (11%) and

private sector (87%). As for the span of control, 60% indicated that they lead directly less than ten employees. Most respondents were quite experienced in fulfilling managerial roles, namely, 38% occupied managerial position for more than ten years, and up to 37% served as managers from three to ten years. As for the educational background, almost 60% of respondents studied economics- or management-oriented study programs at universities, and slightly more than a half of them (54%) stated that they had attended at least once during their professional career an ethics training course offered by their employers (for more information on the research background see Remišová et al., 2015).

For the purpose of investigation of the nature of unethical leadership in the Slovak context, three questions were posed in the questionnaire. The first question regarded the occurrence of unethical leadership and asked respondents to indicate whether they have experienced in their organization unethical leadership from their direct supervisors. It was a closed question with two response possibilities, "yes" or "no". Next, two open-ended questions were posed that aimed to map respondents' particular experiences with unethical leadership. The first question regarded the nature of the situation(s) and the second related to perceived reasons that led to unethical conduct.

After obtaining the data, narrative responses were transcribed and were subject to qualitative content analysis. This method allows for an inductive approach, by the means of which categories emerge out of the data, while respecting the meaning of the context, in which the data are analyzed and the categories are derived. As Hsieh and Shannon note (2005, pp. 1279-1280), the advantage of this method lies in "gaining direct information from study participants without imposing preconceived categories or theoretical perspectives". In order to capture all relevant details in the narrative responses of our respondents, two researchers independently read in detail through the descriptions of unethical leadership situations and derived a coding scheme and related labels that would allow for cataloguing of all of recorded issues according to their conveyed meaning. In the next step, the two coding schemes were compared and, in case of inconsistency, a third researcher was involved to assess the controversial issues autonomously in order to reach consensus over the final coding system. Codes were sorted into sense-making categories (forms of unethical leadership), which were used for organizing and grouping of the recorded phenomena together with their frequency analysis. Afterwards, these categories were classified into a smaller number of clusters representing different areas of leaders' misconduct in the current Slovak organizational environment.

#### 4. Research Results and Discussion

According to the research results, almost half of respondents indicated that they have experienced unethical leadership, more specifically, 379 respondents (47%) reported to have such an experience. In the next step, respondents were asked to describe the situation more in-depth excluding the names or any other particularities that could violate the principle of anonymity of respondents or of any persons involved in the described situations.

Table 1. Areas of leaders' misconduct

Cluster	% within sample	N
Unethical human resource management practices	26,4	78
Unethical style of communication	26,4	78
Mistreatment of employees	13,5	40
Preference of economic over ethical interests	11,8	35
Clientelism	6,4	19
Unethical behavior toward external stakeholders	5,7	17
Weak management and professional incompetence	5,1	15
Violation of rules	4,7	14

Source: Own work

Nearly two thirds (N = 248) of those who declared to have an unethical leadership experience, were willing to describe the events and give more details on the character of the situation as well as on perceived reasons for leadership misconduct. Actually, some respondents have indicated more than one situation; hence altogether 296 descriptions of unethical leadership practices were subject for further analysis. After conducting the qualitative content analysis of these open narrative responses, 36 forms of unethical leadership were identified. These were than grouped according to their common features and semantic relatedness into eight clusters (Table 1).

The observed frequencies for many categories of recorded unethical leadership symptoms were rather low; namely, 26 out of 36 groups showed a frequency of less than ten responses. It is necessary to emphasize that in coding the cases, there was a need to achieve a thorough analysis and the "finest" sorting possible, in order to not to lose details and particularities of respondents' descriptions. Table 2 displays the frequency results for particular forms of unethical leadership within each of the eight identified clusters.

Table 2. Forms of unethical leadership

Cluster	Categories (% within cluster)		Examples (response excerpts)
Unethical human resource management practices	Dismissals Recruitment Compensation Workflow organization Disciplining employees Performance appraisal Time-offs allocation Career management	31% 18% 18% 10% 9% 8% 4% 2%	Leader did the layoff of subordinates without explanation of any reasons for doing so.  Leader rewards followers subjectively, based more on personal relationships than their actual performance.
Unethical style of communication	Lying/Deception Verbal attacks Promises breaking Vulgar expressions Shouting Withholding information	35% 25% 14% 10% 8% 8%	Leader adjusted information and his arguments to suit his own egocentric goals.  Leader corroborates on falsifying the employee attendance lists.
Mistreatment of employees	Abuse of power over others Mobbing Discrimination Playing politics Arrogance Privacy violation Team disintegration	28% 20% 12% 12% 10% 10% 8%	Leader is often claiming for various services from subordinates either for her of for her family members during work.  Leader made late night long telephone calls to subordinates demanding their attention to things that were not urgent.
Preference of economic over ethical interests	Prioritization of comp. goals Financial self-enrichment Corruption	43% 34% 23%	Leader watches for gaining company profit instead of creation of a value. The most important for the leader is to reach company goals and success at any costs.
Clientelism	Due friendship, camaraderie Not specified	95% 5%	Leader prioritizes friends or younger female colleagues at the expense of other employees.  Leader used to protégé a firm of a friend in the contractor selection process.
Unethical behavior toward external stakeholders	In supplier-customer relations Toward clients Toward competitors Not specified	47% 35% 12% 6%	Leader was engaged in non- transparent tenders for suppliers. Leader participated in stealing key talented employees from competitors.
Weak management and professional incompetence	Conflict avoidance Getting rid of responsibility Personal integrity issues Micromanagement	40% 27% 20% 13%	Leader was talking about open communication, but in reality the leader was not behaving accordingly. Leader was not able to confess openly that his promise cannot be upheld.
Violation of rules	Disrespect to comp. rules Illegal behavior	57% 43%	Leader was encouraging employees to circumvent the company rules.  Leader gave instructions that were not in line with legal regulations.

Source: Own work

According to research results, one of the most populated areas of unethical leadership behavior goes on behalf of personnel management. This particular area of managerial work seems to be symptomatically marked by harmful leadership practices. For instance, as Toffler (1989) have noted already in 1986, according to her research results, circa 66% of ethical issues in managerial work relate to HRM.

As Fratričová's research results show (Fratričová, 2010; Fratričová, 2012), the majority of Slovak companies have implemented a formalized system of human resource management (HRM) with prescribed policies for its various functions (recruitment, compensation, etc.). Despite these changes, corporate praxis signals that some specific areas of HR management are still undermanaged. For example, Stachová and Stacho (2013) state that only 14% of organizations operating in Slovakia deal with employee adaptation systematically and only 8% deals methodically with HR function of outplacement.

Formalization of HR practices may contribute to elimination of harmful managerial decisions over individual employees. Nevertheless, our research outcomes suggest that despite of HRM formalization, leaders' unethical actions in HRM still take place, especially in respect to employee dismissals, recruitment, and compensation. Justice in HRM is perceived by many respondents as an important ingredient of leadership work and in case leaders break it, employees will perceive this as a sign of unethical leadership. As Ünal et al. mention (2012), especially retributive and compensatory justice are particularly important because their violation by leaders may cause a laissez-faire organizational climate that promotes unethical conduct of employees.

The cluster related to unethical style of leaders' communication entails issues of lying, abusive communication using vulgar expressions, belittling, and humiliation, mocking and shouting at employees together with concealment of important information from employees. This cluster tackles the interactive nature of leadership process, indicating the importance of trustful, open, honest and respectful communication of leaders towards employees. In this context, respondents mentioned issues like weak information flow and withhold of information that would enable employees to decide right over their work or career plans. Deceitful communication and sheer lying to employees together with verbal attacks were quite frequent, too. Use of deception and lying were identified as behaviors perceived by followers as destructive also by Webster et al. (2014). Authors classify these behaviors under the category of manipulating behaviors. Pathological lying, poor behavioral control, intimidation and threating employees were listed also in B-Scan 360, an assessment instrument for managers, subordinates and peers to assess psychopathy in others in workplace settings (Mathieu et al., 2013). As for the relative numbers, the category of lying and deception (N = 27) was in fact the most populated category of unethical leadership behaviors in our research.

The third cluster relates to mistreatment of employees that regards wrongful practices of power abuse, bullying, arrogance, violation of rights of employees for privacy and purposeful team disintegration. The central aspect in this cluster relates to treating others from a power position. Interestingly, excoriation and abuse of subordinates were found as typical destructive leadership behaviors also in the Chinese cultural context (Lu et al., 2012).

Followers often perceive their leaders as persons who have the right to use their power over employees that stems from either formal or informal authority position in the company. Nevertheless, research results indicate that employees are often able to notice the slight dividing line between the utilization of power for justifiable reasons and the maltreatment of power for wrong purposes and in an immoral manner. As one respondent put it, "usually it is all about playing politics and the motivation to acquire more influence in the company, or to gain a better position". This vicious spiral of power is often motored by aggregation of more personal power over people or events, resulting in oppression and abuse of others due to incapacity of leaders to build their own power position by more accurate managerial tools.

Besides followers-oriented aspects of leadership, to which the former three clusters were related, research results indicate also the link of unethical leadership to prioritization of economic goals over ethics. Leaders violate ethical norms for personal financial gain and engage in corruption. Leaders' self-serving behavior and its antecedents have been well mapped already in the work of Decoster et al. (2014). However, besides these egocentric mammon-driven practices, our research results show that leaders might be blinded also by a customary mantra of managerial work, namely the economically-driven effectivity and success in reaching company goals that is often stressed in conventional leadership definitions. For instance, House et al. (2001) situate the locus of leadership into the ability of a leader to

motivate others to contribute to company success. Similarly, DuBrin (1990) stresses the function of leadership to reach particular goals that were set. The traditional perspective accentuates instrumental and pragmatic approach to leadership, whereas the values-oriented, humanistic side of this process might be often neglected in managerial praxis. The economic paradigm in leadership reflection has a tendency to accentuate cost-effective practices over any other purpose. This imbalance produces than ethical missteps of leaders, who wish to reach company success at any costs. Hoyt, Price and Poatsy (2013) provide in their paper support for the assumption that the drive for performance contributes to increased confidence in appropriateness of any means to achieve the goals. Further, as Balch and Armstrong (2010, p. 291) note, high performance companies create favorable conditions for wrongdoing because "high performance requires aggressive behavior at the ethical margins of what is acceptable".

Following two clusters of unethical leadership manifestations, clientelism and mistreatment of external stakeholders, are related to the "outside" relationships of leaders. To protégé suppliers, or to patronage employees that have family personal bonds with leaders, was perceived by respondents as another facet of unethical leadership. Clientelism instills inequality in human relations, and if leaders decide over resources and opportunities allocation based on family ties or camaraderie, their deeds are perceived as immoral. Similarly, dishonest customers, suppliers or competitors relations were stressed several times in narrative responses of research participants as a sing of unethical leadership.

Weak management and professional incompetence of leaders and the category of violation of rules were the two lowest populated areas of leaders' misconduct in our research. The first was represented by fifteen situations entailing conflict avoidance, getting rid of personal responsibility, problems with personal integrity and micromanagement; while the latter category entailed fourteen situations of showing disrespect to company rules or to legal regulations. Interestingly, the issue of micromanagement, as severe workplace control that violates the principle of human dignity, was identified as a component of toxic leader behavior also in the work of Erickson et al. (2007). This was confirmed also by results of Webster, Brough and Daly (2014), which showed that this particular aspect of managerial misconduct was indicated by 24% of their overall sample of 76 respondents.

Our results show that immoral leadership is perceived to be related to weak management competencies of leaders who lack certain personality characteristics that contribute to effective management of people. The absence of managerial profession-tied competencies like motivation, persuasion, active listening, or coordination of people might results in sabotage of or decline from organizational goals. In case leaders are not able to effectively manage people, and quite the opposite, they contribute to low engagement and dissatisfaction of others, their leadership will be reflected upon as unethical. Further, in case of disrespect to behavioral standards that were set in and outside of company, leaders might engage in non-compliant or even illegal behavior, which was perceived by our respondents as unethical. Similarly to our findings, also Eisenbeiß and Brodbeck (2014) found out in their study on 36 interviewees that, from a compliance-based view, 40% of their respondents labeled as unethical leaders delinquent persons, who break the law and engage in criminal behavior. Paraphrasing the outcomes of Weaver and Trevino (1999), in order to gain relevance among employees, all kinds of behavioral standards (ethical as well as legal) have to be supported by leaders; leaders' commitment to rules seems to be an influential predictor of employee acceptance in this respect.

#### 5. Conclusion

Our analysis of the forms of unethical leadership in organizations operating in Slovakia indicates several important outcomes. First, this phenomenon is quite widespread in Slovak organizational environment; almost half of respondents have declared to have experiences with leaders who lead employees in an unethical manner. Second, unethical leadership seems to have diverse facets in organizational praxis. Altogether eight distinctive areas of leaders' wrongdoing were identified, encompassing a wide range of 36 categories that represent specific ways in which leaders may lead others unethically. Third, the most prevailing manifestations of unethical leadership relate to unethical HRM practices, comprising issues like unjust employee dismissal, recruitment and compensation, and to the unethical style of leaders' communication with deceitfulness, verbal attacks, breaking of promises and using vulgar expressions. More specifically, the most populated individual category of reported incidents regards practices of lying and deception. Fourth, our results indicate that unethical leadership is associated with ineffective management, professional incompetence of a leader, and

hence with leader's inability to reach company goals that were set. Fifth, unethical leadership surpasses the boundaries of a company. Although current scientific discourse pays attention primarily to the leader-member relations, the destructive nature of unethical leadership might negatively affect also external stakeholders like customers, suppliers, or competitors. Sixth, our research results suggest that the unethical side of leadership might be related also to otherwise ethical and legitimate motivation of leaders to act. In order to reach company goals, which is traditionally an appropriate objective of leadership, leaders might engage in unethical actions. Our results point out that an unrestricted quest for sheer performance might lead in praxis to unethical leadership.

The results indicate which aspects of organization should be watched closely in order to minimize the occurrence of harmful leadership practices. First of all, it is necessary to increase control over unethical practices in HR management. Transparency of all HR processes, striving for objectivity in employee assessment, fairness toward employees and the principle of employee welfare should be incorporated in all HR processes. Further, it is essential to continuously communicate the importance of ethics in business across the company and to institutionalize ethics in business, for example by the means of codes of ethics, ethics committees or ethics trainings. In this context, the area of performance appraisal of leaders is particularly significant. Their performance evaluation should entail also the aspect of their ethical behavior and the way they communicate with other employees. An ideal solution seems to be the 360 degree feedback method, which objectifies the evaluation process and brings in a holistic view of leader's personality.

Our research has certain limitations, too. We investigated perceptions of unethical leadership, not the actual unethical behavior per se. In our approach, unethical leadership was assessed from followers' point of view. At one hand, this approach has affected the data; still as for example also Schyns and Schilling (2013) argue, the majority of unethical leadership concepts include the element of followers' perception and consequent judgement on behalf of leader's decisions and actions. Another limitation regards our focus on the leader as the sole "agent" of unethical leadership. As some authors emphasize, the unethical leadership does not exist in a vacuum; usually it is "nurtured" not only by leader's personality, but also by leader's surroundings. For instance, Padilla et al. (2007) accentuate the impact of a toxic triangle of three domains that relate to destructive leadership, being it destructive leaders, susceptible followers and conducive environment. These three elements are working together in amplifying each other. Nevertheless, despite the fact that our research did not focus on environmental and followers-related precursors of unethical leadership, we still believe that our qualitative approach to data analysis has a strong exploratory power in respect to the phenomenon of unethical leadership in the Slovak context. Finally, one limitation regards also the nature of the research sample. Our respondents were employed on managerial positions. Results might be differing to some extent, if employees, who do not fulfil managerial roles, would assess their leaders. As Thoroughgood et al. (2012) note, subordinates might perceive their leaders as more ethical then they really are because of different motives. One might stem from the benefits they gain because of colluding with their leader. We assume that a large proportion of our respondents could be promoted to managerial positions by their superiors. Therefore, evaluations of supervisory behavior might not reflect the reality truthfully. Yet, the 296 individual cases that were analyzed demonstrated indeed a wide variety of unethical leadership practices. In this respect, our results present an intriguing assortment of different manifestations of unethical leadership from organizational praxis and offer a solid ground for further explanatory research on the reasons and consequences of these phenomena.

#### Acknowledgement

This article is part of the research project VEGA no. 1/0333/13 titled *Critical analysis of the impact of cultural and ethical factors on leadership in current Slovak business environment.* 

#### References

Balch, D. R., Armstrong, R. W. (2010). Ethical Marginality: The Icarus Syndrome and Banality of Wrongdoing. *Journal of Business Ethics*, vol. 92, iss. 2, pp. 291-303.

Boddy, C. R. (2011). Corporate Psychopaths, Bullying and Unfair Supervision in the Workplace. *Journal of Business Ethics*, vol. 100, iss. 3, pp. 367-379.

Brown, M. E., Mitchell, M. S. (2010). Ethical and Unethical Leadership: Exploring New Avenues for Future Research. *Business Ethics Quarterly*, vol. 20, iss. 4, pp. 583-616.

Campbell, W. K., Hoffman, B. J., Campbell, S. M., Marchisio, G. (2011). Narcissism in Organizational Contexts. *Human Resource Management Review*, vol. 21, iss. 4, pp. 268-284.

Dandira, M. (2012). Dysfunctional Leadership: Organizational Cancer. Business Strategy Series, vol. 13, iss. 4, pp. 187-192.

De Hoogh, A. H. B., Den Hartog, D. N. (2008). Ethical and Despotic Leadership, Relationships with Leader's Social Responsibility, Top Management Team Effectiveness and Subordinates' Optimism: A Multi-method Study. *The Leadership Quarterly*, vol. 19, iss. 3, pp. 297-311.

Decoster, S., Stouten, J., Camps, J., Tripp, T. M. (2014). The Role of Employees' OCB and Leaders' Hindrance Stress in the Emergence of Self-Serving Leadership. *The Leadership Quarterly*, vol. 25, iss. 4, pp. 647-659.

DuBrin, A. J. (1990). Essentials of Management. Cincinnati: South-Western Publishing, 1990.

Eisenbeiß, S. A., Brodbeck, F. (2014). Ethical and Unethical Leadership: A Cross-Cultural and Cross-Sectoral Analysis. *Journal of Business Ethics*, vol. 122, iss. 2, pp. 343-359.

Einarsen, S., Aasland. M. S., Skogstad, A. (2007). Destructive Leadership Behaviour: A Definition and Conceptual Model. *The Leadership Quarterly*, vol. 18, iss. 3, pp. 207-216.

Erickson, A., Shaw, J. B., Agabe, Z. (2007). An Empirical Investigation of the Antecedents, Behaviors, and Outcomes of Bad Leadership. *Journal of Leadership Studies*, vol. 1, iss. 3, pp. 26-43.

Fratričová, J. (2010). Strategic Human Resource Management and Impact on Organizational Performance. *Journal of Human Resource Management*, vol. 13, iss. 1-2, pp. 19-30.

Fratričová, J. (2012). Strategic Human Resource Management in Practice: The Perspective of HR Managers in Slovakia. *Journal of Human Resource Management*, vol. 15, iss. 1-2, pp. 18-32.

House, R. J., Javidan, M., Dorfman, P. (2001). Project GLOBE: An Introduction. Applied Psychology, vol. 50, iss. 4, pp. 489-505.

Hoyt, C. L., Price, T. L., Poatsy, L. (2013). The Social Role Theory of Unethical Leadership. *The Leadership Quarterly*, vol. 24, iss. 5, pp. 712-723.

Hsieh, H.-F., Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, vol. 15, iss. 9, pp. 1277-1288.

Kant, L., Skogstad, A., Torsheim, T., Einarsen, S. (2013). Beware the Angry Leader: Trait Anger and Trait Anxiety as Predictors of Petty Tyranny. *The Leadership Quarterly*, vol. 24, iss. 1, pp. 106-124.

Krasikova, D. V., Green, S. G., LeBreton, J. M. (2013). Destructive Leadership: A Theoretical Review, Integration, and Future Research Agenda. *Journal of Management*, vol. 39, iss. 5, pp. 1308-1338.

Lašáková, A., Remišová, A. (2015). Unethical Leadership: Current Theoretical Trends and Conceptualization [online]. In *Business Economics and Management 2015 Conference*. Proceedings of the 9th International Scientific Conference. Zvolen: Technical University in Zvolen. Procedia Economics and Finance, vol. 34, pp. 319-328. [cit.2016-01-03]. [online]. Available: http://www.sciencedirect.com/science/article/pii/S2212567115016366.

Lu, H., Ling, W., Wu, Y., Liu, Y. (2012). A Chinese Perspective on the Content and Structure of Destructive Leadership. *Chinese Management Studies*, vol. 6, iss. 2, pp. 271-283.

Mathieu, C., Hare, R. D., Jones, D. N., Babiak, P., Neumann, C. S. (2013). Factor Structure of the B-Scan 360: A Measure of Corporate Psychopathy. *Psychological Assessment*, vol. 25, iss. 1, pp. 288-293. http://dx.doi.org/10.1037/a0029262

Mathieu, C., Neumann, C. S., Hare, R. D., Babiak, P. (2014). A Dark Side of Leadership: Corporate Psychopathy and its Influence on Employee Well-Being and Job Satisfaction. *Personality and Individual Differences*, vol. 59, iss. March 2014, pp. 83-88.

Padilla, A., Hogan, R., Kaiser, R. B. (2007). The Toxic Triangle: Destructive Leaders, Susceptible Followers, and Conducive Environments. *The Leadership Quarterly*, vol. 18, iss. 3, pp. 176-194.

Paulhus, D. L., Williams, K. M. (2002). The Dark Triad of Personality: Narcissism, Machiavellianism, and Psychopathy. *Journal of Research in Personality*, vol. 36, iss. 6, pp. 556-563.

Pelletier, K. L. (2010). Leader Toxicity: An Empirical Investigation of Toxic Behavior and Rhetoric. *Leadership*, vol. 6, iss. 4, pp. 373-389.

Remišová, A., Lašáková, A., Rudy, J., Sulíková, R., Kirchmayer, Z., Fratričová, J. (2015). Etické vedenie ľudí v slovenskom podnikateľskom prostredí. Bratislava: Wolters Kluwer, 2015.

Rus, D., van Knippenberg, D., Wisse, B. (2010). Leader Self-Definition and Leader Self-Serving Behavior. *The Leadership Quarterly*, vol. 21, iss. 3, pp. 509-529.

Sawaoka, T., Monin, B. (2015). Moral Suspicion Trickles Down. Social Psychological and Personality Science, vol. 6, iss. 3, pp. 334-342.

Schyns, B., Schilling, J. (2013). How Bad are the Effects of Bad Leaders? A Meta-Analysis of Destructive Leadership and Its Outcomes. *The Leadership Quarterly*, vol. 24, iss. 1, pp. 138-158.

Stachová, K., Stacho, Z. (2013). Employee Allocation in Slovak Companies. *Business: Theory and Practice*, vol. 14, no. 4, pp. 332-336.

Thoroughgood, Ch. N., Padilla, A., Hunter, S. T., Tate, B. W. (2012). The Susceptible Circle: A Taxonomy of Followers Associated with Destructive Leadership. *The Leadership Quarterly*, vol. 23, iss. 5, pp. 897-917.

Toffler, B. L. (1986). Tough Choices. Managers Talk Ethics. New York: John Wiley & Sons, 2012.

Ünal, A. F., Warren, D. E., Chen, Ch. C. (2012). The Normative Foundations of Unethical Supervision in Organizations. *Journal of Business Ethics*, vol. 107, iss. 1, pp. 5-19.

Weaver, G. R., Trevino, L. K., Cochran, P. L. (1999). Corporate Ethics Programs as Control Systems: Influences of Executive Commitment and Environmental Factors. *The Academy of Management Journal*, vol. 42, iss. 1, pp. 41-57.

Webster, W., Brough, P., Daly, K. (2014). Fight, Flight or Freeze: Common Responses for Follower Coping with Toxic Leadership [online]. *Stress and Health*, 2014. [cit.2016-01-03]. Available: http://onlinelibrary.wiley.com/doi/10.1002/smi.2626/pdf

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# 37. INFLUENCE OF ONLINE SOCIAL NETWORKS ON LITHUANIAN COMMUNICATION MEDIA

**Abstract:** This article aims to investigate and identify the impact of Internet based social networks on Lithuanian media, based on cases of online news portals *Delfi.lt* and *15min.lt*. Therefore, it is important to highlight links between the media field and Internet based social networks; based on expert opinions, to ground close links of Internet based social networks with the field of the media, influence made on it; and to provide future prospects for Internet based social networks in the media field. The analysis of scientific literature disclosed that Internet based social networks revealed a new approach to the role of communication in the information society. The qualitative research data analysis disclosed that new Internet based social networks and protection of a person's privacy were these two constituents which form the basis for observing trends of information dissemination through Internet based social networks.

**Keywords:** Internet based social networks, *Facebook*, the media, online news portals

**JEL Classification:** L14

#### 1. Introduction

Relevance and novelty of the topic. Consumers' behaviour in today's information and knowledge society has changed: they follow information using both traditional and online media. Along with these means Internet based social networks *Twitter*, *Facebook*, etc., which today are an important means of communication in the media, are used. Particularly widely used information and communication technologies enable journalists acting in the media to use the most modern tools in order to expeditiously transfer relevant information, regardless of time and place restrictions.

It should be emphasized that in recent years, many media increasingly relate their activities to Internet based social networks. If formerly the content of important events used to be transmitted through traditional media, today such information is also announced via Internet based social networks as one of the media, transmitting the latest information (Allgaier et al., 2013). It is therefore concluded that due to the growing influence of Internet based social networks on the media today's media acquire another new role – they are turning into an administrator and mediator of the content of Internet based social network.

It is considered that today the media are inconceivable without Internet based social networks as their common interaction. However, it must be emphasised that aspects of changes in the media and of the increasingly significant role of Internet based social networks for the media in the works of numerous scientists are often analyzed in the theoretical rather than in practical research context. Various researches related to problems of the media often do not particularly highlight the importance of Internet based social networks for the media.

The above-mentioned context presupposes the problem field of this research, which is disclosed through these problem questions: Are Internet based social networks just the way for the media to increase the number of visitors on online news portals? Don't Internet based social networks endanger survival of online news portals?

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Exploration of the topic. It may be noticed that there is quite a considerable amount of scientific literature, analysing various aspects of the influence of Internet based social networks on the media. Foreign and Lithuanian scientists provide their approaches to the media that are changing due to influence of Internet based social networks (Balčytienė, Harro-Loit, 2009; Balčytienė et al., 2009; Castells, 2009; Navarro, 2009; Dawson, 2010; Geiß et al., 2013; Kane et al., 2014), specify problem aspects coming to prominence in the transition from traditional to online media (Núria, 2006; Spyridou et al., 2013), changes in journalists' work in the information and knowledge society and emerging trends of the media in the future (Dawson, 2010; López Parra, 2012; Čiužaitė et al. 2012; Punín et al., 2014).

Although, as it can be seen, aspects of changes in the media are tackled in the said scientists' works, no exhaustive analysis has yet been conducted as to possibilities of Internet based social networks in the media, the relation of Internet based social networks with online media. Therefore, it is maintained in this article that it is necessary to conduct an empirical research in order to identify how Internet based social networks influence modern media.

The research object: influence of Internet based social networks on Lithuanian media.

The research aim: to investigate and identify the impact of Internet based social networks on Lithuanian media.

Research objectives:

- 1) Based on experts' opinions, to ground close links of Internet based social networks with the media and influence made on it;
- 2) To provide future prospects for Internet based social networks.
  - Research methods:
- Qualitative investigation (interview).
- Qualitative content analysis.

### 2. Dimension of the Impact of Online Social Networks on Lithuanian Communication Media

#### 2.1. Links of the Media and Internet Based Social Networks

Nogueira Vivo (2010) points out that Internet based social networks, the majority of users of which have their personal accounts on social network *Facebook*, are increasingly used in the world. According to Nogueira Vivo (2010), such phenomenon of popularity of social networks presupposes the idea about transformation of the current media, which is related to approaching of certain online media towards Internet based social network platform in order to create new online products. Such context enables to state that Internet based social networks are becoming a new trend of the media, plotting future guidelines in the media.

Once the Internet as one of the channels of information dissemination gained popularity, Kane et al. (2014) observe the so-called digital convergence, the essence of which is synthesis of computers, telecommunications, sound and image and the media, which it supported. Noguera Vivo (2010) notes that in recent years a number of media relate their activities to Internet based social networks. Therefore, based on Noguera Vivo (2010), it is concluded that due to the growing influence of Internet based social networks in the media, today's media acquire another new role: they become an administrator and mediator of the content of the social network.

Lara (2008) believes that Internet based social networks due to qualities inherent to them, such as wide trends of information dissemination and administration of the content published by other persons, began to play an increasingly important role in modern media, especially attracting a growing segment of population to share information in web-based social networks.

In summary it can be stated that currently online media, which are often common for many users, are still dominating. Despite the growing interest in web-based social networks, it is assumed that the media still fail to find ways how to effectively use web-based social networks for media purposes.

#### 2.2. Research Methodology

The qualitative research, applying expert interview method, was conducted. The objective of the research was to investigate the influence of social networks on Lithuanian media and to assess Lithuanian media as a whole, based on content analysis of interviews with experts working in concrete media companies (online news portals *Delfi.lt* and *15min.lt*).

Experts are persons who distinguish themselves by competencies in the media field, have work experience in this field (they work in the department of the media enterprise related to Internet based social networks, therefore, are aware of the specificity of applying web-based social networks, see links of the media and web-based social networks). Experts were interviewed, giving pre-prepared questions.

The qualitative research was conducted in October-November, 2014. The results of this research were processed and analyzed in November, 2014. The interview with every expert was conducted separately, speaking face to face at the workplace. The average length of the interview with every respondent was 17 minutes.

However, in order to properly prepare for the interview, it was decided to conduct a pilot interview with Erika Maslauskaitė, the head of Business Innovation Department of online news portal *Delfi.lt*. The aim of this pilot interview was to find out in advance whether prepared interview questions would be comprehensible and clear to other participants of the research and whether their logical sequence was suitable. During the pilot research several shortcomings were noticed but they were evaluated as inessential, therefore, in other interviews with other research participants the same questions and their logical sequence were maintained.

The interviews with experts were preceded by experts' verbal consent to participate in this research and at the experts' request interview questions were sent by e-mail in advance so that research participants could get familiarised with them and prepare for interviews.

The aim of interview questions was to find out personal work experience and efforts of experts, using Internet based social networks as a tool in the media; to evaluate advantages of Internet based social networks for media and envisage their shortcomings with regard to the media; to foresee future prospects (possible trends).

During the research, experts were deliberately chosen according to the set criteria. It should be noted that experts were selected regardless of their gender or age. Therefore, it can be stated that targeted screening was conducted. The following two criteria were considered: 1) not less than 2 years of work experience, managing and/or supervising the field of social media/web-based social networks in the media organization; 2) supervision, preparation and implementation of social media/web-based social networks in the media organization.

Table 1. Demographic Characteristics of Respondents, Working in Online News Portals *Delfi.lt* and *15min.lt* 

Demographic factor	<b>Delfi.lt</b>	15min.lt
Sample size	n = 3	n = 3
Gender	Women (100 per cent)	Women (100 per cent)
The period of work in the media in the field of social media / web- based social networks	One respondent works 4 years, another respondent, 2,5 years, still another respondent, 3 years.  The mean of the period of work in the social media field is 3 years.	One respondent works 4 years, the second respondent, 2 years, the third respondent, 3 years.  The mean of the period of work in the social media field is 2.5 years.
Distribution by type of enterprise	Main workplace of all three respondents is online news portal <i>Delfi.lt</i>	Main workplace of all three respondents is online news portal 15min.lt
Distribution by work status	1 respondent – head of the department; 2 respondents – news editors	1 respondent – head of the department; 2 respondents – news editors
Education	1 respondent has higher university education (Master's degree), 2 respondents have higher university education (Bachelor's degree).	2 respondents have higher university education (Master's degree), 1 respondent has higher university education (Bachelor's degree).
Geographic distribution	Respondents were interviewed in the central unit of online news portal <i>Delfi.lt</i> in Vilnius.	Respondents were interviewed in the central unit of online news portal <i>15min.lt</i> in Vilnius.

Source: Developed by the authors of the article according to the obtained research results

The analysis of the said demographic data of survey participants was followed by formulation of generalised demographic characteristics of experts of every media enterprise (Table 1).

### 2.3. Influence of Internet Based Social Networks on Lithuanian Media: Manifestation of Experts' Opinion

The analysis of the content of interviews with experts primarily aimed at identifying experts' approach to the influence of Internet based social networks on Lithuanian media; i.e., explaining how web-based social networks affected specificity of work (content of the news, dissemination channels, journalists' work, etc.) of the largest and most popular Lithuanian online news portals *Delfi.lt* and *15min.lt*.

During the interview respondents were given a question related to the influence of web-based social networks on the media (Table 2).

Table 2. Influence of Internet Based Social Networks on the Media

Category	Subcategory	Experts Confirming statement
Influence of web- based social networks	Source of new topics	"Do you know how many topics you can create from Facebook; nothing, no other source – letters or telephones or information communicated from lip to lip – can offer." (E2-2); "Sometimes half of the content is what is found on Facebook in celebrities' profiles." (E1-1)
	Additional content	" through additional completely different content, which can be brought to the user by that social network." (E2-2)
	Dissemination of content through links	"Social network allows sharing links. It is enough to know the link of the content that you want to disseminate and upload it onto the status field of the social network." (E2-3)
	Popularisation of articles	" the article, which was not popular in the portal, can be read by 50 percent of people via <i>Facebook</i> . I.e., 50 percent of the flow for that article will be only from <i>Facebook</i> . So, in principal you can practically put that text to the portal like to the box and go to invite the whole flow of its readers from <i>Facebook</i> , because it will suit to that audience which is on <i>Facebook</i> ." (E1-1)
	Unimportant content of online news portals	"Because often the tendency is as follows: the content which is read in the news portal, most often is totally uninteresting in the social network. Why? Because it is likely that relevant content of the portal is designed, for example, for the older audience or is transmitted at that time when the audience in social networks is not active." (E1-3)

Source: Developed by the authors of the article according to the obtained research results

Generalising experts' imparted statements about the influence of Internet based social networks on the media, it can be stated that five areas where Internet based social networks had the biggest influence on the media come to prominence. This influence manifests itself as a source of new topics, additional content, dissemination of content via links, popularization of articles and uninteresting content of online news. Thus, based on interpretation of experts' statements, it can be concluded that the influence of Internet based social networks on the media is evident and inseparable from work specificity of the media.

Qualitative content analysis highlighted experts' attitude to advantages of Internet based social networks for the media. The qualitative category *Advantages of Internet based social networks*, which reflects experts' attitude to advantages that have led to positive changes in the media, was distinguished. According to experts, in recent years, certain positive changes related to influence of web-based social networks take place in Lithuanian media (Table 3).

Table 3. Advantages of Internet Based Social Networks for the Media

Category	Subcategories	Experts Confirming statement
	News portal	"Basically the very social network becomes like a news portal." (E1-3); "You can put an equals sign that social network is completely equal to the news portal." (E1-1)
	Visitors' flow	"Actually <i>Facebook</i> brings such benefit that the flow comes from there." (E1-3); "It became an additional channel of news portals, which can attract flow." (E1-1)
	Market development	" now <i>Facebook</i> is moving to the market share of <i>Youtube</i> and has its video content, which is placed in <i>Facebook</i> platform." (E1-3)
Advantages	Communication with users	"You can access users of your page, you can reach beyond their limits." (E2-1); "Basically, social networks are useful because they allow to start a conversation with their readers. Enable to feel their moods very well, involve them in the discussion on relevant issues" (E2-2);
of Internet based social networks	Image	" the channel, which is more associated with the image and involvement of users." (E2-2); " allows to speak more about how we work, why we work. What we have to say allows to slightly, although not slightly, form image." (E1-1); "In short, <i>Facebook</i> is as matter of image." (E1-2)
	Advertising	"Social networks are used just as an advertising tool." (E1-E2); "From a free social network it turned into a platform, where it can basically advertise itself." (E2-1)
	Low costs	" so what <i>Facebook</i> basically is doing, it saves costs." (E1-1); "This way social media or, for example, some chats or video chats in principal substantially reduce costs in these traditional channels." (E2-2)
	Loyalty	"The user is more tied to the very social network." (E1-3)
	Popularity	"Facebook was chosen for its popularity" (E2-2); "So in principal what we see here is that Facebook is a leader." (E1-3)
	Public spirit	"Social networks lead to public spirit". (E1-1)

Source: Developed by the authors of the article according to the obtained research results.

Advantages of Internet based social networks for the media raised by experts during the research can be interpreted as strengths and possibilities of changes in Lithuanian media, which are those most important constituents which form the basis for the specificity of media activities and which must be constantly improved in order to maintain quality of both content and form of the media.

The research also investigated shortcomings of Internet based social networks for the media. The qualitative category *Shortcomings of Internet based social networks*, which reflects experts' attitude to the negative influence of Internet based social networks on the media, was distinguished (Table 4).

Table 4. Shortcomings of Internet Based Social Networks for the Media

<b>C</b> 1		Experts			
Category	Subcategory	Confirming statement			
	Introduced restrictions	"As it is known, <i>Facebook</i> periodically introduces certain restrictions." (E2-1); "But the fact is that, well, <i>Facebook</i> allowed to create a large community and then it put a block." (E2-3)			
Shortcomings of Internet	Carrot and stick principle	" In the beginning applies carrot and stick principle. It means in the beginning they attract the media so that they include their content into the very <i>Facebook</i> , integrate it as much as possible." (E2-2)			
based social networks	Paid services	"Very many profiles, very many users. In order to survive, profiles pay for content, plus strategy of <i>Facebook</i> has changed." (E1-1); "From a free social network <i>Facebook</i> has become a platform in which it can in principal advertise itself." (E1-2); "In order to survive, companies have started to invest in <i>Facebook</i> ." (E2-1)			

Source: developed by the authors of the article according to the obtained research results.

Aspects (shortcomings) of Internet based social networks raised by experts in the research – introduced restrictions, the principle of carrot and stick and paid services – can be treated as weaknesses and potential threats of Internet based social networks, which in the future may negatively

influence the media, seeking more effectively and faster spread their content through this channel. Therefore, it is assumed that in the near future the media will consider all possibilities how to eliminate these shortcomings or to turn them into strengths, not becoming completely dependent on web-based social networks as one of the main ways to spread their content to users.

The research also aimed to find out possible future prospects of dissemination of information in web-based social networks. During the qualitative research, experts were asked about possible future trends of information dissemination through web-based social networks. Qualitative category *Future prospects for dissemination of information in Internet based social networks* was distinguished (Table 5).

Table 5. Future Prospects for Dissemination of Information in Internet Based Social Networks

Category	Subcategory	Experts Confirming statement
Prospects for Internet based social networks	Protection of personal privacy	"It is difficult to envisage future prospects. Changing privacy rules, taking and publicising of public and non-public persons' information arise most questions. If this is regulated, and now attempts are made through social network account, if it is public, to attribute to the information media, a lot of information useful for journalists may disappear and tangible benefit will be only one – direction of the flow to the portal." (E2-3) "But it also may be that over the next few years there will be changes if a new network appears, which will become more popular, and <i>Facebook</i> will just no longer be so favoured by all." (E2-1)
	Limited predictions	"Another thing, it is very difficult to predict the future, because, as we know, <i>Facebook</i> periodically introduces certain restrictions." (E2-3); " therefore, no one can say how it will be with <i>Facebook</i> in the future." (E2-2)

Source: Developed by the authors of the article according to the obtained research results

Summarising experts' opinion, it can be stated that they relate future prospects for dissemination of information in web-based social networks to outrival and decline of the already existing web-based social networks, especially of the popular web-based social network *Facebook*, upon emergence of new social networks. Improvement of protection of individual privacy would substantially change journalists' practice using personal profiles in social networks: their possibilities to use and publicise personal information and data published in the personal account for commercial purposes; i.e., preparing publications and disseminating them in various media, would be limited. Thus, new Internet based social networks and personal privacy protection are these two constituents which form the basis for trends of information dissemination through Internet based social networks.

However, prospective guidelines plotted by experts involved in the research highlight the aspect of consideration and uncertainty. It can be assumed that due to unclear future policy and constant changes in strategy of social networks, particularly *Facebook*, future prospects of dissemination of information in Internet based social networks become limited and difficult to predict.

#### 3. Conclusion

Qualitative data analysis has shown that links of online news portals with Internet based social networks are perceived in the context of news dissemination channel, competition, information dissemination channel and attraction of new visitors. The research has demonstrated that the influence of Internet based social networks on the media manifests itself as a source of new topics, additional content, dissemination of content via links, popularisation of articles and as uninteresting content of online news portals. Advantages of Internet based social networks for the media raised by experts during the research can be interpreted as strengths and possibilities of changes in Lithuanian media, which are those most important constituents which form the basis for the specificity of media activities and which must be constantly improved.

The analysis of experts' opinion disclosed that new Internet based social networks and personal privacy protection are these two constituents which form the basis for the trends of information dissemination through Internet based social networks. However, prospective guidelines plotted by experts involved in the research highlight the aspect of consideration and uncertainty. It can be assumed that due to unclear future policy and constant changes in strategy of social networks, particularly *Facebook*, future prospects for dissemination of information in Internet based social networks become limited and difficult to predict.

The defended statement that Internet based social networks are treated as an important channel for communication, therefore, Lithuanian media, being aware of the constantly increasing influence of Internet based social networks, pays increasingly more attention to information dissemination through Internet based social networks, has proved out.

#### References

Balčytienė, A., Harro-Loit, A. (2009). Between reality and illusion: re-examining the diversity of media and online professional journalism in the Baltic States. *Journal of Baltic Studies*, vol. 40, iss. 4, pp. 517-530.

Balčytienė, A., Nugaraitė, A., Juraitė, K. (2009). The Lithuanian journalism education landscape. In Terzis, G. (ed.). *European Journalism Education*. Chicago: Intellect Books, pp. 447-462.

Dawson, R. (2010). Further explanation and answers to 6 questions on the Newspaper Extinction Timeline after one million views [online]. [cit.2015-01-23]. Available: http://rossdawsonblog.com/weblog/archives/2010/11/further explana.html.

Castells, M. (2009). Communication Power. Oxford: Oxford University Press, 2009.

Čiužaitė G., Gudauskas, A., Jastramskis, D., Juodytė, A., Martišius, M., Mažylė, J., Pečiulis, Ž., Sakadolskis, R. (2012). *Medijos. žiniasklaida, žurnalistika tradicinėje ir tinklaveikos visuomenėje.* Vilnius: Vilniaus Universiteto Leidykla, 2012.

Geiß, S., Nikolaus, J., Quiring, O. (2013). The impact of communicating digital technologies: How information and communication technology journalists conceptualize their influence on the audience and the industry. *New Media & Society*, vol. 15 iss. 7, pp. 1058-1076 [online]. [cit.2015-01-25]. Available: http://web.ebscohost.com/ehost/detail?sid=e1ba59cd4f9e-41bfa7d474d002a5f970%40sessionmgr112&vid=1&hid=114&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN =91280050.

Kane, G. C., Alavi, M., Labianca, G. J., Borgatti, S. P. (2014). What's Different about Social Media Networks? A Framework and Research Agenda. *MIS Quarterly*, vol. 38, iss. 1, pp. 275–304 [online]. [cit.2015-09-01]. Available: http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=d10a6d3f-a79c-45df-999c-cd2264ff2af4%40sessionmgr4002&vid=5&hid=4214.

Lara, T. (2008). La nueva esfera pública. Los medios de comunicación como redes sociales. *Telos*, vol. 76 [online]. [cit.2015-01-14]. Available: http://www.telos.es/articulocuaderno.asp?idarticulo=9&rev=76.

López Parra, R. (2012). Está muriendo el periodismo o los periódicos? *Revista Mexicana de Comunicacion*, vol. 24, iss. 131, pp. 38-41 [online]. [cit.2015-01-23]. Available: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=830015dc-c7c5-4037-848d-aebeeebd6ebc%40sessionmgr4002&vid=1&hid=4109.

Navarro, L. (2009). Tres lustros del periodismo digital: interactividad e hipertextualidad. *Comunicar*, vol. 17, iss. 33, pp. 35-43 [online]. [cit.2015-01-14]. Available: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=674a2bca-6321-42ce-840a-bd80cfe6b004%40sessionmgr112&vid=2&hid=114.

Noguera Vivo, J. M. (2010). Social networks as journalistic paradigm. Spanish media on Facebook [online] [cit.2014-09-07.]. Available: http://www.revistalatinacs.org/10/art/891\_UCAM/13\_JM\_NogueraEN.html.

Núria, A. R. (2006). Los valores del periodismo en la convergencia digital: civic journalism y quinto poder. *Revista Latina de Comunicación Social*, vol. 61 [online]. [cit.2014-01-22]. Available:

http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=376e8d9b-7d3c-4e77-8295-b7002cb61e45%40sessionmgr4004&vid=1&hid=4109.

Punín, M. I., Martínez, A., Rencoret, N. (2014). Digital Media in Ecuador – Future Perspectives. *Comunicar*, vol. 21, iss. 42, pp. 199–207 [online]. [cit.2015-01-20]. Available: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=8cc20a7e-2da6-4981-af2b-602a1faf3f6b%40sessionmgr4003&vid=2&hid=4109.

Spyridou, L.-P., Matsiola, M., Veglis, A., Kalliris, G., Dimoulas, Ch. (2013). Journalism in a state of flux: Journalists as agents of technology innovation and emerging news practices. *International Communication Gazette*, vol. 75, iss. 1, pp. 76-98 [online]. [cit.2015-01-22]. Available: http://web.ebscohost.com/ehost/detail?sid=9b40b528-39c5-449b-b29d-

5155919f9858%40sessionmgr111&vid=1&hid=108&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN=85096545.

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# 38. PUBLIC CONSULTATION IN MANAGEMENT OF TECHNICAL INFRASTRUCTURE INVESTMENTS IN CZESTOCHOWA IN 2010-2015

**Abstract:** Public consultation is a process in which representatives of the local authorities introduce citizens with their plans directly or indirectly related to them. Public consultation is a current challenge for democracy and self-government, it forms the basis for its implementation as a right of local communities to decide about public affairs. The purpose of this article is to identify principles and scope of consultation between local authorities and citizens of Czestochowa on implemented investment projects in the field of technical infrastructure in 2010-2015. Empirical data was obtained using standardized interview with the local authorities of Czestochowa. Based on the analysis it can be concluded that in 2010-2015 the role of citizens of Czestochowa in the planning of investments consisted mainly of providing information about investment needs and consulting the localization of the future objects and facilities of technical infrastructure.

Key words: investment management, public consultation, technical infrastructure

JEL Classification: H40, R53, R58

#### 1. Introduction

The proper functioning of local self-government in Poland requires that citizens actively participate in management of public affairs. Citizens' participation has become a necessary element of the modern model of organising public sphere at the level of gmina, which means that different needs and expectations should be negotiated and agreed on with residents before final decisions are taken (Bovaird, 2007). This results from the basic principles of local self-government, understood as a self-government community of citizens.

Democracy gives voice to citizens and should be the foundation for thinking and co-deciding about public matters. Local authorities should make an effort to open up to a democratic political process and increase the possibilities of public consultation. Any referenda, primary elections, meetings of residents or their groups, which have been independently chosen to express their opinions on political issues, implement the objective of participation in public affairs (Fishkin, 2009, p. 9-15).

Citizens' participation in public affairs is understood in different ways. According to the prevalent view, citizens' participation is a sum of activities during which citizens gain an influence, and indirectly also control over decisions of public authorities, when these decisions have a direct or indirect impact on their own interests. Citizens' participation goes far beyond the traditional participation in elections. Residents who gain influence on law and decisions at the early stage of legislative works are more eager to actively participate in its implementation. The concept of participation is correctly ascribed the meaning of an activity involving co-participation of gmina's residents in solving common problems. Public consultation has its genesis in the requirements towards politicians set by contemporary educated voters and critical citizens (Ferens et al., 2010, p. 37-39).

The preparation of infrastructure investment is a difficult and complex task (Korombel, 2007, p. 404). Every investment is implemented in a specific environment, amid people living in the neighbourhood. In the case of large infrastructure investments, benefits of their implementation are felt by wider communities, with little direct benefit for the nearest environment. They often lead to

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nuisance or threats, and consequently - disputes about neighbourhood. The NIMBY "not in my backyard" reaction is a common occurrence in such situations (Cowan, 2003).

Investors have to be able to reach such arrangements and agreements that reconcile local or individual interests with the interests of wider communities and allow investments to be implemented. (Ministry of Regional Development, 2008, p. 35-40)

The aim of the paper is to identify the principles and scope of consultation of local authorities with residents of Częstochowa on investment projects in the area of technical infrastructure implemented in the period 2010-2015.

The theoretical part presents literature studies conducted through gathering, specification and characterisation of data. Based on the information gathered in the theoretical part, an empirical part has been carried out to achieve the objective formulated using the method of a standardised interview (by means of a questionnaire).

#### 2. Principles and legal bases for holding public consultation in Polish communities

Consultation is a term originating from the Latin language (consulto means "I seek advice"). The dictionary of the Polish language defines it as advice, giving guidance, asking for somebody's opinion, usually experts, specialists in some area. In the colloquial use, this word may also mean a meeting - sometimes a less formalised conference of a group of experts dedicated to a difficult issue.

Public consultation is an institution of direct democracy which consists in the members of a community expressing their opinions on the issue presented. Consultation is also one of the methods of a civil dialogue. It is a process of informing and asking citizens' opinions while taking the most important decisions regarding, among other things, important legal acts, planned investments and other significant projects. Consultation is initiated both by representatives of government authority or local authorities and by social actors, and its participants include individual citizens, non-government institutions and organisations representing citizens as well as external specialists and experts (Ferens et al., 2010, p. 13).

Public consultation is a process in which representatives of local authorities present citizens with their plans regarding, e.g. legal acts (amending them or passing new ones), investments or other projects that will impact the every day life and work of citizens. However, consultation is not limited to presentation of such plans, but it also involves listening to opinions on them, modifying them and informing about the final decision. Public consultation is a way to obtain opinions, positions, proposals etc. from institutions and people that will be somehow affected, directly or indirectly, by the effects of the activities proposed by the administration (Zychowicz, 2011, p. 7).

The legal basis for holding public consultation in gminas are mainly the provisions of the act on gmina's self-government of 8 March 1990 (consolidated text, Journal of Laws of 2001, issue No 142, item 1591 with later amendments). They state that public consultation may be held on the territory of a given gmina on issues specified in a law or on other issues that are important for the gmina, and the principles and procedure for holding such consultation are described in a separate resolution of the gmina (city) council.

At the level of gmina, a self-government unit is obliged to hold public consultation in the following cases (Starzyk, 2009, p. 6-8):

- 1) based on the Act on gmina's self-government:
  - creation, consolidation, division and abolition of gminas, and establishment of their borders;
  - granting a gmina or a town the status of a city or setting its borders;
  - establishing or changing the names of gminas and seats of their authorities;
  - forming an auxiliary unit;
- 2) based on the Act of 27 march 2003 on land-use planning and management:
  - development of a project of a study of the conditions and directions of spatial development (the
    act specifies the minimum conditions for holding consultation: schedule and principles for
    informing and holding public consultation, procedure for informing about the results of the
    consultation);
  - development of a local plan for spatial planning (the act specifies minimum conditions regarding the procedure for holding consultation).

Other important legal regulations forming the normative environment for public consultation include the following ones (Zychowicz, 2011, p. 12-13):

- act on public benefit activity and voluntary service;
- Act on Tripartite Commission for Social and Economic Affairs and voivodeship commissions for a social dialogue;
- Act on sharing information on the environment and its protection, participation of the society in environmental protection and impact assessments;
- Act on the principles of pursuing the development policy;
- Act on social assistance;
- Act on the promotion of employment and labour market institutions;
- Act on spatial planning and development.

The above mentioned legal acts show that consultation is a permanent and integral element of numerous social and economic mechanisms defined in Polish lawmaking. Though not exhaustive or complete, they allow administration and social partners in particular to fill them with real content and concrete activities.

An investor has three categories of activities at their disposal to obtain the environment's consent to implement infrastructure investments. These are:

- information activities;
- public consultation;
- negotiations with social partners resulting in various arrangements.

These three categories of activities form a logical pyramid in which the higher layer is supported by - i.e. takes advantage of the results of - the lower layer.

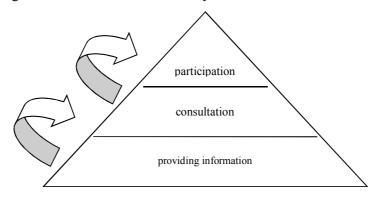


Figure 1. Communication pyramid

Source: Inwestycje infrastrukturalne, 2008, p. 48.

Information activities constitute the base of the pyramid. They represent a one-way communication - the message flows in one direction, from the sender, i.e. the investor, to recipients, i.e. residents of the neighbourhood, local leaders, media, environmental organisations or other interested parties. Consultation is based on a two-way communication - the information flows from the investor (beneficiary) to the social environment (stakeholders) and the other way round - from stakeholders to the investor.

Based on information and consultation, participation takes place. A frequent form of participation are negotiations, which involve a two-way communication differing from consultation in that the solution to a problem is found jointly, usually in a direct conversation. Negotiations are a way to ensure a high level of participation of social partners in the decision-making process (Ministerstwo Rozwoju Regionalnego, p. 48-53).

Stages of the process of public consultation:

- informing about aims/plans;
- presenting views on the ways to solve a problem;
- opinion exchange;
- finding solutions;
- informing about the final decision.

General formulation of legal bases of consultation enables a relatively flexible use of various methods, e.g. public meetings, submission of comments in writing, public hearings, or appointment of local consultation bodies. Regulations permit consultation with individual citizens - residents and social partners (organisations with which residents form association).

Forms of consultation:

- informing about plans of the authorities (e.g. in local media) and about possibilities of submitting comments and opinions about these plans;
- planning and informing about the schedule of open meetings or meetings dedicated to certain groups of interested institutions during which comments may be submitted and opinions exchanged;
- organisation of meetings and participation in meetings regarding plans of an office to the invitation of interested persons and institutions;
- gathering opinions among specialists;
- commissioning of social research research provides knowledge about solutions and their acceptance by the local community.

Different techniques should be used for different environments. Moreover, the expectations regarding opinions to be obtained should also vary. With reference to infrastructure policy, possible consultation methods include: solving-problem meetings, problem teams, "round table", research and analytical teams, gmina (municipal) forum, expert groups, public debates and discussions, awarenessraising workshops and campaigns (Zychowicz, 2011).

Table 1. Difficulties in and benefits of the use of public consultation

#### **Benefits of consultation** Difficulties during consultation activities.

- Consultation not always gives a clear answer to all the problems raised during it.
- While deciding on the way to solve a problem, it is often difficult to define the cause and effect of the problem. This may lead to mistakes in planning activities.
- It gives too many possibilities of solutions to a specific problem, causes lengthiness of procedures and may give rise to more disputes and conflicts between interest groups.
- Facade activities may appear on the part of the authorities and citizens. Pseudo-consultation inflames conflicts and leads to new problems.
- Consultation exposes conflicts between the objectives, as it difficult to meet the interests of one group without harming the interests of another one.
- It is hard to reach a clear compromise.
- Incorrect preparation of objectives and methods of consultation, randomness of priorities and decision variants "blur" responsibility.
- Holding public consultation, its proper preparation and analysis of applied methods and channels of information flow require that the organisers devote a lot of time and energy.

- It creates a positive climate around proposed
- It makes it easier to carry out projects smoothly and on time, which reduces costs incurred by all interested parties.
- It facilitates the achievement of an office's objectives, preventing conflicts between the office and interest groups and residents.
- Consultation strengthens a positive image of an office and facilitates the establishment of partnership-based relations with residents.
- Consultation shows a problem in a broader context from numerous perspectives and extends the scope of raised issues.
- Consultation provides information about new problems and difficult situations that officials often fail to notice.
- It offers a new point of view for solving a given problem for all the parties involved.
- Consultation often leads to all interested parties making attempts to solve the problem.
- Consultation is often required by law, and if successfully conducted, it may give access e.g. to external funds. Obtaining such funds leads, in turn, to social and economic development of a gmina.
- It contributes to finding specific solutions. It generates new ideas and causes increased involvement of its participants and their creativity. It almost always brings measurable benefits to local authorities.

Source: Ferens et al., 2010, pp. 17-18

Local authorities more and more often use consultation procedures as a form of improvement of the quality of democratic decision-making (Catta, Murphy, 2003, pp. 407-421). Experience of European countries, e.g. Great Britain, shows advantages of involving the local community in a broad scope of political decisions regarding employment, health, crime reduction, education, local public services or revitalisation. According to the authorities, an increased role of local community facilitates local responsibility and improvement of service standards. At the same time, existing experience suggests that there are serious obstacles on the way to increased participation of the society in deciding on public affairs. Moreover, the involvement of the authorities in bottom-up initiatives and local experiments may be in conflict with their strong centralisation instinct (Foley, Martin, 2000, p. 479-492).

### 3. Public consultation in management of technical infrastructure investments in Częstochowa between 2010 and 2015

#### 3. 1. Methodology of research

Empirical studies were conducted by the method of an interview, using a questionnaire. The interview questionnaire contains 41 questions regarding management of technical infrastructure investments in communities and covers the period 2010-2015. The questions were so arranged to ensure that the whole process of the management of the development of community's technical infrastructure can be examined.

The questions contained in the questionnaire were answered by: Head of the Department of Investments and Public Procurement, Head of European Funds and Office of the Council of the City of Częstochowa. The study was conducted in February 2015. Presented below are selected issues connected with holding public consultation in the process of management of technical infrastructure investments by Częstochowa authorities in the period analysed.

### 3.2. Public consultation in management of technical infrastructure investments in Czestochowa in 2010-2015 – results of research

The principles for holding public consultation in Częstochowa are regulated by Resolution no 715/LXII/2010 of Częstochowa City Council of 28 June 2010 on the principles and procedures for holding public consultation with residents of Częstochowa. This resolution states that consultation may be held on the initiative of:

- President of the City of Częstochowa;
- Councilmen of the City of Częstochowa who number at least five;
- District Council by way of a resolution adopted by absolute majority of the members of District Council;
- residents of the city who number at least 100 and have the right to vote.
   The following persons may participate in consultation:
- all residents of the city, if the issue concerns the whole city;
- a specific group of residents, if the issue affects this group;
- representatives of the initiators;
- other interested parties.
  - A proposal for holding consultation should specify:
- the subject of the consultation;
- the territorial scope of the consultation;
- proposed forms of holding the consultation;
- justification for holding the consultation.

President of the City considers the proposals taking into account the costs of the proposed form of consultation and the significance of the subject of the consultation for the local community.

President of the City initiates consultation by way of resolution. Consultation may be conducted using all available instruments for a social dialogue, in particular:

- via the local online platform dedicated to consultation;
- as part of meetings with residents held in district councils;
- through appointment of working teams composed of the representatives of residents and representatives of the President of the City;
- using questionnaire surveys;
- using online surveys;
- as part of open consultation meetings with residents of the city.

It is possible to combine different forms of consultation. Regardless of the selected form of consultation, Częstochowa City authorities run a website dedicated to consultation (http://konsultacje.czestochowa.pl). It presents in particular:

- information about all submitted proposals for holding consultation;
- information about the procedure for considering proposals for holding consultation;
- orders by the President of the City to initiate consultation;
- explanations of the subject and purpose of consultation;
- details on the date, place and form of consultation;
- documents connected with consultation, including: studies, designs, visualisations and other materials referring to the subject of consultation, in particular: reports on the consultation held.

Consultation is valid regardless of the number of its participants. Its result is always taken into account, but it is not binding to the bodies of the City of Częstochowa deciding on matters covered by consultation.

Empirical studies were conducted by the method of an interview, using a questionnaire. In the first question, respondents were asked whether the plans of infrastructure investments were a subject of public consultation with residents of Częstochowa. The answer was "Yes" - between 2010 and 2015 the authorities of the city consulted the plans for technical infrastructure development with the residents and economic entities operating within Częstochowa.

The next question referred to factors that determined the order of the implementation of investment projects in Częstochowa between 2010 and 2015 in the process of infrastructure investment planning by the authorities of the city. The answers provided by the respondents have been presented in table 2.

Table 2. Factors determining the order of the implementation of investment projects in the process of planning infrastructure investments (on the scale from 1 to 5, where: 1 - no impact; 2 - little impact;

3 - medium impact; 4 - significant impact; 5 - very significant impact) in Częstochowa between 2010 and 2015

Factors	Water	Gas	Sewerage	Waste-water	Landfill	Roads
ractors	system	network	network	treatment plant	site	Roaus
Residents' needs	5	4	5	2	3	2
Business environment	3	3	3	3	3	2
Gmina's financial capacity	1	1	4	4	4	5
Possibilities of obtaining EU funds	1	1	3	4	4	5
Possibilities of the location	1	1	1	5	5	5

Source: Own work

According to the respondents, residents' needs had bigger impact on the planned order of the implementation of investments than business environment. The biggest impact of this factor was indicated for water system and sewerage network.

Next, respondents were asked whether residents of the gmina participated in the process of planning infrastructure investments. The answer was Yes. The role of residents in the process of development of technical infrastructure in Częstochowa in the period analysed has been shown in table 3.

Table 3. The role of residents in the process of planning infrastructure investments (on the scale from 1 to 5, where: 1 - no impact; 2 - little impact; 3 - medium impact; 4 - significant impact; 5 - very significant impact) in Częstochowa between 2010 and 2015

Role of residents	Water system	Gas network	Sewerage network	Waste-water treatment plant	Landfill site	Roads
Are a source of information about investment needs	4	4	4	1	1	2
Consult the location of the investment	2	2	2	4	4	3
Are co-authors of the concepts of projects	2	1	2	1	1	1
Accept the projects of investment plans	2	1	1	1	1	2
Co-implement investment projects	1	1	1	1	1	1
Co-finance investments	2	2	2	1	1	1

Source: Own work

Further, respondents were asked whether between 2010 and 2015 social committees were set up in Częstochowa for the purpose of planning or co-participation in the implementation of technical infrastructure investments. The respondents answered that committees proposing new tasks were set up every year. Of them, the most important was a social committee established to build a sanitary sewage system. As a result of the work of this committee, around 5.7 km of a sanitary sewage system have been put into operation.

Respondents were also asked to indicate 3 factors that were the most important for the authorities of the city of Częstochowa in the period analysed when choosing infrastructure projects for implementation. The following factors were mentioned:

- large budget of a gmina/city;
- possibilities of obtaining external sources of financing;
- possibilities of obtaining EU funds.

It is worth stressing that the interview questionnaire proposed, among other things, the factor: the impact of residents of the city, but it was not selected.

At the end of the interview, respondents were asked about the type of most needed infrastructure investments in Częstochowa in 2015. The following investments were indicated as the most urgent ones: development of a sanitary sewage system and rain water sewer system, modernisation and construction of roads and street lighting investments.

#### 4. Conclusion

Summing up, the interview conducted with people actively participating in the process of management of gmina's infrastructure investments provided a lot of information about problems encountered by the authorities of Częstochowa in the process of the development of technical infrastructure. The presented results of the studies show that the authorities of the city analysed actively held consultation with residents in the process of planning infrastructure investments between 2010 and 2015. Data analysis shows that the role of residents of Częstochowa in the process of investment planning is mainly to provide information about investment needs and consult the location of technical infrastructure facilities and equipment. Częstochowa is a good example of a city in which public consultation contributed to increased participation of the community in taking decisions that are important for residents.

The modern model of local self-government requires that local communities actively participate in shaping the environment in which they are living. Citizens' legal awareness has grown, as well as their willingness to gain impact on important matters, including infrastructure. The aim of public consultation is to establish a dialogue between residents and local authorities. Feedback communication can prevent a lot of conflicts and speed up the investment process (Cichobłaziński, 2011, p. 109-115).

#### References

Ferens, A., Kondas, R., Matysiak, I., Rzeźnik, G., Szymski, M. (2010). Jak prowadzić konsultacje społeczne w samorządach? Zasady i najlepsze praktyki współpracy samorządów z przedstawicielami społeczności lokalnych. Przewodnik dla samorządów. Warszawa: FRDL, 2010.

Fishkin, J.M. (2009). When the people sapek. Deliberative Democracy & Public Consultation, Oxford University Press, 2009.

Ministerstwo Rozwoju Regionalnego (2008). *Inwestycje infrastrukturalne. Komunikacja społeczna i rozwiązywanie konfliktów.* Warszawa: Ministerstwo Rozwoju Regionalnego, 2008.

Bovaird, T. (2007). Beyond Engagement and Participation: User and Community Coproduction of Public Services, *Public Administration Review*, vol. 67, iss. 5, pp. 846-860.

Catta, H., Murphy, M. (2003). What voice for the people? Categorising methods of public consultation, *Australian Journal of Political Science*, vol. 38, iss. 3, pp. 407-421.

Cichobłaziński, L. (2011). Konflikt w samorządzie terytorialnym: aspekty pozytywne i negatywne. In Kościołek, A. (eds.). *Analiza lokalnych problemów społecznych w perspektywie instytucjonalnej. Rezultaty badań w Kielcach i w powiatach: koneckim, skarżyskim i włoszczowskim.* Kielce: Wyższa Szkoła Umiejętności, pp. 110-119.

Cowan, S. (2003). NIMBY syndrome and public consultation policy: the implications of a discourse analysis of local responses to the establishment of a community mental health facility. *Health & Social Care in the Community*, vol. 11, iss. 5, pp. 379-386.

Foley, P., Martin, S. (2000). A new deal for the community? Public participation in regeneration and local service delivery. *Policy & Politics*, vol. 28, No 4, pp. 479-492.

Korombel, A. (2007). Źródła finansowania inwestycji infrastrukturalnych w polskiej energetyce cieplnej. In Bylok, F., Janik, R. (eds.) *Ekonomiczne i społeczne uwarunkowania zarządzania miedzynarodowego*. Częstochowa: Wydawnictwo Politechniki Częstochowskiej, pp. 404-410.

Starzyk, K. (2009). *Uwarunkowania prawne partycypacji społecznej w Polsce*, Pracownia Badań i Innowacji Społecznych Stocznia. [online]. [cit. 2015-12-20]. Available: http://partycypacjaobywatelska.pl/uploads/pdf/partycypacja regulacje%20prawne.pdf.

Zychowicz, Z. (2011). *Przeprowadzanie konsultacji społecznych w samorządzie*, [online]. [cit. 2015-12-29]. Available: http://www.szczecin.pl/umszczecinSwiat/files/AD4F41AB6CB94E78993C199743E0FB84/Podr%C4%99cznik%20przeprow adzania%20konsultacji%20spo%C5%82ecznych%20w%20samorz%C4%85dzie.pdf.

http://konsultacje.czestochowa.pl

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# 39. MANAGEMENT COMPETENCIES AND THEIR IMPACT ON THE EFFICIENCY OF ORGANIZATIONS

**Abstract:** This paper deals with the management competencies as a strategic basis for the staff development. The operation of an organization, its competitiveness and economic performance are affected by the managers' decisions in a great deal. In the recent time we have been observing a growing tendency to use the concept of managerial competencies as a foundation for building systems for human resources development. Competency models used are characterized as identified specific competencies that directly make a required job performance. The growing interest in the competency model and approach to human resources development affected the organizational changes in many companies. The management competencies being really a reliable strategic basis for the staff development, we will analyze the application of the principles of competence approach in an organization. The paper provides a theoretical overview and comparison of different approaches to the development of human resources we can implement in the business practice

Keywords: management competencies, human resources, competency model

JEL Classification: M 12, E24, J 24

#### 1. Introduction

Competitiveness, position at the market, economic performance and prosperity of an organization are significantly affected by the managers' decisions. Nevertheless, in practice, we still can face a lack of support in human resource development. The organizations then run risks of absence of the right decisions in the context of long-term strategically important vision of their direction and progress. The success of any organization depends just on the top management development, implementation of human resource development, gaining experience from their own operation, continuous improvement of systems supporting intellectual and emotional capital of executives.

So as to make management competencies be a really reliable strategic basis for the human resources development, it is necessary to consistently apply the principles of competency approach. Managerial competence in management theory understood as actions needed to achieve the desired result (Belz, Siegrist, 2001).

The aim of this paper is to analyse the discussed issue on a theoretical basis, proceeding from the domestic and foreign sources related to the examined topic.

#### 2. Competency model as a basis for human resource development

A summary of the qualities, skills and other competencies that are essential to good performance in a position is referred to the concept of competence. It is very necessary to determine and identify what is important in managerial competences. Our attention should be paid to the key management competencies, since the long term success of the entire company depends on the managers' qualities. A group of the most important competencies is created by a competency model.

Misidentified competency model will lead managers to stagnation, and thereby to unnecessary spending a lot of effort and time to detect a correct solution to the problem. Many funds can be spent inefficiently as a result of an incorrect decision. There are lots of knowledge, skills, abilities and experience that managers need in their work, but not all of them are able to apply them in a proper

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way. This distinguishes top managers from those who achieve average results. Despite this knowledge, organizations are often forced to take the competency models without the possibility of verifying whether they actually apply to their specific operating conditions. Therefore, it is crucial to elaborate well-defined competencies that constitute competency models for each organization separately.

During the last decade, in Slovakia as well as in neighbouring countries, we have observed a growing interest in using the concept of managerial competencies, or more precisely a competency model as a basis for building systems for human resources development, as they are exactly the competency models that include specific competencies directly qualifying for high work performance (Belas, 2005; Bilan, 2005; Demjan, 2005). The growing interest in the competency model for human resource development was influenced by organizational changes currently under way in a number of organizations which have not brought about the expected changes in the behavior of individuals, as well as by the belief that competitiveness and economic growth of the organization is directly proportional to the abilities of senior management.

A competency model is not a way to create a precise description and standards, on the contrary it is a way of managing diversity and creativity to reach the performance (Hroník, 2007). To identify competencies for a competency model creation, there are several starting points. Approaches made to ensure the competency model to be a connecting bridge between the business strategy and personnel strategy, namely:

Social - psychological perspective, on one hand, extends from the competent staff to a competent company. It includes three categories of behavior: approach to tasks and things, relation to other people and to oneself and expression of emotions.

Organizational - marketing (strategic) perspective, on the other hand, has opposite direction, from the competencies that fulfill the company strategy to the individual competencies of staff.

When creating a completely new model, especially for small and medium businesses, the second perspective will be more difficult to apply, as the owners and managers may not have a precise concept or a strategy (Haviernikova, Srovnalíková, 2014). The second approach is better for the future of an organization on the whole. On the other hand, social - psychological point may help to transfer some elements of behaviour of successful managers to the rest of the staff in the beginning. In case of a high number of employees and their surveyed achievements, it might help to accurately map the situation in the organization and steer the development of these workers (Veteška, 2008).

In both types of approach we are trying to identify such behaviour that leads to above-average performance. Certainly there are managers with different levels of success and with different types of behaviour. Therefore, "The competency analysis nowadays focus on identifying critical manifestations of behaviour that distinguish the above-average managers from the average ones." (Kubeš et al., 2004). The organization will be more beneficial to know the behaviour required for high performance, and at the best coming from the company's own environment, resulting in the acquired model to be tailor-made for the company and out of which successful managers will be examined.

#### 2.1. Assessment of managerial competencies level

A competency model for managers can be resumed in four areas that are the most significant:

- selecting the most suitable candidates
- developing their staff in a targeted way in the most relevant issues
- identifying and developing managerial talents
- using the evaluation for the continuous growth of the company and its people.

In order to achieve the expected result, the competency model must involve: description of competences and their overall contribution to the organization, typical manifestations of behaviour, which are measurable, observable and capable of being developed, and a new rating scale for each competency (Belás et al., 2015).

A competency model is a guideline to show the areas needed to be developed with managers. The developing is practiced by coaching, internships, delegating new responsibilities or by other forms. In the specified term, it is necessary to examine whether the managers' development has brought expected results. Feedback on their work is needed by all the staff - developed workers, their managers but also the specialists responsible for developing support systems of development. Therefore, the greatest effect and the reliability of evaluation is brought by the tools of multiple staff evaluation, the most used being the 360° feedback.

#### 2.2. 360° feedback and competency

360° feedback is an employee performance evaluation system with respect to the selected individual competencies. Evaluation results are presented in a report that is provided to evaluated workers. 360° represents a circle, and in this case it symbolizes the fact that the employee is evaluated from all sides. In the evaluation not only superiors are present but also the colleagues at the same management level, subordinates, customers etc. The evaluated managers will certainly assess themselves as well, which is often very difficult. Comparison of differences in self-assessment and evaluation assessment to the other participants is a reliable basis for determining a development plan. In today's modern technological period, we enjoy the benefits of technological achievements and more and more companies are successfully applying an online version of 360° feedback evaluation system. Processing results is faster, administrative paper forms are not any more necessary, there are no distribution delays and subsequent questionnaires handing. A plumbless aspect of internet processing is eliminating the fear of breaking the law of anonymity, as well as an outstanding system flexibility.

Using the results of the 360° feedback enhances the effectiveness of evaluation and development interviews. Especially by the fact of growing sense of responsibility of all the participants who are aware of the seriousness and importance of evaluation. Regard to the evaluated worker is objective because the manager does not always have the opportunity to see workers in all work situations. The interview itself is more relevant as it is based on concrete results.

When introducing the 360° feedback system, senior managers must first identify the competencies which are important from a strategic point of view. Then the individual competence must be expressed in measurable and observable behavioural descriptions. When evaluators have filled thus prepared forms through the internet, the managers can begin the evaluation interviews already based on the individual reports (Kubeš, Šebestová, 2008).

Hardly anything can make an organization and its staff's achievements move forward so efficiently as an objective and accurate feedback does.

360° feedback is an evaluation of a worker by the people who he or she manages, by his or her own manager as well as colleagues or coworkers. This evaluation "in a circle" gives a very objective image of the workers' qualities and calls attention just to areas needed to be developed. The popularity of this method with prominent and world best-known companies gives evidence of its efficiency. 360° feedback is:

- An objective view of the key-workers abilities;
- A basis for constructive evaluation interviews;
- An outline of critical areas needing the most extensive development due to repeated assessment and controls of the progress achieved during the assessed period;
- An early noticing of negative trends;
- A basis for elaborating effective development plans.

The evaluation is executed not just in numbers, but their assessment is accompanied by the commentaries which answer a question "How can the others find out?" In the practical part it is described from the perspective of an objective assessment: "In the objective assessment (by others) within the 360° feedback is the superior the most frequently in the role of an evaluator, or it can also be a subordinate colleague or a customer. Since it is necessary that the measuring instruments encumber the organization in a minimal measure, the shortened forms are the most commonly used. A shortened form means the load of 20 to 25 minutes for one measurement. This corresponds very well to the concept of e - 360° mini." (Hroník, 2007, p.187).

#### 2.3 Integrating power of competences

Competence approach reenginneries several important areas of human resource management. Selection based on identifying key competencies increases the chances of choosing more suitable candidates compared with standard procedures. But it requires, besides other things, the acquisition of initial interview, which can identify competencies but which is more time-consuming. More targeted selection means lower requirements for training new staff, quicker adapting to corporate culture. Regular staff evaluation based on competencies directs their further development (Kordoš, Karbach, 2014). Evaluated workers and evaluators are adopting a common language to name the good

performance and qualities leading to them. The feedback from several evaluators, including subordinates belongs to the most reliable indicators of the competence level. Well-built competency model will also serve for the preparation of talented managers for senior positions. The constant development of the competency approach, accompanied by extensive research, the creation of a number of supporting tools for its effective application as well as evidence of the economic benefits for the company suggests that it is a good choice. It is a choice which confirms the strategic importance of human resources for the company.

Human capital is considered to be the basic capital of any organization in which investment is made, and investments are expected to make a profit. Education is an example of such investment. We will focus on managers whose primary role is leading all the staff to achieve goals. Although the profit from staff education is very difficult to be measured, it is necessary to continually focus on management development. This creates the need for effective training and development that will bring further growth of the company, employees and the satisfaction of all stakeholders. Losses can only be brought by random, unguided learning that does not follow the long-term company strategy (Krajňáková, Vojtovič, 2014).

Development of managerial skills, and at the same time an efficiently guided process of their acquisition, are crucial factors of the manager's performance demanded by organization. It creates space for new directions of management based on responsibilities of a learning organization. Therefore, the topic examined in this work is always up-to-date.

Personal strategy leads the manager to an approach of achieving goals with the help of employees, their will and creativity. In turn, the company creates a business strategy which is an information base for the company development and the procedures for its achievement. But it remains an open system that helps you find your way to decisions and responding to business (Vodáček, Vodáčková, 2009).

All the work is executed by people. People are guided by leaders, managers who have a vision, a developed strategy and thus are creating values. The success of each company is based on this. We emphasize the role of personnel managers which is to identify and manage leaders who lead the employees and hence the organization to success.

Success of an organization is dependent on its leadership. From all the management tasks we would like to depict the ability of determining objectives, planning the way to reach them and implementing them. We can be given a lot of advice and gained experience of others. What is the answer to the proper management strategies?

The strategy should establish a framework in which we will move forward. The strategy is a path from a vision to success, to results. A manager, who wants to be successful, must find a strategy that connects abilities of people to the possibilities of the company.

#### 3. Conclusion

Management competencies and their use in the practice of organizations are focused more within the context of a new approach to building human resources development. The entry of human resources evaluation in organizations was also caused by the change that has taken place during economic crises in 2008, as well as it was due to the rapid development of information technology. This caused the expansion of knowledge-intensive businesses whose competitiveness, value and success depend on the quality of managers and their competence. In this context the term of intellectual capital was applied, which entered economic science as intangible assets of a company. The intellectual capital of the company is considered as a competitive advantage of the company. For human resources field, key management competencies have been defined, on the basis of which organizations obtain the necessary intellectual capital to their more prosperous operation and achieving strategic goals (Krajnakova, Vojtovic, 2014).

In assessing the competence of selected most often use a structured interview. Benefits of this method 360 feedback - is always only means of development. Important in the whole process is a positive attitude, clear objectives, practical implementation steps, strengths manager.

To supplement provides a variety of tests - Knowledge, psychological, numeric and so on. These methods are aimed to assess the intellectual capacity and inventiveness, personality structure, leadership, organizational skills and so on. The tests are in line with the needs and requirements of a particular organization. Also, by combining the results of individual tests and observation of the test you can some idea of the suitability of the manager.

On the basis of current globalization processes, we can assume that in the future there will increase the need to be engaged in key manager's competencies. Especially in this area there is opening a large space for further exploration and research.

#### References

Belas, J., Bilan, Y., Demjan, V., Sipko, J. (2015). Entrepreneurship in SME Segment: Case Study from the Czech republic and Slovakia, *Amfiteatru Economic*, vol. 17, iss. 38, pp. 308-326.

Belás, J., Demjan, V., Habánik, J., Hudáková, M., Sipko, J. (2015). The business environment of Small and medium-sized companies in selected regions of the Czech Republic and Slovakia. *E+M. Economy a Management*, vol. 18, iss. 1, pp. 85-110.

Belz, H., Siegrist, M. (2001). Key competencies and their development. Praha: Portál, 2001.

Havierniková, K., Srovnalíková, P. (2014). The immunity of family business in the conditions of economic crisis. In Drobyazko, S.I. (eds.). *Problems of social and economic development of business*, vol. I. Montreal, Canada: BREEZE, Working paper Series, pp. 179-183.

Hroník, F. (2007). Development and training of employees. Praha: Grada, 2007.

Kordoš, M., Karbach, R. (2014). The issue of innovation in international economics. In *Economics & Tourism. SGEM* conference on political sciences law, finance economics & tourism. International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM2014. SGEM2014 Conference Proceedings. September 1-9, Book 2, vol.3. Sofia: STEF92 Technology, pp. 653-660.

Krajnakova, E., Vojtovic, S. (2014). Priorities in the methods and forms of higher education. *Education&Educational Research*. *International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM2014*. SGEM2014 Conference Proceedings. September 1-9. Book 1. vol. 3, Sofia: *SGEM*, vol. 3, iss. 2367-5659, pp. 673-680.

Kubeš, M., Spillerová, D., Kurnický, R. (2004). Management skills. Praha: Grada, 2004.

Kubeš, M., Šebestová, L. (2008). 360 degree feedback as a tool for human development. Bratislava: GradaPublishing, 2008.

Veteška, J. (2008). Competences in education. Praha: Grada, 2008.

Vodáček, L., Vodáčková, O. (2009). In modern management theory and practice. Praha: Management Press, 2009.

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# 40. DEVELOPMENT INDICATORS COMPARISON OF INSURANCE MARKETS IN SLOVAKIA AND CZECH REPUBLIC

Abstract: Insurance market, its scope, effectiveness, importance in terms of national economy, can be characterized by several indicators: total premiums, claims incurred, total premiums to GDP, total premiums per capita and others. The aim of this paper is by means of analysis of insurance market selected indicators to detect differences in insurance market development in Slovakia and the Czech Republic. To achieve this objective, we used the time series analysis using mathematical and statistical methods, as well as comparison method and synthesis. Czech Republic and Slovakia have a long common history, they are regional and humanly close, and therefore the insurance markets are based on similar terms. The insurance market development is also affected by economic and social environment, and law diversity. Also this implies a different evolution in insurance markets in Slovakia and Czech Republic. The survey showed that in SR the life insurance is preferred by the insured ones, while in Czech Republic the property protection prevails. In Czech insurance market, the penetration and density are significantly higher than in Slovakia. In Slovakia and Czech Republic the underinsurance of economy still remains. In these countries there is a significant potential for growth because of new production and market boost

Keywords: claims incurred, insurance market, total premiums

JEL Classification: G22, O57

#### 1. Introduction

Activities of individuals and companies are affected by various unforeseen events. There are risks posed by the possibility of future losses, whether material, financial, but also the loss of life. By means of insurance the insured ones can eliminate their risks, which in case of their occurrence they were not able to handle by themselves and the consequences would be unbearable for them. The financial risk coverage is provided by the insurance industry.

As Ciftci et al. (2015) noted, insurance sector supports financial stability, facilitates trade and reduces losses by transferring the risk. Insurance companies transfer risk to themselves to preserve the financial stability of households, especially by making long-term investments, on the other hand with the life insurance premiums they support the development of the local stock and bond markets.

In market economies, insurance represents an integral part of the national economy. Through its activities insurance ensures protection of the health, property and interests of citizens and businesses. Hence the commercial insurance companies help to maintain the standard of living and economic stability of the population and other organizations. (Meheš, Gojdič, 2014) Insurance companies offer products through insurance market.

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According to Koišová (2010), trading in the insurance market, i.e. sale and purchase of insurance products is realized in the form of contract between the insurance company (the seller) and policyholder (buyer).

The insurance market as one of the segments of the financial market is closely linked to the overall economic situation in each country. The favourable development of the insurance market positively affects economic growth of the state, and vice versa, the economic development influences the development of the insurance market (Grmanová, 2014a).

As Čejková and Nečas (2003) noted, insurance market is influenced by: state through legal rules and supervision in insurance, insurers (insurance companies), clients, insurance brokers, reinsurers and various consultancy firms. Also the associations of insurance companies play an important function, they significantly influence through their activity the behaviour of member insurance companies.

Insurance market, its scope, effectiveness, importance in terms of national economy, can be characterized by several indicators. Basic indicators of insurance market include total premiums, claims incurred, total premiums to GDP, total premiums per capita and others.

#### 2. The objective and methods of research

The objective of this field study is based on an analysis of the insurance market through selected indicators to identify and compare the differences in the development of insurance markets in the Czech Republic (CR) and Slovak Republic (SR). The paper begins with a brief review of the scientific literature on the subject with references to domestic as well as foreign sources. To identify the differences between the two insurance markets we used the method of analysis of time series of development of these indicators: gross written premium, insurance penetration indicator, average premium written per capita (density).

For the content analysis of the acquired data we used mathematical and statistical methods, the results are presented through tables and graphical display of selected indicators of the insurance markets. The results are assessed by the method of comparison. For overall summary of the research and formulation of conclusions we implemented method of synthesis. Information used and analysed in the research was taken from the InsuranceEurope database.

#### 3. Theoretical background of insurance market

Market research in the field of insurance and insurance markets is carried out in several areas. Many scientific works are aimed at exploring risk and its insurance (Cipra, 2004; Smejkal, Rais, 2006; Turvey et al., 2013). Navickas et al. (2014) stated that insurance is a part of financial decisions in personal finance management.

Some authors investigated the effect of insurance on economic growth. Liedtke (2007) described the positive role and impact that insurance has in a modern economy. According to this author, insurance is not just about employment and the financial compensation of victims, it is also the central part of the capitalisation process of a modern economy. Outreville (2013) reviewed the 85 empirical papers examining the relationships between insurance and economic development. Han et al. (2010) investigated the relationship between insurance development and economic growth, and found that the development of insurance contributes significantly to economic growth; especially non-life insurance is of great importance for economic growth in developing economies. Ward and Zurbruegg (2000) examined the relationships exhibited between economic growth and growth in the insurance industry for nine OECD countries. Their results indicate that these relationships are country specific and any discussion of whether the insurance industry does promote economic growth will be dependent on a number of national circumstances.

Other groups of authors focused their research on the opposite relationship, i.e. impact of macroeconomic indicators on the insurance market. Kramaric and Galetic (2013) investigated the dependence of GDP per capita and the development of the insurance market in the European Union countries and found a strong positive correlation especially in the variable insurance premiums per capita, with the highest correlation in the EU12 countries. Also Kugler and Ofoghi (2005) found a long run relationship between development in insurance market size and economic growth. Their research saw a bilateral long run relationship; the causality from GDP growth to insurance market size development was more powerful than the causality from the other side.

Brokešová et al. (2014) evaluated the impact of economic, demographic, socio-cultural and factors of the business environment on the development of the insurance market within the V4 countries. Results showed that the greatest impact on the development of insurance have the economic factors, particularly GDP per capita, the rate of foreign trade and the number of motor vehicles. Conversely, the impact of inflation on the insurance market was not statistically significant.

Zhang and Zhu (2005) examined the determinants of China's insurance development, using data for 225 cities. The insurance development they measured by premium volume, insurance density and insurance penetration. Ratowska-Dziobiak (2011) presented the main consequences of Poland's integration with EU in the field of insurance market.

Another area of study is to measure the effectiveness of the insurance market and insurance companies. Grmanová (2015) investigated the efficiency of national life insurance markets in Europe. Some authors (e.g. Becmer, 2015) compare the development of the insurance market in selected countries.

### 4. Development of selected indicators of insurance market in Slovakia and the Czech Republic

Since May 2004, Slovak and Czech insurance market became part of the single European insurance market. Insurance companies of each EU member states are allowed to offer their insurance products in Slovakia and the Czech Republic. Similarly, the insurance companies from Slovakia and the Czech Republic can offer their services to clients in other European Union countries, thus opening opportunities for further development.

In the European environment, legislative coherence between national insurance markets is growing and competitiveness is increasing. Mutual interaction and globalization is reflected at the level of national markets. However, last years were marked by large fluctuations in the financial markets and by increasing economic instability, which influenced the development of the insurance markets. (Grmanová, 2014b)

As Tipurić, Pejić-Bach and Pavić (2008) noted, the size of the insurance market in a particular country is measured according to total gross premium of all insurance companies put together, and the number of insurance companies. However, these are just absolute values which do not say much about the strength and development of the insurance market and which can be assessed only in relation to the size of population and economic power of citizens. Therefore strength and development of the insurance market are measured by two generally accepted indicators: (1) insurance density rate, i.e. gross written premium per capita and (2) insurance penetration rate measured as the share of gross written premium in GDP.

In order to compare insurance markets in Slovakia and the Czech Republic we have selected the indicator of gross premiums written. We have also looked at the structure of the market between life and non-life insurance. Given the different size and population of Slovak and Czech Republic we have compared the relative indicators: insurance penetration and average premium written per capita (density).

#### 4.1. Gross written premium in Slovakia and in the Czech Republic

The principal indicator for the assessment of the state of the insurance market includes gross written premium (GWP). Written premiums refer to the amount of premiums customers are required to pay for insurance policies written during the accounting period (Investopedia, 2015). Figure 1 shows the development of gross written premium in Slovakia, Figure 2 shows the development of gross written premium in the Czech Republic.

In SR, in the reported period, gross premiums written in life and non-life insurance varied, however overall they showed a growing trend. The total value of premiums written increased from 1,994 million EUR in 2010 to 2,181 million EUR in 2014. There was a decrease in non-life insurance in 2012 by (0.8%) and life insurance in 2014 by (1.5%). The highest growth in premiums written occurred in 2013, with premiums written in life insurance increasing by 5.8% in that year and in non-life insurance by as much as 8.6%. The share of life insurance of total gross premiums written increased slightly from 55.6% in 2010 to 55.8% in 2014, in 2012 even amounted to 57.5%.

In the Czech Republic gross premiums written in the reported period also varied. Total value of gross premiums written decreased slightly from 5,310 million EUR in 2010 to 5,308 million EUR in 2014. Gross premiums written in life insurance were almost unchanged, but non-life insurance showed

more significant fluctuations. In 2012, premiums written in non-life insurance declined by (4.8%) vs. previous year and in subsequent years, in turn, increased by 2.7% and 3.1% respectively. The share of life insurance on gross premiums written was different than in Slovakia; in 2010 it represented only 44.7% while in subsequent years increased up to 46.3% in 2012, in the following years declined slightly to 44.9% in 2014.

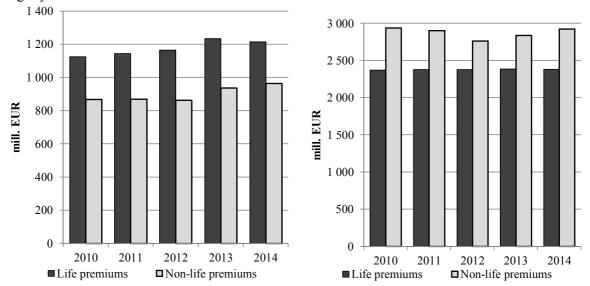


Figure 1. GWP in Slovakia

Figure 2. GWP in the Czech Republic

Source: Insurance Europe (2015), own creating

As Brokešová et al. (2015) noted, that gross written premium is an absolute value and do not reflect subject characteristics e.g. country size. Other two indicators (insurance density and insurance penetration) correct this feature where insurance penetration is a percentage of total premiums to GDP and the insurance density represents the average amount that a typical person spends on commercial insurance in the country.

#### 4.2. Insurance penetration in Slovakia and in the Czech Republic

Insurance penetration indicator is considered a key indicator showing the level of development for aggregate insurance market. It expresses the overall productivity of the insurance sector in the national economy. It is found as a share of total premiums written (technical) to gross domestic product at current prices, in percentage. Development of insurance penetration in Slovakia and the Czech Republic are shown in a Figure 3.

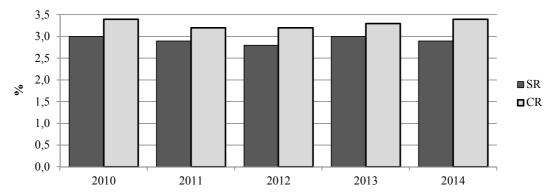


Figure 3. Development of insurance penetration in R and CR

Source: Insurance Europe (2015), own creating

As highlighted in Figure 3, the insurance penetration in SR initially dropped (2010: 3%, 2012: 2.8%), later showed a growth (2013: 3%). In the Czech Republic insurance penetration fluctuated with increasing trend since 2011 (2010: 3.4%, 2011: 3.2%, 2014: 3.4%). In 2014, insurance penetration in the Czech Republic was higher than in Slovakia by 0.5 percentage points.

#### 4.3. The insurance density in Slovakia and in the Czech Republic

The indicator that takes into account population of the country is the average premium written per capita (density). It is a relative indicator, which is calculated as the ratio of total premium income and population of the country (Figure 4).

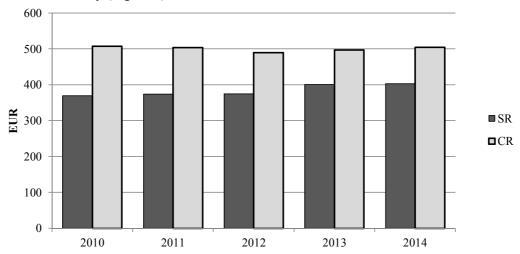


Figure 4. Development of insurance density in SR and CR

Source: Insurance Europe (2015), own creating

The average premium written per capita in the Slovak Republic in the years 2010-2014 gradually increased, from EUR 370 in 2010 to EUR 403 in 2014, representing a growth of 8.9%. In the Czech Republic the value of this indicator is higher than in Slovakia, between EUR 490 (2012) to EUR 508 (2010). The biggest difference between Slovakia and the Czech Republic was in 2010, when premiums written per capita in the Czech Republic were EUR 138 higher compared to Slovakia.

### 5. Comparison of the insurance market in Slovakia and the Czech Republic with the European insurance market

The results of our research show that gross premiums written in the Czech Republic are higher than in Slovakia as a result of the size of the country and of its population. When comparing the share of life and non-life insurance on gross premiums written, SR has a higher proportion of long-term life insurance (55.8% in 2014), while in the Czech Republic non-life insurance has higher proportion (44.9% in 2014). As reported by Insurance Europe (2015), the average share of life insurance in European countries is app. 61% of total gross insurance premiums written. The countries with the highest share of life insurance include Finland, Sweden, Ireland (around 80%). The lowest share of life insurance on gross premiums written is in Iceland, Latvia, Turkey (around 10%).

As far as the insurance penetration indicator is concerned – the penetration in the Czech Republic is higher than in Slovakia (2014: Czech Republic: 3.4%, Slovakia 2.9%). Both countries are below the European average, which is 7.46% (Insurance Europe, 2015). European countries with the highest insurance penetration include Netherlands, Finland and United Kingdom (around 11%), insurance penetration is the lowest in Romania (1.2%).

The average premiums written per capita (density) in the Czech Republic in 2014 was EUR 505, while in Slovakia it was EUR 403. The European average is EUR 1,967. States with high density are: Switzerland, Luxembourg, Netherlands and Finland. Romania has the lowest density (EUR 90).

#### 6. Conclusion

Slovakia and the Czech Republic have a long common history and their insurance markets had a common starting base. According to Lhotská (2012) the regional proximity is an important factor, but more important are the economic and social environment, which is reflected for example in different legislation. This also greatly contributes to the fact that the current situation on the insurance markets in Slovakia and the Czech Republic are significantly different.

A certain similarity of the insurance markets in the Czech Republic and Slovakia are due to the fact that both markets are dominated by two large insurance companies (Česká pojišťovna in CR, Allianz - SP in SR and Kooperatíva poisťovňa in both countries) however the segment of medium-sized insurance companies in Slovakia is considerably weaker than in the Czech Republic. In terms of non-life insurance, the Slovak and Czech insurance markets have comparable share of large, medium and small insurers. When it comes to life insurance, in Slovakia, the biggest market share have large and medium-sized insurers (about the same, more than 40%) in the Czech Republic the medium sized insurers have the largest market share (over 50%). The category of large insurance companies is represented in the Czech Republic only by one company. Another difference between Czech Republic and Slovakia is more developed market of investment insurance in the Czech Republic.

According to Kordos and Karbach (2014), insurance industry is becoming increasingly global and hence it is not subject to geographical and territorial boundaries. Therefore the insurance market as part of the financial market is sensitive to global changes. During the global financial crisis, insurance markets in Slovakia and the Czech Republic did not record any large fluctuations and proved to be stable markets.

The survey showed that in SR the life insurance is preferred by the insured ones, while in Czech Republic the property protection (non-life insurance) prevails. In Czech Republic, the insurance also the average written premium insurance per 1 inhabitant are significantly higher than in Slovakia. In Slovakia and Czech Republic the underinsurance of economy still remains. In these countries there is a significant potential for growth because of new production and market boost.

#### **Acknowledgements**

The article is part of research project funded by the Scientific Grant Agency of the Ministry of Education, Science Research and Sport of the Slovak Republic, VEGA 1/0208/14 Insurance market and Insurance Companies Efficiency.

#### References

Becmer, A. (2015). The Insurance Market of Selected Countries in Central and Eastern Europe against a Background of the EU Countries-15. In *Some Current Issues in Economics*. Komárno: International Research Institute, pp. 158-169 [online]. [cit.2015-10-23]. Available: http://www.irisro.org/economics2015january/42AnnaBecmer.pdf.

Brokešová, Z., Ondruška, T., Pastoráková, E. (2015). Economic and Demographic Determinants of Life Insurance Industry Development. In *European Financial Systems 2015:* Proceedings of the 12th International Scientific Conference. Brno: Masaryk University, pp. 61-65.

Brokešová, Z., Pastoráková, E., Ondruška, T. (2014). Determinants of Insurance Industry Development in Transition Economies: Empirical Analysis of Visegrad Group Data. *The Geneva Papers*, 2014, vol. 39, pp. 471-492 [online]. [cit.2015-10-27]. Available: http://econpapers.repec.org/article/palgpprii/v\_3a39\_3ay\_3a2014\_3ai\_3a3\_3ap\_3a471-492.htm.

Čejková, V., Nečas, S. (2003). Czech insurance market before entering the European Union, *Ekonomický časopis*, vol. 51, iss. 10, pp. 1217-1233.

Ciftci, H., Iscan, E., Serin, D. (2015). The interaction between insurance sector and economic growth: Turkish case. In *Proceedings of the 19th International Academic Conference*, Florence: International Institute of Social and Economic Sciences, pp. 178-183 [online]. [cit.2015-10-23]. Available: http://iises.net/proceedings/19th-international-academic-conference-florence/table-of-content.

Cipra, T. (2004). Zajištění a přenos rizik v pojišťovnictví. Praha: Grada Publishing, 2004.

Grmanová, E. (2014a). Life insurance in the European Union during the economic crisis. In *SGEM conference on political sciences law, finance economics & tourism:* Conference proceedings volume II Finance. Sofia: STEF92 Technology, pp. 511-518.

Grmanová, E. (2014b). New business and efficiency of insurance companies in the Slovak Republic. In *SGEM conference on political sciences law, finance economics & tourism:* Conference proceedings volume II Finance. Sofia: STEF92 Technology, pp. 415-422.

Grmanová, E. (2015). Efficiency of National Life Insurance Markets in Europe. In *European Financial Systems 2015*: Proceedings of the 12th International Scientific Conference. Brno: Masaryk University, 2015, pp. 151-157.

Han, L., Li, D., Moshirian, F., Tian, Y. (2010). Insurance Development and Economic Growth. *The Geneva Papers*, 2010, vol. 35, iss. 2, pp. 183-199 [online]. [cit.2015-10-27]. Available: http://econpapers.repec.org/article/palgpprii/v\_3a35\_3ay\_3a2010\_3ai\_3a2\_3ap\_3a183-199.htm.

 $In surance\ Europe\ (2015).\ In surance\ Data\ [online].\ [cit.2015-11-05].\ Available:\ http://www.insuranceeurope.eu/insurancedata.$ 

Investopedia (2015). Dictionary. [online]. [cit.2015-11-05]. Available: http://www.investopedia.com/terms/w/written-premium.asp.

Koišová, E. (2010). Poistný trh ako súčasť finančného trhu. In: *Hodnotenie efektívnosti komerčných poisťovní v Slovenskej a Českej republike metódou analýzy obalu dát = VEGA 1/0414/08*. Trenčín: TnUAD, 2010. pp. 28-36.

Kordos, M., Karbach, R. (2014). The issue of innovation in international economics. In *SGEM conference on political sciences law, finance economics & tourism*: Conference proceedings volume III Economics & Tourism. Sofia: STEF92 Technology, pp. 653-660.

Kramaric, T.P., Galetic, F. (2013). The Role of the Overall Economic Development on the Insurance Market Growth–Evidence of the European Union. *Journal of Applied Finance & Banking*, vol. 3, no 3, pp. 157-168 [online]. [cit.2015-10-27]. Available: http://www.scienpress.com/journal\_focus.asp?main\_id=56&Sub\_id=IV&Issue=610.

Kugler, M., Ofoghi, R. (2005). Does insurance Promote Economic Growth? Evidence from the UK. In *Money Macro and Finance Research Group*. Money Macro and Finance (MMF) Research Group Conference 2005, Rethymno, Greece: University of Crete [online]. [cit.2016-02-18]. Available: http://repec.org/mmfc05/paper8.pdf.

Lhotská, K. (2012). Srovnání českého a slovenského pojistného trhu 1. díl [online]. [cit.2015-05-09]. Available: http://www.opojisteni.cz/ekonomika/vyvoj-trhu/analyza-srovnani-ceskeho-a-slovenskeho-pojistneho-trhu-1-dil/.

Liedtke, P.K. (2007). What's insurance to a modern economy? *The Geneva Papers on Risk and Insurance-Issues and Practice*, vol. 32, iss. 2, pp. 211-221.

Meheš, M., Gojdič, I. (2014). Investičná činnosť komerčných poisťovní v období hospodárskej krízy, *Acta academica karviniensia*, vol. 14, iss. 1, pp. 108-115 [online]. [cit.2015-10-20]. Available: http://www.slu.cz/opf/cz/informace/acta-academica-karviniensia/casopisy-aak/aak-rocnik-2014/docs-1-2014/Mehes Gojdic.pdf.

Navickas, M., Gudaitis, T., Krajnakova, E. (2014). Influence of financial literacy on management of personal finances in a young household. *Business: Theory and Practice*, vol. 15, iss. 1, pp. 32-40.

Outreville, J. F. (2013). The Relationship between Insurance and Economic Development: 85 Empirical Papers for a Review of the Literature. *Risk Management and Insurance Review*, vol. 16, iss. 1, pp. 71-122.

Ratowska-Dziobiak, E. (2011). Impact of European Integration on the Functioning of the Insurance Market in Poland. *Comparative Economic Research*. vol. 14, iss. 1, pp. 81-96.

Smejkal, V., Rais, K. (2006). Řízení rizik ve firmách a jiných organizacích. Praha: Grada Publishing, 2006.

Tipurić, D., Pejić-Bach, M., Pavić, T. (2008). Dynamics of concentration of insurance industry in selected transition countries of Central and Eastern Europe. *Post-Communist Economies*, vol. 20, iss. 1, pp. 97-118.

Turvey, C.G., Gao, X., Nie, R., Wang, L., Kong, R. (2013). Subjective, Risks, Objective Risks and the Crop Insurance Problem in Rural China. *The Geneva Papers on Risk and Insurance - Issues and Practice*, vol. 38, iss. 3, pp. 612-633.

Ward, D., Zurbruegg, R. (2000). Does insurance promote economic growth? Evidence from OECD economies. *Journal of Risk and Insurance*, vol. 67, iss. 4, pp. 489-506.

Zhang, C., Zhu, N. (2005). *Determinants of the development of insurance in China under the globalization*, Université d'Auvergne: working paper [online]. [cit.2016-02-18]. Available: http://cerdi.org/uploads/sfCmsContent/html/200/Zhang 31.pdf.

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# 41. MANAGEMENT OF SOCIAL PROTECTION MEASURES IN THE UNFAVOURABLE SOCIAL SITUATION OF MIGRANTS IN SLOVAKIA

Abstract: There are two fields of state social politics linked in this article – migration policy and social protection policy, this article is relevant for the terminology of social sphere. For the State, which wants to implement integration policy towards migrants, it is necessary to examine the establishing of care for migrants in 3 subsystems of social protection – social insurance, state social support and social assistance. The main objective of this article is to examine measures (instruments) of social protection and their application in the life of a migrant. Following tasks have been identified for the realization of our objective: to define key words, to research measures of social insurance in the life of a migrant, to research measures of state social support in the life of a migrant and, in the relation to our previous task, to nominate quantitative indicators of the quality of family life of migrants, to research measures of social assistance in the life of a migrant. Research methods used in the article: theoretical general methods of scientific knowledge – analysis and synthesis of available bibliographic references, their comparison.

Key words: migrant, quality of life of migrants, social assistance, social insurance, state social support

**JEL Classification**: F02, F22, J61, I38, Y80

#### 1. Introduction

Globalization processes characterized by the free movement of goods and capital are extended by the free movement of labour. Established development trend of international migration is based on globalization processes. Motives of migration from the beginning of mankind, not excluding the present, result from a desire to increase the quality of human life (Tupá, 2013; Tupá, 2015). The key to improving the quality of life of migrants and also to remain competitive on the global market are innovations (Kordoš, 2014).

Author of this article focuses the attention to managing tools in selected areas of life of migrants in Slovakia in the sphere of social protection. Various subsystems of social protection are handled by offering a brief overview of the current state, overview of legislative which regulates the sphere and an overview of competencies which different public institutions hold. We also state the problems that foreigners encounter in different areas of social protection.

#### 2. Terminological excursion

In accordance with the International Organization for Migration, migration is a movement of a person or a group of people from one geographical unit to another across an administrative or a political boundary in order to settle definitively or temporarily on a place different than the place of origin of the person (IOM, 2005). Migration is a form of a spatial mobility of the population, the essence of which is the movement of people across national borders with the intension to settle in other country for a certain period of time (Divinský, 2005).

The concept of migrant (synonym foreigner) is another frequent concept which we often encounter in regards to migration problems. A migrant is defined by the United Nations Organisation as a person who, for whatever reasons, changed his country of permanent or habitual residency and has moved from

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their home country to another country (Concept of Foreigners' Integration in the Slovak Republic, 2009). A foreigner is anyone who is not a citizen of the Slovak Republic (Act No. 404/2011 Coll. on residence of foreigners, as amended). Third-country national is any foreigner who is not a citizen of the European Economic Area (Concept of Foreigners' Integration in the Slovak Republic, 2009).

Social protection system is a set of legal, financial and organizational instruments and measures designed to compensate unfavourable financial and social consequences of different life circumstances and events that threaten recognized social rights or designed to prevent these life situations. Social protection system has been created with the purpose to compensate negative consequences of different life events (Matlák, 1996).

Social insurance financially secures an individual or family members in the occurrence of life events that can be predicted and against which he is insured (Masárová et al., 2015).

The aim of state social benefits is financial participation of state in overcoming unwanted decline in living standard of a family caused by the formation, respectively by the duration of certain state-recognized life events. There is a financial support for families with dependent children mainly in specific life situations. Providing of state social support is not bound to a certain income level attained by the family (Masárova et al., 2015).

Social assistance is a set of legislative, financial and organizational measures designed to help and support those citizens who provably need this help. The whole system of social assistance aims primarily towards preventing social exclusion of citizens (Stanek, 2011).

Laluha in: Stanek (2011) inclines to the definition of quality of life according to which the quality of life is understood as a socio-economic category; it is historically conditioned level of life processes; a person or a society reproduces and develops its existence within these life processes in accordance with the principles of humanism and humanity. It is the responsibility of the recipient society to create humane conditions for the stay of migrants.

#### 3. Setting the social protection subsystems in the life of a migrant

Social protection is an inseparable part of social policy. It is known as the core of social policy as the realization of objectives and tasks of social policy happens by the means of social protection. Some authors have attempted to define the social protection as a compilation of cash benefits and physical benefits (material naturalia) including services guaranteed to certain people. A wider approach to social protection can be found in the report of the International Labour Organization for the 21<sup>st</sup> century: Development of social protection. In the report, social protection is understood as a response to the need for security in the widest meaning of the word, not as a set of mechanisms to ensure such security. Many different authors are in favor of this objective – to provide "security". They believe that these legal regulations should provide protection against risks (uncertainties resulting from them) associated with the formation of industrial society and its development. In short, to provide protection against "social" risks. It is questionable what kind of protection it should be and what kind of risks are considered to be "social" (Rievajová, 2008). The most familiar social institutions (subsystems) that social protection is currently using are primarily social insurance, state social support and social assistance.

Social insurance in accordance with Act No. 461/2003 Coll. on social insurance, as amended, is divided into sickness insurance, pension insurance (old-age insurance, disability insurance), accident insurance, guarantee insurance and unemployment insurance. Sickness insurance represents insurance against the loss or reduction of earned income and provides income in case of temporary work inability, pregnancy and maternity. Pension insurance system consists of two subsystems: first subsystem is old-age insurance as an insurance to provide income at the old age and in the case of death; second subsystem is disability insurance as an insurance against the decline of ability to perform work activity due to long-term health issues of the insured person and in the case of death.

Accident insurance is an insurance against health damage or death resulting from an accident at work and occupational illness. Guarantee insurance is an insurance in case of insolvency of the employer to solve the claims of the employee and also as payments of contribution for the old-age pension saving which has not been payed by the employer into the basic fund of contributions for the old-age pension saving. The purpose of unemployment insurance is the employees' insurance against the loss of income as a result of unemployment and also to ensure income during a period of unemployment. Employed foreigners and foreigners running own enterprises are legally obliged to

pay social insurance. The same is valid for employed native citizens and native citizens running own enterprises. Social insurance and particularly the drawing of benefits in social insurance is guided by the Slovak legislative (the law act mentioned above), by the legislative of European Union and by international agreements.

Table 1. Number of employed foreigners in Slovakia (top 5)

CITIZENSHIP	2012	2013	2014
Ukraine	967	998	969
Republic of Korea	751	885	790
Republic of Serbia	345	505	523
Socialist Republic of Vietnam	322	294	345
People's Republic of China	212	281	345

Source: Ministry of Labour, Social Affairs and Family of the Slovak Republic

Table 2. Number of holders of temporary residence permit for business purpose in Slovakia (top 5)

CITIZENSHIP	2012	2013	2014
Ukraine	719	690	711
Russian Federation	381	432	426
Socialist Republic of Vietnam	689	507	416
People's Republic of China	756	519	329
Republic of Korea	67	61	50

Source: Ministry of Labour, Social Affairs and Family of the Slovak Republic

State social support benefits are state benefits which are acknowledged by the state in some selected life situations. These benefits are mostly formed by so-called family benefits (parental allowance, child allowance, etc.). Entitlement to family benefits is not conditional to payment of contributions or to income conditions of beneficiaries. Foreigners, who have their habitual residency in Slovak Republic, are entitled to draw some state social support benefits. When the conditions for eligibility are met, child allowance, child allowance supplement, parental allowance, funeral allowance and childcare allowance are provided to all Slovak Republic residents (with permanent or temporary residence) including foreigners who live in Slovakia. Other allowances such as birth allowance, birth allowance supplement, multiple children birth allowance (allowance for parents who gave birth to three and more kids at the same time, allowance for parents who gave birth to twins repeatedly within two years) and allowances for the support of substitute care are provided to the residents with permanent residence and also to foreigners with permanent residence in Slovak Republic. Entitlement to some state social benefits apply also to citizens from countries outside of European Union / European Economic Area who were granted a temporary residence in Slovakia and also to people who were granted asylum or subsidiary protection.

he area of social assistance consists of cash benefits and social services which should solve a critical social situation. Financial allowances for the compensation of consequences of health disability are provided for the reduction of increased personal costs of disabled people. The mentioned cash allowances are governed by the Act No. 447/2008 Coll. on cash allowances for the compensation of severe disability, as amended. According to the law, financial allowances for the compensation can be provided only to the small group of foreigners. In the case of foreigners from the third countries, this section is governed by Slovak legislation and also by international treaties. If the entitlement of

foreigner to cash allowance is proven, it can be granted to him under the condition that (on the basis of a comprehensive assessment) the foreigner is considered to be an individual with a severe disability with a proposal to compensate social consequences of severe disability with some of the cash benefits for compensation. Material need allowance is a state cash benefit which is provided in the situation of material need of an applicant. This allowance is meant to ensure the basic living conditions. For the assessment of this allowance, the same position is valid for the citizen of Slovak Republic, foreigner, refugee, foreigner with granted subsidiary protection, exiled person residing in Slovak Republic by permission of the competent authority and Slovak expatriate residing in Slovak Republic. Act No. 417/2013 Coll. on support in material need, as amended, is the rule that regulates the section of support provided in material need. The stated act defines the material need as a condition when the income of household members is below of the subsistence minimum. Act No. 601/2003 Coll. on the subsistence minimum, as amended, defines the subsistence minimum as follow: subsistence minimum is a socially recognized minimum income limit for an individual and below this limit, condition of material need comes up. Subsistence minimum of an individual is the sum listed in the mentioned law act. Subsistence minimum of more people, who have their incomes reviewed together, is the total sum listed in the mentioned law act.

Material need benefit and allowances to the material need benefit (protection allowance, activation allowance, dependent child allowance and housing allowance) are provided for solving or reduction of material need. Assessment of applicants 'material need and acknowledgment of material need benefits is in the competency of offices of labour, social affairs and family. Social services are professional activities which focus on the prevention of unfavourable social situation, on the solution or reduction of unfavourable social situation of an individual, family or community, on the recovery and development of ability of an individual to live an independent life and on the integration of an individual into society. Providing of social services is governed by Act No. 448/2008 Coll. on social services, as amended. Only a relatively narrow range of foreigners have a right for social services, just like in the case of compensations for disability consequences. In the case of foreigners from the third countries, this section is regulated by Slovak legislative and international treaties. This means that social service can be offered to the foreigner from a third country in case this entitlement results from the international treaty. Social Services Act rules out providing of social services to foreigners in social service facilities. Social services for foreigners are primarily aiming at solving critical life situation (relocating into the crisis centre, social dormitories, etc.) rather than at prevention of critical life situation (social and legal counselling, social work, etc.).

#### 4. The context of family in the life of migrant and managing by responsible subjects

The quality of life is measured by indicators. The application of hundreds of indicators can be found in the list of references dedicated to the quality of life. It turns out that the constantly increasing number of indicators does not contribute to the objectification of measuring the quality of life.

It is questionable whether it is possible to measure human development, whether it is possible to reliably determine the level of quality of life of a country or an individual (in this case the family of a foreigner with underage child) (Masárová, Živčicová, 2012). Indicators of quality of life are understood as qualitative-quantitative characteristics of social and economic processes. They contain various fields and aspects of social development of individuals, social groups and their perception by the population. Information (such as content element of the indicator) is obtained in particular:

- by the statement of respondents (subjective attitudes, feelings, opinions, judgments, evaluations);
- by the use of objective data (collected and processed by different institutions, organisations, authorities such as the Statistical Office (Laluha, Stanek, 2011).

Society must adapt to rapidly changing conditions and based on this fact, management of human resources faces significant demands on flexibility and responsibility of its policies (Soósová, 2013).

The integration of a migrant into the society is a complicated complex of relations with social environment of host country, economic and legislative conditions and factors affecting the dynamics of this process. Integration means that a group of migrants wants to retain some elements of their original culture and also the majority population accepts the specifics of the new group (Berry, 1990; Fenton, 2003; Scott, Marschall, 2009). Integration policy as part of the global approach to migration is one of the main priorities for the European Union agenda (Bosswick, Heckmann, 2006).

Table 3. Measuring the quality of life of migrants in terms of state social support

LIFE VALUE	INDICATORS FOR MEASUREMENT OF STATE SOCIAL SUPPORT OF FOREIGNERS	RESPONSIBLE SUBJECTS
FAMILY	<ul> <li>Number of child allowances paid to foreigners</li> <li>Foreigners receiving child allowance supplement</li> <li>Number of parental allowance paid to foreigners</li> <li>Foreigners receiving childcare allowance</li> <li>Number of birth allowances paid to foreigners</li> <li>Foreigners receiving birth allowance supplement</li> <li>Allowance for the support of substitute care of foreigners</li> <li>Other allowances</li> </ul>	Ministry of Labour, Social Affairs and Family of the Slovak Republic. Office of Labour, Social Affairs and Family. Non- governmental organizations. Others.

Source: Own work

When measuring the quality of life of migrants we evaluate the success rate of the integration process of foreign nationals into the majority society. For the purpose of our research, we deal with the quality of life through the prism of family and benefits that are available to foreigners in the system of state social support, for example, families of foreigners with underage children have an opportunity of receiving single or repeated financial benefits when the state takes over the role to participate in solving some of the state-recognized life situations in order to prevent unwanted decline in living standards of families which take care of dependent children (possible indicators of measurement in the state social support of foreigners, see the template). We also consider the possible responsible parties. In our case, legislative measures of state social support for foreigners should be managed by Ministry of Labour, Social Affairs and Family of Slovak Republic. Competences regarding the execution of mentioned measures should be transferred to offices of labour, social affairs and family in the place of residence of the foreigner. We have pointed out non-governmental organizations as other responsible subjects.

We consider housing, education, health care, civil and political participation of foreigners to be the next case for the research in the field of migration-integration policy. When we talk about education, the main goal is to provide migrants of all ages with equal and open access to quality education opportunities and to different experiences with education (Kajanová, Sedláček 2014).

#### 5. Conclusion

As a conclusion, we would like to provide our own insights to this research. Compared to the citizens of Slovak Republic, foreigners are generally less involved in drawing various benefits and services in the sphere of social protection (not only because of legal restrictions but also because of lack of information and because of language barrier). Foreigners find themselves more easily in a crisis situation (compared to the rest of the population) and they are often not entitled to draw certain benefits and social services. Some risk situations that might occur to foreigners are covered insufficiently by social insurance.

We can take foreigners with temporary residence as an example. For the purpose of employment, foreigners must fulfil their obligations just like Slovak Republic natives even though they do not have the opportunity to draw unemployment insurance. The reason is that as soon as a foreigner loses his job, his residence permit for the purpose of work is cancelled and he must leave. The sphere of providing cash benefits for compensation of disability consequences and providing of social services is very complicated in the case of third country foreigners as it is governed Slovak legislative and also by international agreements between Slovak Republic and the countries of origin.

To raise a sufficient awareness, we would suggest to place leaflets with basic facts about the social protection system, links to relevant websites, addresses where to ask for help to departments of Foreign Police as every foreigner is heading to these departments to apply for the residence permit. Information must be spread around in native language or in the language understood by the foreigners. Cooperation with relevant institutions (migrant organizations, community centres, religious centres and also educational institutions and schools) would be very helpful.

#### Acknowledgements

This article was created in the frame of the project VEGA "Trendy v migrácii pracovnej sily do krajín EÚ a ich dopad na hospodársky a sociálny rozvoj SR" 1/0736/14

#### References

Berry, J. W. (1990). Psychology of acculturation. Lincoln: University of Nebraska Press,1990.

Bosswick, W., Heckmann, F. (2006). *Integration of migrants: Contribution of local and regional authorities*. Dublin: European Foundation for the Improvement of Living and Working Conditions, 2006.

Divinský, B. (2005). Zahraničná migrácia v Slovenskej republike. Stav, trendy, spoločenské súvislosti. Bratislava: Friedrich Ebert Stiftung, 2005.

Drozd, P. (2015). *Prístup migrantov k sociálnemu zabezpečeniu a zdravotnej starostlivosti v Slovenskej republike: Politiky a prax.* Bratislava: IOM Úrad v Slovenskej republike, 2015.

Fenton, S. (2003). *Ethnicity*. Cambridge: Polity Press, 2003.

IOM (2005). World Migration 2005: Costs and Benefits of International Migration. Ženeva: Medzinárodná organizácia pre migráciu.

Kajanová, H., Sedláček, M. (2014). Readiness of students to use m-learning education – case study Slovakia. In *SGEM Conference on Psychology & Psychiatry Sociology & Healthcare Education: Conference proceedings volume III Education & Educational Research*. Sofia: STEF92 Technology, pp.737-744.

Kordoš, M. (2014). Role of innovations in the EU industrial policy and competitiveness enhancement. In *Proceedings of the* 2nd international conference on European integration 2014. Ostrava: VŠB, pp.335-342.

MPSVR (2009). Koncepcia integrácie cudzincov v SR. Bratislava: MPSVR SR, 2009.

Masárová, T., Živčicová E. (2012). Meranie kvality života. Žilina: Georg, 2012.

Masárová, T., Sika, P., Španková J. (2015). Sociálna politika I. Trenčín: TnU AD, 2015.

Matlák, J. (1996). Právo sociálneho zabezpečenia v historickom, súčasnom a európskom kontexte. Bratislava: Právnická fakulta UK, 1996.

Rievajová, E. (2008). Sociálne zabezpečenie. Bratislava: Ekonóm, 2008.

Scott, J., Marschall, G. (2009). Oxford Dictionary of Sociology. Oxford: Oxford University Press, 2009.

Soósová, V. (2013). Zavádzanie personálneho controllingu v MSP. In *Current Problems of the Corporate Sector*. Bratislava: EUBA, pp. 493-503.

Stanek, V. a kol. (2011). Sociálna politika. Bratislava: Sprint dva. 2011.

Tupá, M. (2013). Faktory migrácie pracovnej sily do zahraničia. Sociálno – ekonomická revue, 11 (1), pp. 108-121.

Tupá, M. (2015). Problémy a trendy v migrácii pracovnej sily. Trenčín: TnU AD, 2015.

Zákon č. 461/2003 Z. z. o sociálnom poistení v znení neskorších predpisov.

Zákon č. 601/2003 Z. z. o životnom minime v znení neskorších predpisov.

Zákon č. 447/2008 Z. z. o peňažných príspevkoch na kompenzáciu ťažkého zdravotného postihnutia v znení neskorších predpisov.

Zákon č. 448/2008 Z. z. o sociálnych službách v znení neskorších predpisov.

Zákon č. 404/2011 Z. z. o pobyte cudzincov v znení neskorších predpisov.

Zákon č. 417/2013 Z. z. o pomoci v hmotnej núdzi v znení neskorších predpisov.

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# 42. SELECTED ASPECTS OF PUBLIC SUPPORT FOR SMALL AND MEDIUM-SIZED ENTERPRISES IN EUROPEAN UNION THROUGH THE PRISM OF BLOCK EXEMPTION REGULATION

**Abstract:** The subject of the paper is to discuss selected aspects of public support for small and medium-sized enterprises (SMEs) in the context of present development on internal market. SMEs are regarded as the backbone of national economy. European Commission gives them particular attention, especially in terms of business support. European Union countries are trying to strengthen the competitiveness and innovativeness of SMEs through the operational programs and specific support. The aim of this article is through an analysis of public support for SMEs to characterize and identify its trend through the prism of modernized state aid rules in the European Union (EU) with special emphasis on the area of new block exemption regulation. The need to reform the regulation of state aid in EU was caused not only by external socio-economic factors. At the end of 2013 expired validity of key public support tools and began to be prepared multiannual financial framework of the EU for the period 2014-2020. The article focuses on state aid for SMEs in European Union Member States in accordance with Commission Regulation no. 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. Special attention is given to selected categories of aid to SMEs in revisited General Block Exemption Regulation (GBER) which releases Member States from the obligation to notify to the European Commission a number of state aid measures. The analysis covers the period 2008-2014.

**Keywords:** block exemption, European Union, public support, SMEs

JEL Classification: F23, G38, H5, L26, M21, N44

#### 1. Introduction

An important prerequisite for economic growth is a dynamic business development. Entrepreneurship is an important factor in competitiveness, because of new business projects, increasing competitive pressures, which are forced other firms to react in the form of increased efficiency or introducing innovation, thereby strengthening the competitive power of the entire economy (Křibíková et al., 2012). Support for business in the European Union focuses on supporting SMEs, which are considered the backbone of national economies (Jünger, Mynarzová, 2009). The intent of public support for SMEs is to support the processes leading to increased competitiveness of enterprises, leading to increased competitiveness in the global, European, national, regional or municipal level within the

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framework of sustainable development (Havierníková, 2014; Žebroková, Pellešová, 2014). Small and medium-sized enterprises have a significant role as engines of economic and social development too (Okręglicka et al., 2015).

European legislation considers state aid as generally undesirable and incompatible with the principles of the internal market, and therefore they are, with few exceptions, prohibited by EU law (Svoboda, 2011). Despite the long-term constancy of the general prohibition of state aid in EU law with EU policy of public support developing, particularly in relation to the economic situation of the Union and its Member States (Dziwiński, Barcik, 2014). The economic and financial crisis has increased pressure on Member States to implement measures that could be in conflict with the competition rules. The crisis has also caused an increase in demand for stronger state role in stimulating economic growth and a significant burden on public budgets of the Member States (Právní rádce, 2014). In this situation, Commission launched a reform of the rules for state aid. Currently, the EU is at the beginning of the application of these new rules in the field of state aid, but also at the beginning of the programming period 2014-2020. Proper application of state aid rules becomes essential because these new rules are necessary to be applied not only to aid financed from national sources, but they are also an important condition for the withdrawal of funds from the European Structural and Investment Funds (ÚOHS, 2014a).

#### 2. The Foundations of EU Competition Rules on Public Support

In order to governments to make minimum disrupt in the single market, and hence competition, the European Union is seeking from the beginning in its founding treaties and other legislation to protect competitive conditions and reduce state aid to businesses and enterprises (Kubátová, 2013). Basis of rules of public support are unchanged since the signing of the Treaty establishing the European Economic Community in 1957. The rules for the control of state aid are nowadays contained in Articles 107 to 109 of the Treaty on the Functioning of the European Union (TFEU). The concept of state aid is adapted in Article 107, paragraph 1, which provides; "Any aid granted by a Member State or through State resources which distorts or threatens to distort competition by favoring certain businesses or production of certain goods shall, if they affect trade between Member States, be incompatible with the internal market, unless the Treaties provide otherwise". State aid is not prohibited by EU primary law, but is considered to be incompatible with the internal market. According to Article 107, paragraph 2 and 3, the primary law does not consider all state aid incompatible and provides a large area of aid from the scope of Article 107, paragraph 1 absolutely or conditionally exempted. The second paragraph of Article 107 TFEU lists the cases of state aid, which are automatically excluded from the above general prohibition. There are three types of aid that can be broadly defined as the assistance of "social" character; assistance for the recovery from damage caused by exceptional occurrences and aid to the economy of certain areas of the Federal Republic of Germany affected by the division. The third paragraph of Article 107 TFEU lists the types of state aid that may be considered compatible with the internal market; aid to promote the economic development of areas with extremely low standard of living and high unemployment; aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a member state; aid to facilitate the development of certain economic activities or areas, without adversely affecting trading conditions to an extent which would be contrary to the common interest; aid to promote culture and heritage conservation, if it does not affect trading conditions and competition in the Union to an extent contrary to the common interest, and other types of aid that may be specified by decision of the Council to the Commission's proposal. Aids, which automatically are or may be considered compatible with the internal market under those exceptions, must be pre-notified to the Commission. Exceptions enshrined in EU law can be classified as: general exceptions (Article 107, paragraph 2 TFEU); individual exceptions (Article 107 Sec. 3 TFEU); block exemption (General Block Exemption Regulation no. 651/2014); ad hoc exceptions established by the Council (Article 108, paragraph 2, subparagraph 3 TFEU).

By the early 90s of the 20th century could be argued that the legislation of provision and control of state aid and its development did not belong to the priorities and the Commission's approach to changes in secondary treatment was rather case report approach (Mynarzová, Kaňa, 2015). In the last fifteen years, however, this is an area in which in EU is a significant political development, to which it

responds with new regulations and their ongoing revisions and amendments. This led to a situation where - unlike traditionally espoused concept of the prohibition of state aid to the private sector - was rather more appropriate to talk about the legal regulation of conditions of authorization granting state aid on the basis of their assessment by the Commission (Janků, Mikušová, 2013). The provisions of the Europe 2020 are as well important in determining the directions of state aid in the EU. According to their assumptions the EU Member States have been required to: reduce the level of aid relative to GDP, reduce state aid which decreases competition, reorient sectoral aid to horizontal and regional aid and change the forms of state aid from passive to active instruments (Stepniak-Kucharska, 2013). On 8 May 2012, the Commission issued its Communication on State Aid Modernization, announcing a comprehensive reform program of the existing instruments concerning state aid control. Commission defined three objectives of state aid modernization: foster growth in a strengthened, dynamic and competitive internal market; focusing enforcement on cases with the biggest impact on internal market and streamlined rules and faster decisions (EC, 2012). The intention of the new legislation in the field of state aid is rigorous and focused control of state aid, which should improve the functioning of the internal market through more effective policies aimed at reducing distortions of competition, maintaining equal terms for individual market operators and combating protectionism.

#### 3. Block Exemption in the Context of State Aid Modernization in EU

On 21 May 2014 the European Commission adopted one of the key legislative instruments for the provision of state aid, and the EU Commission Regulation no. 651/2014, which in accordance with Articles 107 and 108 of the Treaty declaring certain categories of aid compatible with the internal market<sup>4</sup>. From 1 July 2014 this regulation replaced the Commission Regulation EC no. 800/2008 in accordance with Articles 87 and 88 of the EC Treaty declaring certain categories of aid compatible with the common market (i.e. General Block Exemption Regulation). The basic advantage of using this exception is to avoid the notification procedure with the Commission and a relatively lower administrative burden (Mynarzová, Štverková, 2015).

#### 3.1. Research Description and Methodology

For the research authors used some of the basic methods of the scientific research to obtain information necessary to the complex systemic processing of the issue. The authors predominantly used methods of qualitative research but of quantitative research too. The basic research methods include literature review method and a method of analysis and comparison. With regard to the establishment of General Block Exemption Regulation in the European Union in 2008 was chosen period 2008-2014. In the paper has been used statistical data processed by the European Commission. The full impact of the new GBER, which came into force from 1 July 2014 take effect from 2015. At the time of this paper, unfortunately data for 2015 was not available.

Taking into consideration the main aim of this paper, the following research hypothesis has been put forward:

H1: Aid awarded under block exemption including aid for SMEs (with risk capital) is becoming the dominant legal form of state aid in the European Union.

### 3.2. The Empirical Characteristic of Block-exempted Aid in European Union and Evaluation of GBER

The development of individual aid block exemption in the European Union in the period 2008-2014 highlights Table 1. Based on the analysis of the data presented in the table can be concluded that public aid granted under block exemption shows an increasing trend. Over the period 2008-2014 the aid intensity for the EU-27 (resp. EU-28 since 2013) amounted to 2.6 times, which in 2014 reached a total of 27,5 billion EUR. Over the reporting period, with the exception of 2012 and 2013, were dominated by means of aid for regional development. Aid for SMEs including risk capital in terms of volume was the second largest item, till 2010. This item for the entire period is gradually reduced, from 3 368 million EUR in 2008 to 1 716 million EUR in 2014.

<sup>&</sup>lt;sup>4</sup> Specific rules are defined separately for the agricultural sector in Commission Regulation (EU) no. 702/2014 and for the fisheries and aquaculture sector in Commission Regulation (EU) no. 1388/2014.

Table 1. Block-exempted aid in EU in the period 2008-2014 (million EUR)

	2008	2009	2010	2011	2012	2013	2014
Regional development	4416	7674	6926	6506	6214	6182	9783
Research and development including innovation	139	1256	1496	2136	2930	3335	5100
Environmental protection and energy saving	8	692	729	5377	7686	8152	7864
SMEs including risk capital	3368	3208	2256	2033	1960	1702	1716
Employment	1547	1309	1422	1364	1503	1656	1656
Training	853	923	767	855	1051	762	576
Culture	:	:	:	:	:	17	475
Promotion of export and internationalisation	0	:	:	:	:	:	:
Heritage conservation	0	0	0	:	:	:	:
Social support to individual consumers	:	:	:	:	:	:	351
Other	:	0	0	1	3	1	28
Total	10331	15061	13595	18271	21347	21807	27549

:= not available

Source: European Commission, Statistics, 2015

The new regulation applies for aid in all economic sectors, except those explicitly excluded. The scope of the GBER has been extensively widened. It now covers almost all categories of exception in Article 107(2) and (3). The Commission included a range of new areas that had to be dealt with in the past through notifications into the modernized system of block exemptions. The most important new category include: aid for culture and heritage conservation, aid for broadband infrastructure, aid for sport and multifunctional recreational infrastructures, aid for local infrastructure, support innovative clusters and process or organizational innovation, or support for urban development. The maximum allowable aid intensity for several types of aid has been raised. Many thresholds for notification of individual amounts of aid have also been raised (Phedon, 2014). The newly defined categories of block exemptions applicable in EU Member States from 17. June 2014 are depicted in Table 2.

Among the important changes the new GBER include: simplification of the rules for the evaluation of the incentive effect of the aid, modifying the definition of a firm in difficulty, adjustment of the maximum aid intensities, increased absolute thresholds for application of the block exemption, a tightening of possible sanctions by the European Commission in compliance with the conditions of the GBER, the introduction of the threshold for a mandatory evaluation major support programs and the introduction of a number of incremental changes within specific rules on particular categories (MMR, 2015).

Table 2. Categories of aid in revised GBER

Regional aid		
Aid for small and medium-sized enterprises		
Aid for access to financing for small and medium-sized enterprises		
Aid for research, development and innovation		
Aid for education (training aid)		
Aid for disadvantaged workers and workers with disabilities		
Aid for environmental protection		
Aid to make good the damage caused by certain natural disasters		
Social aid for transport for residents of remote regions		
Aid for broadband infrastructure		
Aid for culture and heritage conservation (including audiovisual works)		
Aid for sport and multifunctional recreational infrastructures		
Aid for local infrastructure		

Source: Commission Regulation (EU) No 651/2014

According to the Commission should go in the future on the most frequently used legal title of public support within the European Union. The original regulation covered approximately 60% of all aid in the EU. The Commission estimates that about 3/4 of original state aid measures and 2/3 amounts

of aid will be exempted according to the revised GBER (Euroskop, 2014a; Bucci, 2014). Block exemptions should in future become the most used legal title for the state aid and Commission expects their applications up to 90% of the state aid measures across the EU.

#### 3.2. State Aid to SMEs through the Prism of New GBER

The European Commission recognises the key role that SMEs play in the economy, on the other hand that they suffer from a number of market failures. Small and medium-sized enterprises represent 99% of all businesses in the EU. To facilitate the development of the economic activities of SMEs, new regulation therefore exempts certain categories of aid when they are granted in favour of SMEs. In this section we focus on these selected categories. Category named "Aid to SMEs" include SME investment aid (Article 17), aid for consultancy (Article 18), SME participation in fairs (Article 19) and a new aid for cooperation costs incurred by enterprises participating in European Territorial Cooperation projects (Article 20). On the basis of these provisions, SMEs can benefit from public support of up to 7.5 million EUR (see table 3).

"Aid for access to finance for SMEs" is another important category, which is intended for small and medium enterprises. SMEs often have difficulties in obtaining capital or loans, given the risk averse nature of certain financial markets and the limited collateral that they may be able to offer. Their limited resources may also restrict their access to information, new technology and potential markets. The Commission considers that the development of the venture funding and improve access for SMEs and small and medium-sized innovative companies with market capitalization of the venture financing ("MidCap") are very important for the EU economy in general. The Commission has created a flexible framework for granting state aid to SMEs at every stage of their development (also in growth), allowing them to innovate to launch new products and ideas and create jobs. If state aid for the provision of venture financing these companies properly targeted, can be an effective means to alleviate the identified market failures and to enable private capital. "Aid for access to finance for SMEs" consists of risk finance aid (Article 21), aid for start-ups (Article 22), aid to alternative trading platforms specialized in SMEs (Article 23), and aid for scouting costs (Article 24). On the threshold of the various types of aid and the aid intensity points table 3.

Table 3. Selected category of aid to SMEs in revised GBER

Category	Threshold value	The aid intensity	
Aid to SMEs			
Investment aid to SMEs	7.5 million EUR	shall not exceed 20 % of the eligible costs in the case of small enterprises; max. 10 % in the case of medium-sized enterprises	
Aid for consultancy in favour of SMEs	2 million EUR	shall not exceed 50%	
Aid to SMEs for participation in fairs	2 million EUR/year	shall not exceed 50%	
Aid for cooperation costs incurred by SMEs participating in European Territorial Cooperation projects	2 million EUR	shall not exceed 50%	
Aid for access to finance for SMEs			
Risk finance aid	15 million EUR	10 % of the risk finance provided to the eligible undertakings prior to their first commercial sale on any market; 40 % referred to in paragraph 5 (b); 60 % of the risk finance for investment provided to eligible undertakings mentioned in paragraph 5 (c) and for follow-on investments in eligible undertakings after the 7-year period mentioned in paragraph 5 (b)	
Aid for start-ups	not defined	the amount of aid provided for each undertaking in Article 22, paragraph 3, 4 and 5 GBER	
Aid to alternative trading platforms specialized in SMEs	not defined	the amount of aid provided for each undertaking in Article 22, paragraph 3, 4 and 5 GBER where the platform operator is a small enterprise	
Aid for scouting costs	not defined	shall not exceed 50%	

Source: Commission Regulation (EU) No 651/2014; MMR, 2015

The new rules establishes that aid up to 15 mil. EUR per year for one company may not go through an assessment of the compatibility of the aid, which in the past the Commission has already carried out in the amount of 1.5 mil. EUR per year for a single company (Euroskop, 2014 b). Schemes in accordance with the rules laid down in the GBER may be notified to the Commission. This allows easier delivery of aid and reduce bureaucracy. There is now a wider range of possible financial instruments to better reflect market practices, but also the phase and the industries in which the respective company operates. The new rules abolished the requirement that the company was 70% financed by own resources. It is still required mandatory participation of private investors to ensure that the aid will only serve to attract new investors than fully replace private funding. The minimum participation of private investors is between 10-60% depending on age and risk of the company (previously it was 50 % in non-assisted areas and 30% in assisted).

#### 4. Conclusion and discussion

In this paper we discussed selected aspects of public support for small and medium-sized enterprises in European Union in the context of the most comprehensive overhaul in the history of State aid control. The aim of this article was through an analysis of public support for SMEs to characterize and identify its trend through the prism of modernized state aid rules in the EU with special emphasis on the area of new block exemption regulations. We analyzed the rules and its impact on state aid to SMEs on the basis of the implementing regulations, adopted by the European Commission in 2008 and 2014 on state aid provided under the General Block Exemption Regulation, which releases Member States from the obligation to notify to the Commission a number of state aid measures.

The nearly four-year process of modernizing the rules governing the provision of public funds aimed at the economic activity of enterprises, while their provision has the potential to distort competition and affect trade between Member States, came to an end. Objective of the reform of state aid in the EU was not only to stimulate economic growth and competitiveness of the internal market, in line with the Europe 2020 strategy, but also the rationalization of law and accelerating decision-making processes in matters of public support (Mynarzová, 2014). Proper application of the new rules, gains in major importance, as these it is necessary to apply not only to aid financed from national sources, but they are also an important condition for the withdrawal of funds from the Structural and Investment Funds in the period 2014-2020. Only time and experience will tell if state aid modernization will bring significant benefits.

The research hypothesis stated in the article was generally confirmed. Block-exempted aid in EU-28 in the period 2008-2014 amounted to 2,6 times. Due to the new GBER measures, whose impact is fully reflected since 2015 can be expected that aid awarded under block exemption is becoming the dominant legal form of state aid in the European Union. The new, broader GBER allows for more types of aid to be exempted without notification. It now covers almost all categories of exception in Article 107(2) and (3). The new general block exemption regulation should cover the vast majority of State aid measures to be granted by Member States: according to some estimates, 3/4 in terms of number and some 2/3 in terms of aid amounts.

As was discussed the amount of state aid provided to small and medium-sized enterprises within the block exempted aid, in the period 2008-2014 gradually decreased. In relation to SMEs, they can benefit from any category of aid covered by the GBER. In addition, the section on aid to SMEs, designed specifically for SMEs, covers investment aid, aid for consultancy services, aid for participation in fairs and a new aid for cooperation costs incurred by SMEs participating in European Territorial Cooperation projects. On the basis of these provisions, SMEs can benefit from public support of up to 7,5 million EUR.

To allow Member State to boost SME's access to finance, the revised GBER now covers a much wider range of enterprises, irrespective of their geographical location, including not only SMEs from seed/start up and expansion stages but also SMEs in later growth stages. To better align with market practices and adapt the funding to the needs of eligible SMEs, the limit of annual funding tranches of 1.5 million EUR has been replaced by an overall limit of funding of 15 million EUR per company. The range of possible instruments and funding architectures has also been widened - including equity, quasi-equity, loans and guarantees, to better reflect market practices. The new risk finance rules are aimed at enhancing the incentives of private sector investors - including institutional ones - to invest and increase their funding activities in the area of SME financing.

The purpose of supporting undertakings from public funds should be to strengthen the global and long-term competitiveness of companies and stimulate business activity. State aid should be an instrument for implementing state economic policy and should be based mainly on horizontal aid, in particular supporting the development of small and medium-sized enterprises. Can be stated that the process of modernization of state aid in European Union described in this article meets those criteria.

#### References

Bucci, V. (2014). The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness. *Italian Antitrust Review*, no 3, pp. 7-23.

Dziwiński, P., Barcik. A. (2014). The Compliance Mechanism in Management of the Company in Terms of European Competition Policy. In Bylok, F. Uberžiová, I., Cichobłaziński, L. (eds.). *Management and managers facing challenges of the 21 sth century: theoretical background and practical applications*. Gödölló: Szent István Egyetemi Kiadó Nonprofit KFT, pp. 140-147.

EUR-Lex (2015). *Commission Regulation (EU) No 651/214*. [online]. [cit. 2015-11-10]. Available: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014R0651&from=EN.

EUR-Lex (2007). *Treaty of Lison amending the Treaty on European Uion and the Treaty Establishing the European Community* [online]. [cit. 2015-11-10]. Available: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12007L/TXT&from=EN.

European Commision (2015). Statistics [online]. [cit. 2015-12-10]. Available: http://ec.europa.eu/eurostat/tgm\_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp\_bex\_sa\_01&language=en.

European Commision (2012). *EU State Aid Modernisation* [online]. [cit. 2014-10-06]. Available: http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0209:FIN:EN:PDF.

Euroskop (2014a). *Hospodářská soutěž v lednu 2014* [online]. [cit. 2014-10-06]. Available: https://www.euroskop.cz/13/23571/clanek/hospodarska-soutez-v-lednu-2014/#.

Euroskop (2014b). *Hospodářská soutěž v květnu 2014* [online]. [cit. 2014-10-06]. Available: https://www.euroskop.cz/13/24206/clanek/hospodarska-soutez-v-kvetnu-2014/.

Havierníková, K. (2014). Convergence of the Slovak Republic Regions. *In 2<sup>nd</sup> International Conference on European Integration (ICEI 2014)*. Ostrava: VŠB-TUO, pp. 228-235.

Janků, M., Mikušová, J. (2013). Veřejné podpory v soutěžním právu EU. Praha: C.H. Beck, 2013.

Jünger, J., Piskorzová, M. (2009). Význam podnikání ve společnosti. In *Przedsiebiorczosc w warunkach Unii Europejskiej. Podnikání v podmínkách Evropské unie*. Katowice: Górnoslaska Wyzsza Szkola Handlowa, Slezská univerzita v Opavě, Urzad Miejski v Chelmku, pp. 213-224.

Křibíková, P., Štverková, H., Humlová, V. (2012). The Research of Organizational Structures in SMEs. In *Zborník vedeckých prác Aktuálne problémy podnikovej sféry 2012*. Bratislava: Ekonomická univerzita Bratislava, Fakulta podnikového manažmentu, Katedra podnihovohospodárska, pp. 251-256.

Kubátová, K. et al. (2013). Fiskální a měnová politika a jejich vliv na mezinárodní podnikání a konkurenceschopnost v zemích EU. Plzeň: Aleš Čeněk, 2013.

Ministerstvo pro místní rozvoj (2015). *Metodické doporučení pro oblast veřejné podpory* [online]. [cit. 2015-12-10]. Available: http://www.strukturalni-fondy.cz/getmedia/9533c967-ce10-4705-8bf9-87cf628d3b10/MDVP-fin-k-vydani-povlade cista.pdf?ext=.pdf.

Mynarzová, M. (2014). Veřejná podpora podniků na vnitřním trhu Evropské unie prizmatem nových pravidel. In *Trendy v podnikání 2014*. Plzeň: Západočeská univerzita v Plzni, 2014.

Mynarzová, M., Kaňa, R. (2015) Selected Aspects of Public Support for Enterprises. In *Peer-Reviewed Conference Proceedings of International Conference Hradec Economic Days 2015*. Hradec Králové: Univerzita Hradec Králové, Fakulta informatiky a managementu, pp. 48-54.

Mynarzová, M., Štverková, H. (2015). Veřejná podpora jako významný faktor konkurenceschopnosti malých a středních podniků na vnitřním trhu Evropské unie. In *Zborník vedeckých prác Aktuálne problémy podnikovej sféry 2015*. Bratislava: Ekonomická univerzita Bratislava, Fakulta podnikového manažmentu, Katedra podnihovohospodárska, pp. 452-461.

Okręglicka, M., Mynarzová M., Kaňa R. (2015). Business Process Maturity in Small and Medium Sized Enterprises. *Polish Journal of Management Studies*, vol. 12, no 1, pp. 121-131.

Phedon, N. (2014). An Economic Assessment of the Usability of the New General Block Exemption Regulation for State Aid (Regulation 651/2014). *European Competition Journal*, vol. 10, iss. 3, pp. 403-417.

Právní rádce (2014). *Veřejné podpory podle nových pravidel* [online]. [cit. 2014-10-06]. Available: http://pravniradce.ihned.cz/c1-57650400-verejne-podpory-podle-novych-pravidel.

Stępniak-Kucharska, A. (2013). Changes in The Rules For Granting State Aid To Enterprises In The European Union. *Comparative Economic Research*, vol. 16, iss. 4, pp.101-120.

Svoboda, P. (2011). Úvod do evropského práva. Praha: C. H. Beck. 2011.

Úřad pro ochranu hospodářské soutěže (2014a). *Stručný průvodce problematikou veřejné podpory* [online]. [cit. 2014-10-06]. Available: https://www.uohs.cz/cs/verejna-podpora/aktuality-z-verejne-podpory/1878-jak-se-orientovat-v-novych-pravidlech-verejne-podpory-nove-informativni-materialy-zverejneny-na-strankach-uradu.html.

Úřad pro ochranu hospodářské soutěže (2014b). *Modernizace veřejné podpory* [online]. [cit. 2014-10-06]. Available: http://www.uohs.cz/cs/informacni-centrum/informacni-listy.html.

Žebroková, V., Pellešová, P. (2014). The Competitiveness of Small and Medium-sized Enterprises in Retail. In *Sborník* příspěvků XII. Mezinárodní vědecké konference Hospodářská politika v členských zemích Evropské unie. Karviná: SU OPF Karviná, pp. 1075-1084.

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### 43. CLUSTERIZATION PROCESSES INFLUENCE TO COMPETITIVENESS: BIOMASS CLUSTERS CASE

Abstract: The main problem of the paper is that today inevitably emerges necessity provide alternative energy, who not undermine environment and save terminative world resources. Biomass clusters can help make it, but simultaneously they promote at business competitiveness growth. The aim of the paper – create a biomass cluster model. In scientific literature biomass clusters working and their influence to business competitiveness is comparatively little investigate. The authors accomplished research results show, that biomass clusters interact with other clusters can compete with them. In energetic sector clusterization processes operate through usable fuel type, apply technologies for him, and later cluster seeks energy users. Paper authors develop clusterization influence to competitiveness methodology suggest clusterization influence analyse separate case. Then upstate opportunity creates cluster at the best of times. Regions compute invoke the regional concentration index and biomass strategic potential. Authors accomplished calculation and researches indicated, that cluster members get direct (marginal profit) and indirect (synergies and multiplication effects) benefit. Theoretical generalizations doing investigate Lithuanian clusters and analyse analogous other scientific researches. Using authors proposes a suggestion, on biomass clusters incoming companies can increase their competitiveness not only energy production sector.

Keywords: biomass cluster, clusterization, competitiveness

JEL Classification: O13 Q23 D40

#### 1. Introduction

Today various European countries, prevailing economic and environmental situation enforces find ways, how cut-price electricity and heat energy, encourage competitiveness, adjust by sustainable development principles. For energy production most consume gas, also nuclear fuel, yet widely use coal. However, all this fuel especially damaging environments, because emerge unnatural, human determines pollution. Nevertheless, mass counties aren't discussing about fuel change, therefore, that not perform fairly researches, who show economic, social and environmental alternative fuel benefit.

One of the most important competitive maintenance implement at this time is clusterization. With her assistance companies, who operate same sector, can concentrate their available resources and create new benefit, penetrate to markets, who theretofore wasn't achievable. Clusters, doing an activity in the renewable energy sector, today is fairly rare. One scientists performed consideration, how general green energetic clusters will affect regional and economic development (McCauley, Stephens, 2012). Also appear consideration about computer-assisted green energetic cluster creation opportunities (Krioukov, 2012). Recently, when develop sustainable development and renewable

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energetic ideas, biomass usage assume major acceleration. Researches indicate, that more active biomass usage can warrant then, when companies, who have different resources, crowd to cluster, who can provide energy producers them required raw produce. That enhances region and country competitiveness, because largely cases use local resources, who can help reduce import of energy resources. Biomass clusters are wide structure, who involve raw produce supply, fatigue and use ranges. Cluster trump distinguishes, that can use municipal or public infrastructure, and then this doesn't require additional expense. Cluster competitiveness most growth them, when exist favourable cluster members geographic position and can easily propose raw produce, remake her and later consumption produce electricity and heat energy. Authors accomplished researches show, that more active biomass usage arouse synergy effects, who assert new workplaces creation, energetic independence, taxes to country budget increase. About biomass clusters creative benefit is performed few researches, then the theme is fairly new. This situation relate to this, that more develop countries yet invoke fossil fuel maintain energetic. Itself cluster structure is much more progress forward – in the world exist various types clusters, who orient either to benefit aim for business, or to value added creation in scientific research basis. Most in the cluster definition creation process distinguishes Porter (1998, 2000), Bernat (1999). Later cluster theory further develops Delgado (2010, 2014). Much more clusters definitions and structures is maintain this scientist's works.

Novelty of the research. Authors' research indicates, that between biomass clusters and other energy clusters exist tough relationship, who evidence both use the same infrastructure, and customers segments. Different business sectors companies' merger to the cluster can increase all companies' competitiveness, because they, concentrate available resources, can single-mindedly create surplus value and contest for consumers.

#### 2. Theoretical background

#### 2.1. Biomass cluster conception

On purpose to give the biomass cluster conception, need excludes main elements, who is concurrent of biomass cluster. Cluster particularity indicated it, that he is much more local nor other types clusters, because expenditure meaning is important, that biomass production they consumers propose wherewith short time and short distance.

In various countries, biomass cluster structure significantly differs. In Italy, biomass cluster is wide spectre – operate in biomass fatigue and use sectors (Francescato, Negrin, 2013). In Germany is an extensive bioeconomic cluster, whose purpose is much effective use wood and other dissolve wastes, that they could create much more surplus value. Cluster unifies above 50 subjects – companies, institutes, other science agencies. In France operate the 71 with biomass usable and innovation concerned clusters. This structures makes scientific researches, engage biomass production and usable, export knowledge and equipment for foreign countries.

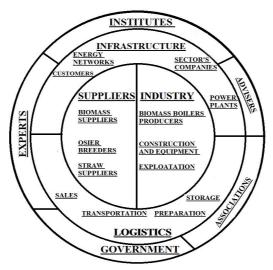


Figure 1. Biomass cluster model

Source: Own work

Ordinarily for biomass cluster activity behave need these elements: biomass source (straw, wood waste place); biomass producers; biomass use equipment producers; market, who use biomass and have the necessary network connects; also essential, that all cluster elements geographically must will be stated near each other.

Beside this elements attributable other institutions, which significantly promote at effectively cluster working support. Near industrial and use potential biomass cluster necessary have experts and creative structures, who assist increase cluster effectiveness.

Cluster can constitute three stages – main, supportive and advisory. On the main stage exist two sectors – biomass suppliers and biomass industry. To suppliers list include all biomass types – wood wastes, biological wastes, straw, osiers, etc. On purpose warrant fixed this fuel expenditure, required biomass demand, who must secure industry, who provide powerhouse systems. Second cluster stage constitutes cluster necessary infrastructure, which is private, public and municipal format. For biomass cluster activity can find new infrastructure units, however main their part is formed for a long time. Important role fall logistic companies - they certain not only biomass preparation and supply of infrastructure units, but also can distribute industry units solutions for foreign countries, enhance cluster competitiveness and importance not only activity country, but also over the countries border. In the advisory stage an important role perform scientific institutes, who suggest innovations for clusters, which can much more effectively cluster work and assist create more surplus value. Government regulates cluster actions legitimation and form opportunities or establish handicap separate cluster activities. In this model exist economic and energetic experts, advisers, associations. This elements assists the cluster work fluent, coordinate, and adjust at possible situation changes. Clusters activity additionally develops establishment research and development centres, who lets companies from different sectors, together with academic institutions and other organizations create new surplus value (Farinha et al., 2014).

Creativity and productivity objective encourage to join to clusters ant this in turn encourage enterprise origin, wish raise business structures effectiveness and productiveness, and is a key to sustainable development, who is emphasize in the world today (Vaz, Nijkamp, 2009). Regions industrial clusters can enlist and connect huge companies, thus forming agglomerate compound. Main provision – specific geographical zone, where all business subjects can unify their strength and resources for teamwork (Lechner, Leyronas, 2012).

Biomass cluster structure lets achieve full regions supply heat, herewith allow electricity production. Instance of common network can provide unprocessed biogas, which use daily, replace natural gas. Then can additionally increase biomass use in energetics, diversify consumption direction

#### 2.2. Biomass cluster relationships with other clusters

Main biomass cluster purpose – using local renewable resources produce heat or electricity, who need region or country. Therefore biomass cluster operates in an environment, where fixate subjects, who operate other fuel basis.

Biomass cluster relationship with other clusters is fairly elaborate complicated – from collaboration to severe competition. Major energetic cluster purpose – provide regions or countries them required energy, which use daily and business aims. Energetic clusters most difference their fuel kind – should dominate fossil or renewable fuel justify cluster, also equipment structures.

Biomass clusters have connects with fuel oil, gas, energy import and energy sector supply clusters. The last-mentioned cluster cover all clusters, because all sector stages are needful service favour. Major biomass cluster relationship with other clusters – common able electricity and heat networks. Main difference – usable fuel type and extraction format – biomass is a local resource, meanwhile, gas and fuel oil is fossil and often import in many countries. Distinguishable energy import cluster, who connect with the electricity business concerned countries.

All kinds fuel use clusters try one purpose – provide country or region him needful energy, operational public infrastructure – heat and electricity networks, every so often power-stations, if they don't belong private sector. Different clusters can supply the same energy demand interdependent – for example, biomass use heat energy production, of gas produce electricity. From the outside clusters operate manufacture, society, state institutions and international settlements for energetic networks, compensation and other aspects.

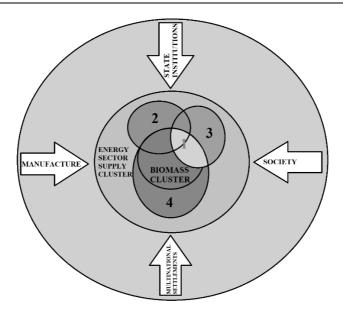


Figure 2. Biomass cluster relationships with other energy clusters structure

Notes

- 1. Concurrent elements Electricity network companies; heat network companies; science institutions;
- 2. Energy import cluster Energy producers in foreign countries; energy import companies, energy trading companies; large energy consumers;
- 3. Gas cluster Gas import companies, gas distributor, heat producers; electricity producers;
- 4. Fuel oil cluster Fuel oil import companies; distribution subjects; storage companies, energy producers, heat producers.

Source: Own work

#### 3. Methodology

On purpose perform biomass cluster influence for competitiveness must find, how change economic several regions situation. In this case usable Variation coefficient. This meaning establishes invoke real gross domestic product (RGDP), fall per capita, deviation from country average.

$$CV^{w} = \frac{\sqrt{\sum_{i=1}^{n} (y_{ii} - y_{i})^{2} * p_{ii}}}{y_{i}}$$
 (1)

 $y_t$  – GDP per capita in analysis region group;

 $p_{it}$  – i-region meaning, considering to this region population t years, that  $\sum_{i=1}^{n} p_{it} = 1$ 

 $y_{it}$  – RGDP per capita in i-region t years.

This index normally conveys in percent, and compare with other regions information.

Next index committed ascertain opportunities pursue biomass business in several country regions. Regional coefficient (RQ) calculates by formula:

$$RQ = \frac{\underline{E}_{ij}}{\underline{E}_{in}} \qquad RQ = \frac{\underline{E}_{ij}}{\underline{E}_{j}}$$

$$E_{n} \qquad E_{n}$$

$$(2)$$

 $E_{ij}$  – employment i industry j region;  $E_j$  – general employment j region;  $E_{in}$  – national employment i industry;  $E_n$  – general national employment.

If regional coefficient exceeds 1, it means, that comparative employment in particular region and in particular industry is upper than average country employment. Accordingly, RQ below 1 demonstrate below than average comparative employment in the particular region industry sector. If RQ upper than 1.25, this show regional specialization in concrete industry sector.

With the view see, how biomass usage influent country economy, necessary ascertain available raw produce and production potential. The potential is importantly evaluate therefore, that will can find the precise influence for country in economic opinion. For potential use negative influence can have constantly change market situation. Therefore, both strategic resources, and strategic potential wise can talk about the potential use grade. They show made production amount ant strategic potential relation:

$$MP = \frac{SP}{SPUG} \tag{3}$$

MP - Made production; SP - Strategic potential; SPRG - Strategic potential use grade

When invokes this formulas, emerge opportunity perform research and verify, which regions is an acceptable investment in the biomass sector and how it affect regions competitiveness.

#### 4. Research and discussion

Biomass cluster with their clear structure bring a various economic benefit and current country processes. Cluster, working in particular region, assist solve both economic and social problems in the region, herewith his strengthen region competitiveness. However cluster with their activity warrant obvious influence of all country, who evidence through prefab taxes plenty and old problems solve. In this case discernible obvious direction, who show, how biomass cluster determines several subject changes and convey their benefit.

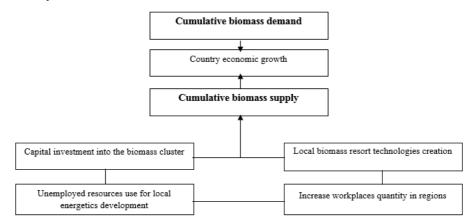


Figure 3. Biomass cluster influence for economic growth

Source: Own work

Discernible this biomass cluster influence for competitiveness directions:

- 1. GDP increase. Biomass cluster encourages regional economy, because they use biomass wastes, and that serve importable fuel. That put create a new business market. If herewith create infrastructure object biomass power-plant, emerge opportunity additional increase GDP, because companies participate power-plant projection, construction and installation processes. When form a new market and sell biomass, the GDF growth rate will remain stable, because the energetic demand fulfilment need over better biomass arrangement. GDP increase is clusterization settle immediate benefit for country (Kettels, 2006).
- 2. Unemployment reduces. Often prevail a regions, who is long-term unemployment problems, therefore, that huge unemployed number compose low qualification peoples, which often not find any work. Biomass cluster assist solve this problems, because cluster activity compatible with unskilled labour force integration for the biomass fatigue purpose. When unemployment reduce, emerge opportunity diversify operative conditions and implements, and warrant operative conditions equality (Kettels, 2013).
- 3. Biomass cluster creates national budget income. They evidence through a VAT, engage employees taxes (income tax, social insurance), also profit tax. Especially increase VAT pickup, because form wood wastes recast to the energy business and reduce energy resources import, increase the transaction number in the country and they will be taxable in the same tax, who later get in a country budget.

- 4. Changes of import structure. Expendable own biomass resources drastic reduce county energy import needs, also reduce gas consumption in towns. It would let achieve, that country foreign trade balance will go to surplus and money, who will be getting for reduce energy import from foreign countries, can be divert for enhance competitiveness.
- 5. Energetic independence consolidation. In this moment exist a situation, when countries produce the energy use gas or coal. This resources disposal just few countries. If for energy production will be using local biomass resources, situation to go into the melting-pot and it would let achieve, that several countries will be externally independent of energy production changes in energy export countries, also for gas supply kinks and politic shading, because a country certain energetic independence.

The biomass cluster benefit of country economy is fairly clear and versatile. To develop this type clusters can achieve clear benefit both particular country, and assessment macroeconomic opinion. When analyse opportunities create biomass cluster, was chosen Lithuania information on purpose explore, whether worth in a country establish a biomass cluster.

As is appreciate differences, who show the variation coefficient, abstracted region, who constitute five municipalities. In three municipalities main fuel is biomass wastes.

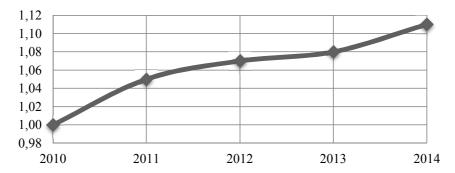


Figure 4. Variation coefficient changes

Source: Own work

Main index growth reason is concerned with the increase of the biomass usage. Two municipalities through the analytical period merge at biomass consumption, their regions created new work places and that increase GDP per capita.

Noticeable a tendency, that high regional concentration distinction a regions, which forestry level is over 40%, and dominate fuel type of energy production is biomass. This regions unemployment level is till 13% and many cases is less nor regions, who regional concentration in this sector is low. In this case present example, how calculated highest RQ in possession of municipality result.

$$LQ = \frac{\frac{E_{ij}}{E_{j}}}{\frac{E_{in}}{E_{in}}} = \frac{\frac{131}{6100}}{\frac{10076}{1319000}} = 2,811$$

This municipality distinguishes that their forestry level is 59.5 %, and dominate fuel type in this region is biomass. This situation shows that the biomass fatigue sector engage enough employees amount and herewith prepared biomass from wastes expendable municipality energetic needs serve. Unemployment level in the region is 12.7 % (2015).

Computationally made production amount noticeable, that Lithuania has huge biomass resources, who at this moment not fully use.

Appreciable opportunities to create biomass cluster, is necessary evaluate now expendable fuel amount and exist their potential. In practice all Lithuania regions exist favourable situation to create biomass cluster, because just less biomass potential part is expendable in this moment, so cluster not lacking a fuel for energy production. Even these regions, where forest is comparatively few, they not full exploitation, so use wood wastes can not only provide heat for towns, but also can produce electricity. In this case invoke the same municipality information.

$$MP = \frac{SP}{SPUG} = \frac{7710000}{70300} = 109,61$$

Results show, that strategic potential use grade is not high, however municipality can fully serve their heat energy demand. Given the opportunity, possible fuel export, who help cluster activity in the region make more effective and additionally useful for cluster members.

Biomass cluster influence to competitiveness evaluation much need information, who concerned with available resources use and opportunities create new workplaces in the sector. Favourable create cluster in regions with large wood wastes amount, herewith invest in biomass maintain energetic, refuse fossil gas and coal.

#### 5. Conclusion

This research indicates, that biomass cluster influence for competitiveness convey local renewable fuel consumption for energy produce, creating new workplaces in the region, increasing regional concentration and reducing energetic resources import from foreign countries. Analysis show, that Lithuanian case, use just few available reserves part, and biomass cluster assists retain a lower unemployment level in regions nor in that case, when regions spend import fuel. Biomass cluster model made considering to environmental influence – this is local model, who impact made government and they strengthen new scientific researches, which assist make work more effective. Pending cluster is concerned with other energy clusters activity both competitive and additional connects. Clusters activity is rational, when cluster operates in a local environment, when not a large biomass transportation and logistics cost. For research invoke formulas let search, which regions biomass cluster is best required and where will be get largest benefit, combine different resources, who organization are disposed. This allows investors shortly analyse regions, and that helps perform investment decisions. Made cluster model let's create a structure, who capability provides region necessary energy for bottom price, engage local citizens and create new economic value.

#### References

Bernat, A. G. (1999). Industry clusters and rural labor markets. Southern Rural Sociology, vol. 15, iss. 1, pp. 13-23.

Delgado, M., Porter, M. E. Stern, S. (2010). Clusters and entrepreneurship. *Journal of Economic Geography*, vol. 10, iss. 4, pp. 495-518.

Delgado, M., Porter, M. E. Stern, S. (2014). Clusters, convergence, and economic performance. *Research Policy*, vol. 43, iss. 10, pp. 1785-1799.

Do Carmo Farinha, L. M., De Matos Ferreira, J. J., Borges Gouvei, J. J. (2014). Innovation and competitiveness: a high-tech cluster approach. *The Romanian Review Precision Mechanics, Optics & Mechatronics*, vol. 45, iss. 45, pp. 41-48.

Francescato V., Negrin M. (2013). *The cluster of biomass producers, Italian biomass association (AEIL)* [online]. [cit. 2015-11-30]. Available: http://www.congresobioenergia.org/ponencias/AIEL.pdf.

Ketels, C., Lindqvist, G., Sölvell, O. (2006). *Cluster initiatives in developing and transition economies*. Stockholm: Center for Strategy and Competitiveness, 2006.

Ketels, C., Lindqvist, G., Sölvell, O. (2013). *The Cluster Initiative Greenbook (2 edition)*. Stockholm: Ivory Tower Publishers, 2013.

Krioukov, A., Alspaugh, S., Mohan, P., Dawson-Haggerty, S., Culler, D. E., Katz, R.H. (2012). *Design and Evaluation of an Energy Agile Computing Cluster. Electrical Engineering and Computer Sciences*. Technical Report No. UCB/EECS-2012-13. University of California.

Lechner, C., Leyronas C. (2012). The competitive advantage of cluster firms: the priority of regional network position over extra-regional networks – a study of a French high-tech cluster. *Entrepreneurship & Regional Development*, vol. 24, iss. 5-6, pp. 457-473.

McCauley, S. M., Stephens, J. C. (2013). Green energy clusters and socio-technical transitions: analysis of a sustainable energy cluster for regional economic development in Central Massachusetts, USA. *Sustainability Science*, vol. 7, iss. 2, pp. 213-225.

Porter, M. E. (1998). On competition. Cambridge, MA: Harvard Business School Press, 1998.

Porter, M. E. (2000). Location, Clusters and the "New" Mocroeconomics of Competition. *Economic Development Quarterly*, vol. 14, iss. 1, pp. 15-34.

Vaz, T. D. N., Nijkamp, P. (2008). Knowledge and innovation: The strings between global and local dimensions of sustainable growth. *Entrepreneurship & Regional Development*, vol. 21, iss. 4, pp. 441-455.

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### 44. METHODOLOGY FOR QUALITY ASSESSMENT WITHIN TRANSPORTATION CHAIN

**Abstract:** This article is focused on the methodology for quality assessment, which can be applied within the frame of the whole transportation chain. It describes the newest approach to monitoring quality within companies by using various types of appropriate software. It is currently a pressing problem to identify quality not only before the start of transportation and during it but also after the end of transportation. In the area of service provision in transport, it is important to take into account the fact that the requirements of customers change over time.

Keywords: quality assessment, quality management, railway transport, transportation

**JEL Classification:** L92

#### 1. Introduction

Situation in the transport market is currently characterized by high competition, fluctuating demand and shorter product life cycle. As pointed out by Lemanska-Majdzik et al. (2015) these factors are putting pressure on the managers of railway undertakings towards cost reduction, flexibility in services offer, efficiency of quality management and technologies of transport and shipping processes, transportation logistics and risk management. According Grzegorzewska (2014) reserves should be sought not only within the railway companies, but also in more efficient management of supplier-customer relations.

One of the goals of a railway company that operates in the area of services in railway freight transport is to obtain a lasting market share with a view to increasing it (Majerčák, 2010). The goal is to point out that the specific features of company environment necessitate them to search for new management approaches that fit in with the new challenges (Gorzen-Mitka, Okreglicka, 2014). As indicated by Clempner (2014) this goal can be achieved through continuous monitoring and evaluation of the quality of the services provided, taking into account the specific characteristics of all the parts of the transportation process.

According to Chesbrough and Rosenbloom (2002) "important determinant for the customer when deciding about the use or non-use of the services of the transport company becomes the quality of provided services". Therefore, if we want to effectively assess the quality of services, it is necessary to take into account the time factor, which is possible through dynamic models that take into account the procedural character of provided services (Guha et al., 1997; Klapita, 2013).

As pointed out by Chong Un Pyon et al. (2011) here exist several models of service quality abroad, which are often concerned about this problem in different aspects, different from conditions of railway

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transport, which for railway transport implies that it is a necessity to look for more suitable approaches. As shown Gitlow (1989), in service quality, rating in a company it is important to take in mind approaches of those methods, techniques and models of quality, which connect objective and subjective aspects of rating that was the impulse for creating a scientific research, which one of the outputs is this article.

The goal of the research was solving the current issue necessary to keep railway transport on track of the transport market concerning the search for innovative options of service quality identification.

The goal of this article is the characteristics of authors created methodology as a progressive approach towards service quality rating, which allows to identify the current service quality level, to find the cause of dissatisfaction of customers and company employees, considering approach by Pfohl et al. (2008). This approach also not only finds the pros and cons of the company, but also its suppliers and competition as presented by Heidari and Loucopoulos (2014). It offers relevant data for the process of constant service quality improvement and brings qualified, measurable outputs with the option of evaluating trends in service quality according to Brnjac et al. (2010).

This model, verified in practice, can be used in a uniform manner. It is unified and thus applicable in different branches and types of business.

#### 2. Methodology of research

For the needs within the frame of research carried out by the Department of Railway Transport, in collaboration with railway companies, a model was applied, which takes into account the characteristics of transportation by linking the perception of service quality in ordinary and extraordinary operations. That means, it specifies the partial processes necessary during the valuation of the service quality offered, whereby two different dimensions of quality, namely the routine dimension and the dimension of special conditions, are distinguished. Both are also possible to observe also after the realization of transportation as mentioned by Majerčáková (2012).

The research was focused on the definition of characteristics for normal operation and for special conditions, and a new methodology for process-oriented quality management was found and applied to railway companies. The routine dimension is typical of normal operation, when the service is provided in normal conditions. At that time, the expected process of transportation is followed, so this process is known. The process of service provision is a routine matter for employees and is standardized (Klapita, 2013).

With regard to the customers' expectations the characteristics of the dimension of special conditions in special situations only. These may be caused by weaker performance, a mistake made by the transporter as the service provider, a mistake caused by the manager of infrastructure or exceptionalities arising in connection with the necessity of providing unusual access to a customer who requires this individuality (Nedeliaková, 2014).

These characteristics simultaneously also include supplementary performances in customer care, which the customer does not expect, for example after completion of the transportation itself. Generally, according to the research, the expectations of the customer that his special requirements will be met quickly are relatively low (Sekulová, 2013). In that case, an opportunity arises for the transporter to exceed the expectations and leave the impression of good quality and a high degree of competence in solving problems, even after the end of transportation (Vetráková, 2013).

#### 2.1. Characteristics for ordinary and extraordinary operation

The selection of characteristics for ordinary and extraordinary operation was within the frame of research realized considering the interconnection with their possibilities of assessment by means of objective and subjective methods, because the set of characteristics is varied and some of them are demanding in qualification (Nedeliaková, 2013). For assessment, the resulting level of quality is necessary to connect the results of the measuring and rating by both types of methods (eventually with the exploitation of a combination of several methods) (Skrinjar et al. 2015). All these principles were based on a correctly defined goal of quality in the transportation chain of railway freight transport, as well as the expectations and needs of customers resulting from the research conducted (Sujanova, 2012).

At the same time, for the transportation chain six basic characteristics of quality were defined in the research, in six quality areas such as information, availability, reality, flexibility, customer care and understanding and knowledge of customers (Nedeliaková, 2013).

Characters of quality were closer explained following way:

- Information = systematic providing of knowledge about the system of railway freight transport, which have to assist in the realization of acts after the execution of transportation.
- Availability = scope of the process in terms of time, frequency, geography and suitability of railway operation techniques.
- Reality = temporal, spatial and informational security of the phase after transportation, including ensuring the intactness of the consignment after transportation.
- Flexibility = speed of handling complaints in case other additional customer requirements after transportation, including exact invoicing of fees for transportation.
- Customer care = reinsurance of operations related with unloading of consignment in destination station, solution the problems that arise after the end of the transportation.
- Understanding and knowledge of customer = help and support customer needs, knowledge of customer needs (Nedeliaková, 2013).

#### 2.2. Algorithm for quality assessment

The algorithm for quality assessment was made in accordance with the Figure 1. The figure documents the activities that were within the frame of the research conducted and served for the identification of customers and the determination of the needs of customers and processes, which are necessary to be able to reach the required quality. After detailed findings and searching, this scheme was used as a so-called map of quality planning, because the quality planning underway follows these systematic steps.

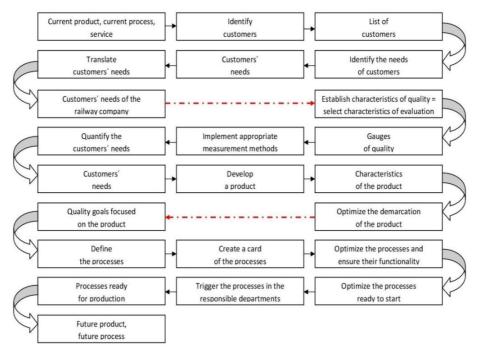


Figure 1. Algorithm for quality assessment within transportation chain

Source: Nedeliaková, 2015

#### 3. Results and Discussion

The selection of characteristics within the frame of the research comes from practical operation, experience with contact with customers with regard to their interest, requirements, needs and the factors that are attractive to them and observations of the decisions about the utilization of railway freight transport and the purpose-built unit structure in a formally organized railway company (Nedeliaková, 2013).

The assessment was characterized by the way in which the ratings were monitored not only for the transportation services but also for the related equipment at railway stations and in accordance with the mentioned data for a period of one year, during which gaps were identified in the exact definitions of the characteristics of quality.

This methodology allows the monitoring of the quality of the processes provided throughout the transportation chain, thus encompassing the quality before the realization of the transportation, during it and after the end of the transportation. In comparison with previously used methods, this methodology is unique, universal and applicable to various types of companies in the context of the introduction of new trends in quality management. Therefore it was supported by software solutions using various quality areas defined within the research and software support through BPMN (Business Process Modeling Notation), EPC (Event-driven Process Chain) and UML (Unified Modeling Language). Figure 2 demonstrates the fragment of Unified Modeling Language application.

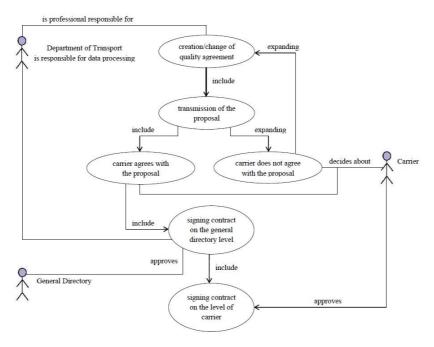


Figure 2. The fragment of Unified Modeling Language application

Source: Nedeliaková et al., 2015

Various software solutions were used to gain a better understanding of the processes and to make managers' work easier. These software tools have never been used in railway companies before. This research allowed the use of a new approach to obtain clearer management attitudes.

#### 4. Conclusion

Constantly changing market environment is largely affected by the need to respond flexibly with appropriate change management, which is extremely difficult and in terms of railway transport very specific task (Poliak, 2014). A railway undertaking is affected by risks of internal environment, external, similarly interactive. There are many causes of risk formation and their consequences that significantly affect the operation of any enterprise and relate to personnel, technical or technological problems. A literature review shows that the risks may relate to strategic decisions, crisis, but also the service quality. Important is the ability of a railway undertaking to immediately use appropriate methodology for quality assessment (Poliak, Križanová, 2014).

The benefit to research is a newly created methodology, with exact definitions and detailed characteristics of quality, which are designed for the management of railway companies. The benefits of the methodology consist of the clarity and the selection of the new characteristics for rating the quality of processes and services. It was created universally and therefore with the possibility of application to the whole transportation chain and in accordance with the specific conditions in different companies.

The research revealed that the biggest problems occur in technical securing within the evaluated services, but they are also related to insufficient equipment or insufficient conditions and the number of certain types of wagons. These problems interfere with the phase of the transportation chain after the end of the transportation and play an important role in normal and extraordinary operation (Nedeliaková, 2015).

This unified quality rating system, supported by appropriate software solutions, can be applied for all kinds of service, departments and companies. It is inevitable in terms of strategic decisions in practical company operations. It can become a way out for regulation of service, which increase in quality is urgent condition for keeping companies in competitive business environment.

#### Acknowledgements

This paper was supported by Grant Agency KEGA [No 026ŽU-4/2015] Innovative approaches in the system of teaching management in the railway transport study programme with a focus on the application of dynamic quality models in railway transport.

#### References

21th International Economic Conference of Sibiu 2014, IECS Prospects of Economic Recovery in a Volatile International Context: Major Obstacles, Initiatives and Projects. Procedia Economics and Finance. Sibiu, pp. 402-409.

Brnjac, N., Abramovic, B., Maslaric, M. (2010). Forecasting Intermodal Transport Requirements on corridor X. *Promettraffic & transportation*, vol. 22, iss. 4, pp. 303-307.

Chesbrough, H., Rosenbloom, R.S. (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Oxford Journals*, Social Sciences, Industrial and Corporate Change, vol. 11, iss. 3, pp. 529-555.

Chong Un Pyon, Ji Young Woo, Sang Chan Park, (2011). Service improvement by business process management using customer complaints in financial service industry. *Expert Systems with Applications*, vol. 38, iss. 4, pp. 3267-3279.

Clempner, J., (2014). Verifying soundness of business processes: A decision process. Petri nets approach, *Expert Systems with Applications*, vol. 41, iss. 11, pp. 5030-5040.

Gitlow, H. et al. (1989). Tools and Methods for Improvement of Quality. Richard D. Irwin, Inc., USA, p. 678.

Gorzen-Mitka, I., Okreglicka, M. (2014). Improving Decision Making in Complexity Environment. *Procedia Economics and Finance* Vol. 16, pp. 402-409.

Grzegorzewska, E., Stasiak-Betlejewska, R. (2014). The Influence of Global Crisis on Financial Liquidity in Corporate Debt of the Furniture Sector in Poland. Drvna industrija. vol 65, iss 4, pp. 315-322.

Guha, S., Grover, V., Kettinger, W. J., Teng, J.T.C. (1997). Business process change and organizational performance: Exploring an antecedent model, *Journal of Management Information Systems*, vol. 14, iss. 1, pp. 119-154.

Heidari, F., Loucopoulos, P. (2014). Quality evaluation framework (QEF): Modeling and evaluating quality of business processes. *International Journal of Accounting Information Systems*, vol. 15, iss. 3, pp. 193-223.

Klapita, V., Majerčáková, E. (2013). Application of RFID technology in rail freight transport in Slovak Republic. In: *Transport Means 2013*. Proceedings of the 17th International Conference. Lithuania: Kaunas University of Technology, pp. 133-136.

Lemanska-Majdzik, A., Okreglicka, M. (2015). Business Process Management in an Enterprise - Determinants of the Implementation and Expected Advantages. In *Liberec Economic Forum 2015*. Proceedings of the 12th International Conference. Liberec: Technical University of Liberec, pp. 305-314.

Majerčák, J., Nedeliak, I. (2010). Practical experiences with modeling of IT systems and business processes. In: 6th Forum of Rail Transport, Bratislava, 2010, pp. 81-84.

Majerčáková, E., Majerčák, P. (2012). Railway transport market and factors of its development, Enterprise economy and management. Scientific magazine about enterprise economy, management, marketing and logistics, no. 2.

Nedeliaková, E. (2015). Innovative approaches in the system of teaching management in the railway transport study programme with a focus on the application of dynamic quality models in railway transport, KEGA 026ŽU-4/2015.

Nedeliaková, E. et al. (2014). Services in railway passenger transport and its evaluation by dynamic models. In: *Transport means 2014*. Kaunas: University of Technology, 2014, pp. 227-230.

Nedeliaková, E., Dolinayová, A., Nedeliak, I. (2013). *Methods of evaluation of the transportation services quality.* Žilina: EDIS, 2013.

Nedeliaková, E., Nedeliak, I., Majerčák, P. (2014). Research of services quality after the end of transportation in railway freight transport. In *Management innovation and business: 2nd international conference on Management innovation and business ICMIBI 2014*, Singapore: Singapore Management and Sports Science Institute, 2014, pp. 54-61.

Nedeliaková, E., Panák, M. (2015). New Trend in process-oriented quality management. Procedia Economics and Finance, Elsevier, vol. 34, pp. 172-179.

Nedeliaková, E., Sekulová, J., Nedeliak, I. (2015). Application of Dynamic Models as a New Trend in Quality Management. Procedia Economics and Finance, Elsevier, vol. 34, pp. 180-186.

Pfohl, H.C. et al. (2008). Konzeption des Supply Chain Risikomanagements. In Sicherheit und Risikomanagement in der Supply Chain: Gestaltungsansätze und praktische Umsetzung. Hamburg: Deutscher Verkehrs-Verlag, pp. 7-94.

Poliak, M. et al. (2014). The importance of the risk in public passenger transport financing. In: Communications: scientific letters of the University of Žilina, vol. 16, no. 2, pp. 92-97.

Poliak, M., Križanová, A. et al. (2014). The influence of contract form choice of the transport services ensuring on performance contracting entity requirement. In *Transport Problems = Problemy Transportu*: international scientific journal, vol. 9, iss. 4, pp. 153-161.

Sekulová, J., Nedeliak, I. (2013). Utilization of GAP model in providing of services in the railway freight transport. Perner's Contacts, 8th ed. vol. 4, pp. 67-75.

Skrinjar, J. P., Abramovic, B., Brnjac, N. (2015). The use of game theory in urban transport planning. *Tehnicki Vjesnik-Technical Gazette*. vol. 22, iss. 6, pp. 1617-1621.

Sujanova, J. et al. (2012). (Aspects of Knowledge Management in Slovak Industrial Enterprises. In 13th European Conference on Knowledge Management (ECKM), vol. 1 and 2, Univ Politecnica Cartagena, Spain, pp. 1135-1144.

Vetráková M., Potkány, M., Hitka, M. (2013). Outsourcing of facility management. In: *E&M Economics and Management*, vol. 16, no. 1/2013, Liberec: TU Liberec, 2013, pp. 80-92.

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## 45. THE IMPORTANCE OF DYNAMIC MODELS IN PROCESS-ORIENTED QUALITY MANAGEMENT

**Abstract:** This article describes the newest results of a research focused on service quality. These innovative solutions have been applied within the framework of railway transport and they are useful for various sectors. The importance of dynamic models as a new trend in quality management has a crucial impact on customers considering their future use of company services. The proposed software for monitoring service quality is based on dynamic models. These models represent a support tool for increasing the service quality in the area of the whole company.

Keywords: dynamic models, quality management, process

**JEL Classification:** L92

#### 1. Introduction

Presented by (Brnjac et al., 2010) high level of the quality is one of the strategic factors in any plan for company health. As shown by Chesbrough and Rosenbloom (2002) viewing quality from a societal perspective within the transport is profound because it includes customers, carriers, manufacturers and the community (Heidari, Loucopoulos, 2014). Railway transport is environmentally conscious so it is necessary to support its position on the transport market through the high quality of provided services as pointed out by (Chong Un Pyon et al., 2011). Its crucial advantages include also the highest level of security among the land transport modes, the lowest specific energy consumption, high degree of safety and others (Brnjac et al., 2010). According to the president of the International Union for Road-Rail Combined Transport "these factors must be monitored by the management of railway companies so it goes hand in hand with the world traffic trends". Characteristic is connecting of speed, safety, and economy, while highlighting quality as an integral part of the services offered in passenger and freight transport.

This perspective on quality has many benefits for everyone, for society, for the environment for all of the participants of transport (Klapita, 2013; Gorzen-Mitka, Okreglicka, 2014).

The way to success leads mostly through the quality services and rational operation of traffic and transport processes" as it was declared by International Union of Railway Transport.

Improvement of the quality of services provided, the removal of existing deficiencies and regular monitoring of needs make it possible to convince the customer that the primary objective of the company is its satisfaction (Bianchi, 2001). The customer will be convinced that he opted for the best partner to transport (UIC, 2015).

Nowadays, the important approaches mainly focus on processing (Antony, Banuelas, 2002). In accordance with the above-mentioned facts, it is essential to provide services within transport with

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integrated planning and process organization, which is the activity of developing the products and processes required to meet customers' needs as it is described by Drucker (1999). It involves a number of universal steps, as defined by Juran and DeFeo:

- define the customers:
- determine the customer needs;
- develop product and service features to meet the customer needs;
- develop processes to deliver the product and service features;
- transfer the resulting plans to operational personnel (Juran, 2005).

The paper emphasizes the need for efficient quality management through new tools and definitions solved within the research. According to the research which have been solved at the University of Žilina in cooperation with international transport organizations, dynamic models represent one of the best approaches to the quality improvement. They are characterized by their ability to see the transport process upon the time, in the whole transportation chain, to catch various changes of customer's behavior in time and the needs, requirements and expectations (Yun, Chua, 2002). Investment in quality improvement is worthwhile and it brings significant advantages for companies pointed out by Lemanska-Majdzik and Okreglicka (2015).

As Pfohl et al. (2008) emphasize "service quality in railway transport is currently a frequently discussed problem, especially in view of the existing competitive environment". Railway undertakings need to find ways to identify quality through which they can precisely intercept the procedural character of the services provided (Majerčáková, 2012).

The purpose of process-oriented management is to lead a company in the direction of never-ending and continuous improvement which is pursued also by continual application of eligible quality improvement tools. The research shows that the dynamic quality models are able to connect subjective and objective assessment of the quality (Sujanova, 2012).

The goal of this paper is to highlight the options for using dynamic models of service quality evaluation just in the area of railway transport. The models that are mentioned in the paper follow the modern trend in quality management and the procedural character of services that are unique, unrepeatable and constantly changing (Youssef et al., 1996).

Important determinant for the customer when deciding about the use or non-use of the services of the transport company becomes the quality of provided services (Coronado, Antony, 2002). Therefore, if we want to effectively assess the quality of services, it is necessary to take into account the time factor, and models that take into account the procedural character of provided services (Brown, 1992). Consideration of the time factor is based on the recognition that customer needs and requirements, with respect to the services provided, are constantly changing (Welch, Welch, 2005).

#### 2. Importance of dynamic quality models

Nowadays several dynamic models of quality are used in the area of services. Among them can be mentioned the Boulding model, Stauss and Neuhaus model, the Liljander and Strandvik model, the Raymond Fisk model which were theoretically described in various publications. The Boulding model and the Stauss and Neuhaus model have never been studied in the field of their using in the transport sector before. Hence, this research brings new view on this issue.

The Boulding model is based on the factor of time. It means that it is based on the assumption that the needs and expectations of customers change over time and ultimately can cause various types of customer behavior towards the service provider (Nedeliaková, 2013).

The Stauss and Neuhaus model, compared with other models, disputes the fact that a high degree of satisfaction automatically leads to a high level of customer loyalty. That argument is based on reasons like the diversity of customer needs and the availability of alternatives (Zabaha et al., 1998). In the model we can distinguish the following types of customers: satisfied customers with growing requirements, stable satisfied customers, resignedly satisfied customers, stable dissatisfied customers and dissatisfied customers with rising requirements.

In research of qualitative model of satisfaction is not enough rating of global (overall) satisfaction but much more is needed the detection of potential threats among the satisfied customers. Model distinguishes customers into five categories and stresses that the perception of service quality is constantly changing.

In the model Stauss and Neuhaus we distinguish three types of satisfied customers and two types of unsatisfied customers:

- satisfied customer with growing requirements. This customer is characterized by high satisfaction
  with the service provider. Requirements of customer constantly growing up and company must try
  to satisfy these requirements;
- stably satisfied customer, which is characterized with passive behavior. The company is not forced raise the performance;
- resignedly satisfied customer, which manifest the some indifference towards relation to company.
   This attitude can be caused by lack of different alternatives;
- stably unsatisfied customer, which manifest a low level of activity and he is unsatisfied with service of company (Skrinjar et al., 2015).

Unsatisfied customer with growing requirements, which shows his dissatisfaction towards to provider of service. The customer should not choose this provider of service again. According to Skrinjar et al. (2015) "when the customer is satisfied, it does not mean that it will be forever, depends on many factors, which his decision about using of railway transport may change". Figure 1 characterizes division of customers according its new approach.

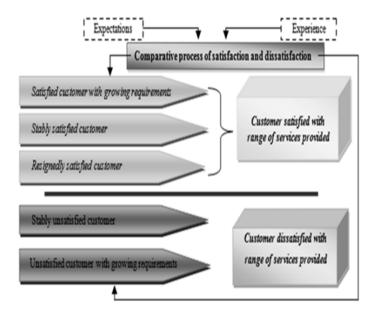


Figure 1. Division of customers according new approach

Source: Nedeliaková, 2015

The disadvantage of original model Stauss and Neuhauss is that the model not considering with determining the criteria of evaluation. For this reason were the principles of model and research for each specific customer of railway freight undertaking and customer specific rail freight carrier supplemented by the evaluation criteria. The research involved 2930 cases of cargo manipulation, and 140 participants at 20 different line sections.

Criteria were divided into type of wagon, technical condition of the wagon, -time necessary on placing of empty wagons at disposal, delivery time of loaded wagon after loading, time of placing wagon on unloading and delivery time of empty wagon after completion unloading, cleanness of wagon. Results of the research with adapted criteria are characterized as in Figure 2.

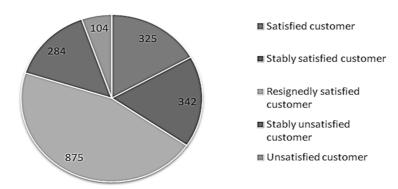


Figure 2. Research results with adapted criteria

Source: Nedeliaková, 2015

The research has shown that the selected dynamic models by Boulding, Stauss and Neuhaus are applicable to practical operation in terms of railway transport because they deal with the dynamic aspects of quality and satisfaction of carriers. Using these models, the overall satisfaction with the services provided can be viewed, which means from the beginning to the end of the service provision (KEGA 026ŽU-4/2015).

Dynamic models can be applied to the area of railway transport and another sectors according to the steps shown below in the figure 3.

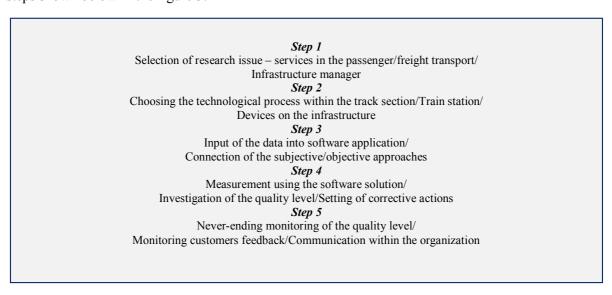


Figure 3. Application of dynamic models

Source: Nedeliaková, Panák, 2015

For the individual steps in applying dynamic models, a methodology of procedures has been established – algorithms using individual methods. Compliance with these procedures may result in full implementation of the dynamic models in operation, thereby enhancing the performance and reflecting the quality that carriers actually require (Nedeliaková, 2013).

#### 3. Results and Discussion

For more effective monitoring of the quality of the services provided and quality monitoring of the transportation process, it is possible to support the creation and use of dynamic models in practice through a software application.

To address this issue, the research at the Department of Railway Transport proposes a simple application that consists of a GUI interface. Data about the existing tracks and the trains operate on the tracks in the Slovak Republic were transmitted to this software application, which is shown in the following figure 4. This interface is currently being extended to include a module to work with dynamic models (the transition is shown by a red arrow in the picture).

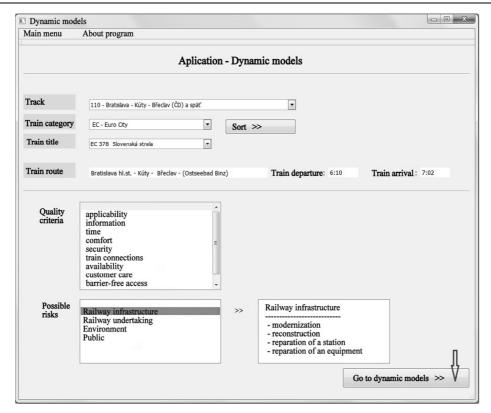


Figure 4. The fragment of new software solution

Source: Nedeliaková et al., 2015

This new solution respects systemic approach, which leads to the prevention of poor quality, reduction the losses which are caused by non-quality of system, help to increase customer satisfaction and control system of service quality in the company (Poliak, Križanová, 2014).

#### 4. Conclusion

Providing of complex services and tailoring of specific solutions is not only the way how to survive in strong competition but also the way how to find and keep a stabile customer. Suitably chosen methodology for improving services quality and for identifying the level of quality of transportation services must meet the requirements in the environment transport market and in specific examples, for a selected stations and track sections to provide relevant results (Nedeliaková, 2014).

This methodology allows monitoring quality of processes provided throughout the transportation chain, therefore before the realization the transportation, during it and after the ending of the transportation. In addition, this new approach of improving quality services in railway transport enables immediate reactions to rapidly changing market environment, especially in relation to customers' needs.

Among the basic advantages which bring using of dynamic quality models belong mainly provisions of documents for improving the quality plan, analysis or processing (Vetráková, 2013). From the economical point of view, the customer is always the one who need to spend certain funds and he expects adequate quality of services, in order to be his needs met. Therefore, there must be a corresponding ratio of quality and price (Sekulová, 2013).

The universal models can be used in any industry or company. Models provide interesting and new perspective on service quality and show often hidden bottlenecks throughout the process of providing service.

#### Acknowledgements

This paper was supported by Grant Agency KEGA [No 026ŽU-4/2015] Innovative approaches in the system of teaching management in the railway transport study programme with a focus on the application of dynamic quality models in railway transport.

#### References

Antony, J., Banuelas, R. (2002). Key Ingredients for the Effective Implementation of Six Sigma Program. *Measuring Business Excellence*, vol. 6(4), pp. 20-27.

Bianchi, A.J. (2001). Management indicators model to evaluate performance of IT organizations. In *Management of Engineering and Technology, PICMET '01*, Portland International Conference. pp. 217-229.

Brnjac, N., Abramovic, B., Maslaric, M. (2010). Forecasting Intermodal Transport Requirements on corridor X. *Promettraffic & transportation*, vol. 22, iss. 4, pp. 303-307.

Brown, A. (1992). Industrial Experience with Total Quality Management. *Total Quality Management*, vol. 3, iss. 2, pp. 147-156.

Coronado, R. B., Antony, J. (2002). Critical Success Factors for the Successful Implementation of Six Sigma Projects in Organizations. *The TQM Magazine*, vol.14, iss. 2, pp. 92-99.

Chesbrough, H., Rosenbloom, R.S. (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Oxford Journals, Social Sciences*, Industrial and Corporate Change, vol. 11, iss. 3, pp. 529-555.

Chong U. P., Ji Young W., Sang Chan P., (2011). Service improvement by business process management using customer complaints in financial service industry. *Expert Systems with Applications*, vol. 8, iss. 4, pp. 3267-3279.

Drucker, P. F. (1999). Management Challenges for the 21st Century. New York: HarperCollins Publishers, Inc., 1999.

Gorzen-Mitka, I., Okreglicka, M. (2014). Improving Decision Making in Complexity Environment. In 21th International Economic Conference of Sibiu 2014, IECS Prospects of Economic Recovery in a Volatile International Context: Major Obstacles, Initiatives and Projects, Procedia Economics and Finance. Sibiu, pp. 402-409.

Heidari, F., Loucopoulos, P. (2014). Quality evaluation framework (QEF): Modeling and evaluating quality of business processes. *International Journal of Accounting Information Systems*, vol. 15, iss. 3, pp. 193-223.

International Union of Railway Transport (2015). UIC. [online]. [cit. 2015-12-12]. Available: http://www.uic.org

International Union for Road-Rail Combined Transport (2015). Annual Report of the World Transport Scientific Congress, New York, 2015.

Juran, J.M. (2005). Critical Evaluations in Business and Management. London and New York: Routledge, Taylor & Francis Group, 2005.

Klapita, V., Majerčáková, E. (2013). Application of RFID technology in rail freight transport in Slovak Republic. In *Transport Means 2013 Proceedings of the 17th International Conference*. Kaunas University of Technology, Lithuania, pp. 133-136.

Lemanska-Majdzik, A., Okreglicka, M. (2015). Business Process Management in an Enterprise - Determinants of the Implementation and Expected Advantages. In *Liberec Economic Forum 2015*. Proceedings of the 12th International Conference. Liberec: Technical University of Liberec, pp. 305-314.

Majerčáková, E., Majerčák, P. (2012). Railway transport market and factors of its development. Enterprise economy and management. *Scientific magazine about enterprise economy, management, marketing and logistics*, no 2. pp. 23-27.

Nedeliaková, E., Dolinayová, A., Nedeliak, I. (2013). *Methods of evaluation of the transportation services quality*. Žilina: EDIS. 2013.

Nedeliaková, E. et al. (2014). Services in railway passenger transport and its evaluation by dynamic models. In *Transport means 2014*. Kaunas: University of Technology, pp. 227-230.

Nedeliaková, E. (2015). Innovative approaches in the system of teaching management in the railway transport study programme with a focus on the application of dynamic quality models in railway transport, KEGA 026ŽU-4/2015.

Nedeliaková, E., Nedeliak, I., Majerčák, P. (2014). Research of services quality after the end of transportation in railway freight transport. In *Management innovation and business: 2nd international conference on Management innovation and business ICMIBI 2014*, Singapore: Singapore Management and Sports Science Institute, pp. 54-61.

Nedeliaková, E., Panák, M. (2015). New Trend in process-oriented quality management. *Procedia Economics and Finance, Elsevier*, vol. 34, pp. 172-179.

Nedeliaková, E., Sekulová, J., Nedeliak, I. (2015). Application of Dynamic Models as a New Trend in Quality Management. Procedia Economics and Finance, Elsevier, vol. 34, pp. 180-186.

Pfohl, H.C. et al. (2008). Konzeption des Supply Chain Risikomanagements. In Sicherheit und Risikomanagement in der Supply Chain: Gestaltungsansätze und praktische Umsetzung. Hamburg: Deutscher Verkehrs-Verlag, pp. 7-94.

Poliak, M et al. (2014). The importance of the risk in public passenger transport financing. In: Communications: scientific letters of the University of Žilina, vol. 16, no. 2, pp. 92-97

Poliak, M., Križanová, A. et al. (2014). The influence of contract form choice of the transport services ensuring on performance contracting entity requirement. In: *Transport Problems = Problemy Transportu*: international scientific journal, vol. 9, iss. 4, pp. 153-161.

Sekulová, J., Nedeliak, I. (2013). Utilization of GAP model in providing of services in the railway freight transport. Perner's Contacts, 8th (eds.)., vol. 4, pp. 67-75.

Skrinjar, J. P., Abramovic, B., Brnjac, N. (2015). The use of game theory in urban transport planning. *Tehnicki Vjesnik-Technical Gazette*. vol. 22, iss. 6, pp. 1617-1621.

Sujanova, J. et al. (2012). Aspects of Knowledge Management in Slovak Industrial Enterprises. In: 13th European Conference on Knowledge Management (ECKM), Univ Politecnica Cartagena, Spain, vol. 1 and 2, pp. 1135-1144.

Vetráková M., Potkány, M., Hitka, M. (2013). Outsourcing of facility management. In *E&M Economics and Management*, vol. 16, no 1/2013, Liberec: TU Liberec, 2013, pp. 80-92.

Welch, J., Welch, S. (2005). Winning. New York: Harper Collins Publishers, Inc, 2005.

Youssef, M. A., Boyd, J., Williams, E. (1996). The Impact of Total Quality Management on Firms Responsiveness: An Empirical Analysis. *Total Quality Management*, vol. 7, iss. 1, pp. 127-144.

Yun, J. Y., Chua, R. C. H. (2002). Samsung uses Six Sigma to change its image. Six Sigma Forum Magazine, vol. 2, no 1, pp. 13-16.

Zabaha, C. P., Rivers, A. and Munchus, G. (1998). Obstacles to the application of total quality management in health care organizations. *Total Quality Management*, vol. 9, iss. 1, pp. 57-66.

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#### 46. CHANDLER'S EFFECT IN LUXURY BRANDS CONSUMPTION

Abstract: In this paper, we are introducing the term "Chandler's Effect" which is borrowed from American classical literature and applied to marketing related subjects. The term "Chandler's Effect" derives from O. Henry's famous short story "Lost on Dress Parade". Bernard Dubois wrote about the segment of luxury brands consumers and identified them as excursionists (Dubois, 1996). Excursionists consume luxury brands only in rare, specific situations. The term "Chandler's Effect" is more distinct and narrow. It refers to a situation when young, educated people (22-27 y.o.) who are not very wealthy, yet are ready to hold the purse strings, and save some money for luxury consumption with the intention to be closer to the wealthy upper class. Although "Chandlers" pretend to be someone else — wealthier and aristocratic, they never consume fakes, as the atmosphere accompanying authentic luxury purchasing is very important to them. These "Chandlers" are represented mainly in big cities where luxury brand consumption can be one of the motives for being successful and hardworking. The study allowed us to describe the specifics of contemporary Russian Chandlers. Although these Chandlers never consume fakes, they can allow themselves to buy second-hand luxury brands. They have good knowledge about brands and trends, but, in most cases, their choices are very famous and fashionable luxury brands. Russian Chandlers are ready to save money to visit popular places at least once per month and they are sensitive to images created by glamorous posters.

Key words: authenticity, atmosphere, Chandler's effect, luxury brands

JEL Classification: M31, M37

#### 1. Introduction

O'Henry wrote his story "Lost on Dress Parade" in 1906. It has been more than 100 years since the story was published. The main hero, 22-year-old architect Chandler, set aside \$1 each week to have an opportunity at the end of every ten weeks to spend an evening at the luxurious New York restaurant. "He arrayed himself in the regalia of millionaires and presidents; he took himself to the quarter where life is brightest and showiest, and there dined with taste and luxury. With ten dollars a man may, for a few hours, play the wealthy idler to perfection. The sum is ample for a well-considered meal, a bottle bearing a respectable label, commensurate tips, a smoke, cab fare and the ordinary etceteras" (O'Henry, 1906). In fact, Mr. Towers Chandler is a so-called "composite character", representing the whole segment of the young, ambitious self-made people striving to plunge into an atmosphere of luxury and prosperity under condition of an austerity budget.

In this paper, the term "Chandlers" is used to describe the young educated people (22-27 y.o.) who are not affluent yet, and have to hold the purse strings, saving some money for luxury consumption with the intention to be closer to the upper wealthy class. "Chandler's Effect" demonstrates the situation when these Chandlers consume luxury items or services with a key motive which combines both self-pleasure and conspicuousness.

In O'Henry's time, luxury consumption was more exclusive and in most cases only the elite could afford to experience this magical world. From the 20<sup>th</sup> century, the luxury world has been democratized (Kapferer, Bastien, 2011). Luxury brands are now available for an increasing number of people, and more and more products are categorized as luxury brands (Hudders et al., 2013). Even the café Starbucks, which has become a "third place" between home and work, identifies itself as affordable luxury². Moreover, nowadays it is not necessary to be affluent to buy luxury brands, and most can afford at least one item per year. Dubois wrote about "excursionists" who buy and consume luxury goods only in particular circumstances (Dubois, 1996). "Chandlers" represent a specific

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<sup>&</sup>lt;sup>2</sup> Starbucks, reinvented: a seven-year study on Schultz, strategy and reinventing a brilliant brand, http://www.forbes.com/, 25 August 2014.

segment of young and ambitious excursionists who strive to belong to the upper class and pretend to be someone who they are not at the moment.

In this study, we check whether "Chandler's Effect" still takes place or how it has been transformed, nowadays. The in-depth interviews and an online survey with people from "Chandler's segment" have been conducted. The sampling includes recent graduates of famous universities who work hard and have no additional financial support. We started the study in the city of Moscow and we plan to cover other big cities in different countries, specifically, those that also experienced communism like Russia.

#### 2. Theoretical background. Luxury and its contemporary meaning

The meaning of luxury is multifaceted. In olden days, luxury was characterized as something which is very expensive, superfluous and unnecessary (Chevalier, Mazzalovo, 2012). Luxury was both criticized and admired. Berthon Pierre noted that for some social commentators, luxury brands are considered a betrayal of community values; and to others, the antidote to the mundane (Berthon et al., 2009). Breckman and Warren mentioned in his paper a German art historian Wilhelm von Bode who wrote an article about luxury in 1906 (Breckman, 1991). Bode claimed that "the splendid king Luxus has a philistine face. His father is philistine spirit, his mother egotism" (Breckman, 1991; Bode, 1906). The dictionary defines a philistine as a person who is guided by materialism and is usually disdainful of intellectual or artistic values (http://www.merriam-webster.com). According to Bode, luxury consumption was based on egoistic motives.

Luxury is not only criticized but it has also received praise. The Romanian Queen Elizabeth at the beginning of 20<sup>th</sup> century was involved in debates about the role of luxury in society, where she expressed that "the decline of a nation starts with the luxury. However, you cannot apply the same rule to all nations... A man of status, who spends on various luxury items, gives a certain number of persons something to do and therefore he offers them bread" (Petcu, 2014). Thus, she described the positive effect from luxury on society.

In any case, at any time, a lot of people want to possess luxurious items for a variety of reasons. Creators of luxury items and brands have their own understanding of this phenomenon which sometimes differs from an academic point of view. Coco Chanel insisted that luxury lies not in richness and ornateness but in the absence of vulgarity. Jil Sander, a contemporary designer from Germany, states that luxury is in simplicity. Arnault, the head of LVMH, stresses the importance of heritage in the luxury business (http://www.merriam-webster.com).

Nowadays, luxury has been transforming from material possessions to non-material, providing its consumers with a unique experience. This unique experience must be accompanied by beauty, comfort, positive emotions and memories. Luxury consumption does not depend on economic level, it is determined as a cultural phenomenon. In developing countries (like China, Russia), people can buy brands which hardly suit their pocket. Some of them have to save money for very long time to finally purchase something luxurious (Ochkovskaya, 2015).

Berthon Pierre wrote about 3 values of luxury brands: functional, symbolic and experiential values (Berthon et al., 2009). The experiential value is very close in its meaning to the emotional dimension of luxury brands. The emotional value deals with the emotions which the consumer experiences buying and possessing the luxury brand. The symbolic value is about other people's opinion and serves to translate information about one's personality into the outer world (Ochkovskaya, 2015). Luxury brands can express the individuality of their consumers. Valentino represents feminity, Alexander McQueen – savage beauty, and Comme des Garçons – nonconformity.

Bastien and Kapferer (2013) introduced the term "my luxury". "My luxury" refers to a rare moment or a dreamed experience. Self-pleasure in luxury consumption fills life with enjoyment and makes it more interesting spiritually and intellectually (Barnier, Valette-Florence, 2013). These rare luxury moments can be experienced, for example, through visits to the Vienna State Opera House or Teatro Alla Scala in Milan, as well as dinner in luxury restaurants with an unforgettable atmosphere, live music, haute cuisine, white tablecloths and silver cutlery. Luxury teaches people how to be sophisticated and refines their internal and external world (Barnier, Valette-Florence, 2013).

It is very important to stress that luxury is not only about money. Sometimes luxury is not afforded from an intellectual perspective (Ricca, Robins, 2012). Ricca and Robbins wrote about the type of luxury identified as meta-luxury. Meta-luxury contains four pillars: craftsmanship, focus, history and rarity (Ricca, Robins, 2012). One of the examples of meta-luxury is dining in the atmosphere of art.

The Kunsthistorisches Museum in Vienna organizes gourmet evenings every Thursday that cost 44 euro<sup>5</sup>. This offer is considered as luxury which can be easily affordable from an economic point of view. However, people should have a high cultural and intellectual level to be able to enjoy and appreciate this dinner in an atmosphere of immortal masterpieces.

In many cases, luxury consumption is conspicuous. The high level of aesthetics and quality makes luxury clearly visible and attracts attention. Thus, some luxury items have no opportunity to be inconspicuous.

#### 3. Segments of luxury brands consumers. Chandlers.

Today, it is not obligatory to be extremely wealthy to buy luxury brands. Kapferer gave an example of the two groups of consumers who are not necessarily affluent: "the ordinary of extraordinary" and "the extraordinary of ordinary people" (Kapferer, 2013). The first group is constituted by creative elite i.e., famous musicians, actors, politicians, sportsmen, scientists and others. The second segment is represented by "average" people who want to feel very special about themselves and become closer to the first group (Ochkovskaya, 2015). Our Chandlers constitute the latter segment.

One of the largest segments of luxury consumers today is excursionists. This term was introduced by Dubois. For excursionists buying and consuming luxury brands is an exceptional moment, contrasting with their daily lifestyle (Dubois, 1996). An excursionist can purchase a luxury item in a variety of situations related to a memorable and important event in the life of the excursionist and his/her family. Examples of excursionist behavior are when a husband purchases a diamond ring from the legendary Wellendorff brand for his wife on their 25<sup>th</sup> marriage anniversary or when parents decided to buy a watch from Tag Heuer for their son for his high school graduation.

"Chandlers" represent a specific segment of young and ambitious excursionists. Chandlers strive to belong to the upper class and pretend to be someone, who they are not at the moment. Their aspiration to attain a luxury lifestyle without having an appropriate budget, forces them to hold the purse strings: eat plain food and rent an apartment or even a room in the distant, cheaper districts or suburbs, as it allows them to keep some money for a luxury experience once per month.

Chandlers appreciate post-purchase positive emotions. These emotions can be caused by memories about visiting luxury restaurants or about using material artefacts which reflect their personality and has a positive effect on their self-esteem. Different people admire and strive to possess luxury for different reasons. One person appreciates visual symbols of success; another needs functionality and comfort; the third wants beauty and elegance; and the final person seeks strong positive emotions and memories. Some of these reasons can be mixed. Chandlers seek visual symbols of success, beauty with elegance and positive emotions with long memories. As O'Henry wrote: "This one delectable evening culled from each dull seventy was to Chandler a source of renascent bliss. ...to Chandler each ten weeks brought a joy as keen, as thrilling, as new as the first had been" (O'Henry, "Lost on dress parade").

So the Chandlers' motive for luxury consumption is a combination of self-pleasure and conspicuousness. Chandlers desperately want to identify themselves with the successful and affluent people. Moreover, they want to follow their lifestyle while not having an appropriate financial and social background for it. "For the next sixty-nine evenings he would be dining in cheviot and worsted at dubious table d'hote, at whirlwind lunch counters, on sandwiches and beer in his hall bedroom. He was willing to do that, for he was a true son of the great city of razzle-dazzle, and to him one evening in the limelight made up for many dark ones" (O'Henry. "Lost on dress parade"). As Chandlers dream about social recognition, only publicly consumed luxury brands matter for them.

Taking into account Dubois' works and O'Henry story, we singled out the luxury effects that matter to Chandlers:

- 1) Self-pleasure;
- 2) Conspicuousness;
- 3) Atmosphere;
- 4) Aesthetics/beauty;
- 5) Exclusivity (affordability only for those who are wealthy).

<sup>&</sup>lt;sup>5</sup> An unforgettable experience at the museum, https://www.khm.at/en/explore/offers/cafe-restaurant.

Luxury brand consumption can be one of the motivations for young people to strive for good education and challenging, well-paid jobs (Wiedmann, Hennigs, 2013). The high income can allow the consumption of luxury brands without cutting down on other expenses. Luxury items and experience are able to provide more value and a better quality of life.

# 4. Methodology and research

In this study we analyzed the specifics of contemporary Russian Chandlers. The investigation consisted of two stages: the in-depth interviews and an online survey.

For the in-depth interviews we chose 7 potential "Chandlers" which meet the following requirements:

- 1) Young graduates from top Moscow Universities between the age of 22-27 y.o. Originally, they came to Moscow from smaller cities.
- 2) They earn money and live only on their own salary without parents' (or someone else's) financial support.
- 3) They have at least 3 authentic items belonging to luxury brands among the following different product categories: perfume, accessories (belt/cufflinks/scarf/tie), bags, ready to wear, and shoes.
- 4) They visit a place which has a status of being popular, fashionable and expensive, at least once per month. It can be a restaurant, café or night club which is frequented by famous people.

We interviewed these "Chandlers", asking them about their luxury brand choice, attitude to fakes and about their favorite "status places" which they visit. As their average monthly salary is about \$1000 (\$1 = 76 Russian rubles), they were questioned about their income distribution and how they manage to consume items of luxury brands and visit fashionable, expensive places living with a rather limited budget and having to pay rent for their apartment. Finally, we asked "Chandlers" whether they pay attention to the images and taglines in glamour magazines and advertisement posters.

Taking into account the answers during the in-depth interviews, we formulated the following hypotheses about today's Russian Chandlers:

- 1) They never consume fakes but do not mind second-hand luxury brands.
- 2) Their choices are the most famous and fashionable luxury brands for products and services, which are called star brands (Nueno, 1998).
- 3) They are ready to sacrifice their lunches to save money for visiting "status places" at least once per month (a prestigious night club or a fashionable restaurant/cafe which the famous and wealthy visit).
- 4) They want to look like the successful stars from luxury brands advertisements.
- 5) They appreciate brand communications with the main idea of success and uniqueness.

To prove these hypotheses we conducted an online survey in which 189 respondents, who are university graduates between the age of 22-27 y.o., took part. It was decided to extend the online study and cover not only Moscow, but also the regional city Ufa which has more than 1 million inhabitants (SCO and BRICS summits were held there in July 2015). Covering 2 different places gave us the opportunity to compare Chandlers in the capital and in this regional city.

Among these 189, we chose 117 respondents who have a positive attitude to a luxury lifestyle and have at least 2 luxury brands items from the different product categories and visit fashionable, expensive places at least 1 per month. We had to limit our respondents with at least 2 luxury items instead of 3, as it was in the interviews because in the regional city Ufa, the income is less and access to luxury brands is very limited. A few luxury brands, e.g. Max Mara, are presented in Ufa. If people want to consume specific luxury brands, they have to go to Moscow, Saint Petersburg, abroad or use online shopping which is not popular in Ufa, specifically in the case of expensive items.

The young people from the sample were divided into 2 geographic groups. The first group was represented by young people from Moscow (72 respondents) and the second (45 respondents) – by the young people from Ufa.

During the survey, the key difference between these segments was revealed. On one hand, the regional respondents easily accept buying a fake for themselves, but, on the other hand, the consumption of second-hand authentic luxury brands is unacceptable for them. Otherwise, the young people from Moscow do not mind the idea of collective consumption of authentic luxury brands, as buying a second-hand item which is much cheaper than the new one or exchanging the artefacts from luxury brands. It can be explained that people living in Moscow have more knowledge about brands, can identify a fake and want an authentic item.

We assumed that Chandlers never purchase fakes, as they appreciate authenticity. So, we can make a preliminary conclusion that there are no Chandlers in Russian regional cities or they are met there rarely, and they are concentrated mainly in Moscow. The same situation took place at the beginning of the 20<sup>th</sup> century in O'Henry's story: the main character who enjoyed the luxury atmosphere once every sixty-nine evenings lived also in the big city of New York. People from big cities are more sensitive to luxury items as megalopolises give more incentives for luxury consumption.

Although Moscow Chandlers have good knowledge about brands and trends, in most cases, their choices are famous and fashionable luxury brands as Armani, Burberry, Hugo Boss, Ralph Lauren, Gucci, and LV. Moscow Chandlers are ready to save money for visiting status popular places at least once per month. Living within a restricted budget, a majority of respondents use special lunch offers in luxury cafés and restaurants as the regular menu is beyond their means. A few respondents mentioned that it is a tradition for them to go for lunch at a famous, atmospheric café or restaurant on pay day.

Upon research completion, we created a potential luxury brands "portfolio" of Moscow Chandlers. A Ralph Lauren shirt, an Emporio Armani suit, a Louis Vuitton belt and/or purse, a Gucci bag and fashionable Italian shoes constitute the brand portfolio of Chandlers. They are sensitive to images created by marketing communications but trust word-of-mouth coming from the people which represent the environment which they want to be a part of. As Chandlers do not have enough money for a prestigious car, they use public transportation but in some special occasions do not mind using a VIP taxi service.

Although Mr. Towers Chandler from the city of New York was given birth to by O'Henry at the beginning of the 20<sup>th</sup> century, nowadays he has a lot of successors following his lifestyle who probably have no idea about this American writer – the father of the poor luxury connoisseur.

# 5. Conclusion and limitations

Luxury brand consumption can be one of the motivations for young people who have not inherited wealth to pursue a good education and then find a challenging, well-paid job. Chandlers seek a combination of self-pleasure and conspicuousness in their luxury experience. They desperately want to identify themselves with successful and affluent people. In our opinion, ambitious and hard-working Chandlers have a lot of chances to become affluent and follow a luxury lifestyle in the future. Luxury producers must take this segment of Chandlers into account and provide special offers for them without any fear to dilute the brand's luxury image. In future, they can become very valuable luxury consumers.

This study is only a first descriptive step to understanding the specifics of contemporary Chandlers: how they manage to consume luxury in the form of material artefacts and services, while living within a shoestring budget. The investigation revealed that today's Chandlers do not mind the collective consumption luxury items and special offers such as business lunches in fashionable café/restaurants.

The research entails some limitations. The investigation covered only a limited numbers of the respondents from Russian cities like Moscow and Ufa (only 117). In future, we hope to continue the research and include more consumers in our sample, as well as to cover more cities in Russia and Eastern European countries (Poland, Romania, Czech Republic, and Ukraine).

#### References

Barnier V., Valette-Florence P. (2012). Culture and luxury: an analysis of luxury perception across frontiers. In Wiedmann K.P., Hennigs N. (eds.). *Luxury marketing: a challenge for theory and practice*. Springer Gabler, pp. 37-56.

Bastien V., Kapferer J.N. (2013). More on anti-laws of marketing. In Wiedmann K.-P., Hennigs N. (eds.). *Luxury marketing: a challenge for theory and practice*. Springer Gabler, pp. 19-34.

Berthon Pierre et al. (2009). Aesthetics and ephemerality: observing and preserving the luxury brand. *California Management Review*, vol. 52, iss. 1, pp. 45-66.

Breckman Warren G. (1991). Disciplining Consumption: The Debate about Luxury in Wilhelmine Germany, 1890–1914. *Journal of Social History*, vol. 3, iss. 24, pp. 485-505.

Chevalier M., Mazzalovo G. (2012). *Luxury brand management: a world of privilege*. John Wiley & Sons Singapore Pte. Ltd., 2012.

Dubois B., Laurent G. (1996). The functions of luxury: a situational approach to excursionism. *Advances in Consumer Research*, vol. 23, pp. 470-477.

Hudders L., Pandelaere M., Vyncke P. (2013). Consumer meaning making. The meaning of luxury brands in a democratized luxury world. *International Journal of Market Research*, vol.55, iss. 3, pp. 391-412.

Kapferer J.-N., Bastien V. (2009). The luxury strategy. Break the rules of marketing to build luxury brands. Kogan Page, 2009.

Kapferer J.-N. (2013). Is luxury history? [online]. [cit. 2015-11-10]. Available: http://www.youtube.com/watch?v=uEKikAflGqk.

Ricca M., Robins R. (2012). Meta-luxury. Brands and the culture of excellence. Palgrave Macmillan 2012.

Nueno J., Quelch J. (1998). The Mass Marketing of Luxury. Business Horizons, vol. 41, iss. 6, pp. 61-68.

Ochkovskaya M. (2015). Perception and consumption of global luxury brands in Russia and Romania: comparative cross-cultural aspect. *Management dynamics in the knowledge economy*. vol. 3, no 2, pp. 279-299.

O'Henry (1906). Lost on dress parade [online]. [cit. 2015-11-20]. Available: http://etc.usf.edu/lit2go/131/the-four-million/2414/lost-on-dress-parade/

Petcu M. (2014). The church as a prescriptor of consumption: an outline for a sociology of luxury. *Journal for the Study of Religions and Ideologies*, vol. 13, iss. 38, pp. 172-194.

Starbucks, reinvented: a seven-year study on Schultz, strategy and reinventing a brilliant brand [online], [cit 2014-08-25]. Available: http://www.forbes.com/

Wiedmann K.P., Hennigs N. (2013). Placing luxury marketing on the research agenda not only for the sake of luxury. In Wiedmann K.P., Hennigs N. (eds.). Luxury marketing: a challenge for theory and practice. Springer Gabler, pp. 3-17.

Wiedmann K.P., Hennigs N. (2013). Luxury Marketing: a challenge for theory and practice. Springer Gabler, 2013.

Wilhelm Bode (1906). *Vom Luxus, Der Kunstwart: Rundschau über alle Gebiete des Schönen*, [online]. [cit. 2015-11-10]. Available: http://digi.ub.uni-heidelberg.de/diglit/kunstwart15 1/0293.

Young J. H., Nunes J.C., Dreze X. (2010). Signaling status with luxury goods: the role of brand prominence. *Journal of Marketing*, vol. 74, pp. 15-30.

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# 47. ACHIEVING STRATEGIC AND SUSTAINABLE COMPETITIVENESS BY USING THE STAKEHOLDER IMPACT ANALYSIS - THEORETICAL ASPECTS

**Abstract:** Competitiveness represents a moving target for any business, and a dynamic indicator of its strategic performance; there is nothing new here. But, the globalization process and the increasing complexity of nowadays continuously change the architecture of the global system; myriads of stakeholders add new social and environmental valences to the challenges businesses have to deal with – in their search for competitiveness. In these circumstances, the micro foundations of competitiveness have to change as well, together with its approach and assessment at business level – as strategic goal. This statement is consistent with The 2030 Agenda for Sustainable Development (UN, 2015) – that promotes the partnership principle for achieving its goals and offers significant guidelines for businesses in order to optimally address them. Transposing the discussion at business level, the stakeholder impact analysis is the decision tool able to strategically align business objectives with social and environmental concerns, and by doing so to synergistically integrate different stakeholders' interests and demands, while adding value for the business. Therefore, based on a theoretical and conceptual approach, the paper aims to advocate for the leading role that the stakeholder impact analysis should play in achieving strategic and sustainable competitiveness at business level.

Keywords: competitiveness, social and environmental concerns, stakeholder impact analysis, strategic performance

JEL Classification: L14, L21, M19

# 1. Introduction

Strongly connected with the idea (and the existence) of competition, and highly influenced by (the evolution of) competitors, *competitiveness* represents a moving target for any business, and a dynamic indicator of its strategic performance. Although the particular approaches of competitiveness vary (sometimes quite a lot), the literature in the field of strategic management generally converges towards a common understanding of competitiveness at firm level. Thus, Veliyath and Zahra (2000) argue that "competitiveness refers to a firm's ability to match the standards of the leaders in its industry (on various benchmarks and critical success factors)", while Porter emphasizes that, for a firm, "its measure or score card of competitiveness is market share and profitability" (Snowdon, Stonehouse, 2006).

Moreover, a firm's searching for competitiveness has to be carried out against the background of the newly emerged "geo-economy of *complexity*" (Mayrhofer, Urban, 2011), which defines *globalization* as it is today: "a series of adapting and co-evolving global systems, each characterized by unpredictability, irreversibility and co-evolution" Urry (2005). Under these circumstances, the growing and concerted pressures towards *sustainability* – as (global) concern which "refers to the long-term maintenance of systems according to environmental, economic and social considerations" (Crane, Matten, 2007) – add new social and environmental valences to the challenges businesses have to deal with in their search for competitiveness. Therefore, the concept of *stakeholder* – seen as "any individual or group who can affect or is affected by the actions, decisions, policies, practices, or goals of the organization" (Weiss, 2014) – should become essential in the process of shifting the micro foundations of competitiveness, together with its approach and assessment at business level – as strategic goal.

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Both academia and firms have already made some significant steps on this way, and a growing body of strategic management literature has been developed in order to support the accomplishment of this desideratum; it particularly emphasizes on the mutual advantages integrative business practices – such as: triple bottom line (Elkington, 1998), stakeholder management (Freeman, 2010), corporate social responsibility (Werther, Chandler, 2010), or shared value (Porter, Kramer, 2011) – could bring to the triptych profit-people-planet, while providing strategic and sustainable competitiveness for firms. However, if looking at the bigger picture, one can easily see that these models of best practices are far from being widely embraced; but now, the recently adopted UN Resolution *Transforming our world: the 2030 Agenda for Sustainable Development* (UN, 2015) – that promotes the *partnership principle* for achieving the 17 sustainable development goals, and offers significant guidelines for businesses in order to optimally address them – could represent *a momentum for a turning point in the way firms are searching for competitiveness*.

If considering Eden and Ackermann (2013) assertion that "to a greater extent than probably any other factor to be considered on the [...strategy making...] journey, *stakeholders* determine the ability of an organization to achieve its aspirations", the *stakeholder impact analysis* appears to be the decision tool able to strategically align business objectives with social and environmental concerns, and by doing so to synergistically integrate different stakeholders' interests and demands, while adding value for the business.

Therefore, based on a theoretical approach, the paper aims to advocate for the leading role that the stakeholder impact analysis should play in achieving strategic and sustainable competitiveness at business level. In order to reach its goal, the paper will progressively address two milestones: In search of strategic and sustainable competitiveness – the role of stakeholder management; and From stakeholder impact analysis to overall strategic performance – filling the gaps. The paper then continues by emphasizing its main conclusion and it ends with the list of references.

# 2. In search of strategic and sustainable competitivenessthe role of stakeholder management

Basically, "strategic competitiveness is achieved when a firm successfully formulates and implements a value-creating strategy" (Hitt et al., 2007). The analysis of this assertion rises at least two interconnected thorny issues which are of great interest for this paper.

Firstly, the continuity imperative related to this process – because "achieving and maintain strategic competitiveness" (Ireland, Hitt, 1999) are equally important. Therefore, under the new circumstances characterized by increasing *complexity* (due to the enlarging and deepening of globalization), and growing pressures towards *sustainability* (due to the erosion of social and environmental parameters against the background of overall development), firm-level strategies have to be revised, while firm-level (sustainable) competitiveness has to be refined – in accordance with the new realities and trends dominating the global business landscape (Gorzeń-Mitka, Okręglicka, 2015). As complex adaptive systems (Holland, 2006) with particular behavioral features (Grant, 2010), the main characteristics of nowadays firms could be defined "in terms of status / existing, dynamics / functioning and purpose/performance, by connecting the triad networks – co-evolution – competitiveness – as moving targets" (Ogrean, Herciu, 2015) for businesses and their managers.

According to Depperu and Cerrato (2005), "competitiveness can be treated as a dependent or independent variable: the first approach looks at competitiveness as driver of a firm's performance whereas the second one considers competitiveness as outcome of a firm's competitive advantages". If taking an integrative perspective, the mutual reinforcing of these two facets will eventually lead to strategic and sustainable competitiveness; therefore, a firms' search for competitiveness will become a never-ending spiral of strategic performance. Within this framework, the *process* of *strategic fit* and the *outcome* of *welfare* should become fundamental pillars – if considering, on one hand, that "for a strategy to be successful, it must be consistent with the firm's external environment, and with its internal environment" (Grant, 2010), and, on the other hand that "the consensus will soon be that competitiveness should be defined as the <a href="mailto:abelian treatments of the treatments of

Secondly, the issue of achieving (and maintaining) strategic (and sustainable) competitiveness through a *value creating* strategy – because quite different perspectives coexist on how value is (or should be) created and for whom. Traditionally, strategic management has emphasized on the idea that "maximizing *shareholder value* is the ultimate goal of profit-making companies. (...) To increase

shareholder value, managers must pursue strategies that increase the profitability of the company and ensure that profits grow" (Hill, Jones, 2013). Although additions such as: "of course, (...) managers must behave in a legal, ethical, and socially responsible manner while working to maximize shareholder value" (Hill, Jones, 2013) – soften nowadays this kind of approach, it is still dominant. But, the centrality of shareholder value (on the expense of "the greater good") has led businesses towards losing their legitimacy, while placing them under increased scrutiny (and demand for accountability) coming from a variety of stakeholders. According to Porter and Kramer (2011), "business is caught in a vicious circle (... and...) a big part of the problem lies with companies themselves, which remain trapped in an outdated approach to value creation that has emerged over the past few decades". In order to overcome this bottleneck, the two authors argue that "the purpose of the corporation must be redefined as *creating shared value*, not just profit per se" (Porter, Kramer, 2011); this new approach of business "involves creating economic value for shareholders while also creating social value by addressing society's needs and challenges" (Rothaermel, 2015).

In between the two rather opposite views (creating value for shareholders and creating shared value), the *stakeholder management* approach of *managing for stakeholders* (Freeman, 2007) seems to be a more realistic one – because, without absolutizing the shareholder value, it takes into consideration stakeholders' interests, based on a more "personal" and "cooperative" relationship than the shared value approach. This statement is consistent with Freeman and McVea (2001), which argue that "a stakeholder approach to strategic management suggests that managers must formulate and implement processes which satisfy all and only those groups who have a stake in the business".

In principle, *stakeholder management* represents "a firm's strategy for recognizing and responding to the interests of all its salient stakeholders" (Dess et al, 2014). But firms' attitudes toward their stakeholders could lead to two very different kinds of behavior: (1). the so called "zero sum" – when "the various stakeholders compete for the organization's resources: the gain of one individual or group is the loss of another individual or group" – which rather leads to frustration and conflicts, spoils the balance between the firm and its stakeholders, and threatens firm's competitiveness; and (2). "stakeholder symbiosis, which recognizes that stakeholders are dependent upon each other for their success and well-being" (Dess et al., 2014).

Particularly in reference to the latter kind of approach, *managing for stakeholders* assumes that "the primary responsibility of the executive is to create *as much value as possible for stakeholders*. Where stakeholder interests conflict, the executive must find a way to rethink the problems so that these interests can go together, so that even more value can be created for each." (Freeman, 2007). In order to achieve such results, "new types of economic, social, and environmental *partnership* are needed. Long-standing enemies must shift from mutual subversion to new forms of symbiosis. The resulting partnerships will help each partner perform traditional tasks more efficiently, while providing a platform from which to reach towards goals that none of the partners could hope to achieve on their own" (Elkington, 1998). This kind of approach: (1). is consistent with the *triple bottom line agenda*, which "focuses corporations not just on the economic value that they add, but also on the environmental and social value that they add – or destroy" (Elkington, 2004); and (2). contributes to "*a redefinition of corporations* to ensure they become major contributors to sustainability rather than social and environmental predators undermining a world fit to live in" (Benn et al., 2014).

# 3. From stakeholder impact analysis to overall strategic performance – filling the gaps

According to Rothaermel (2015), "stakeholder impact analysis provides a decision tool with which managers can recognize, prioritize, and address the needs of different stakeholders. This tool helps the firm achieve a competitive advantage while acting as a good corporate citizen".

In order to properly conduct the analysis, in each of the five steps that shape the stakeholder impact analysis process (Figure 1) it is essential for managers to carefully asses: the three *stakeholder attributes* of power, legitimacy and urgency – considering that: "a stakeholder has power over a company when it can get the company to do something that it would not otherwise do; (...) a stakeholder has a legitimate claim when it is perceived to be legally valid or otherwise appropriate; (...) a stakeholder has an urgent claim when it requires a company's immediate attention and response" (Rothaermel, 2015) – and their respective *additional implications*: "first, each attribute is a variable, not a steady state, and can change for any particular entity or stakeholder-manager relationship. Second, the existence (or degree present) of each attribute is a matter of multiple

perceptions and is a constructed reality rather than an <<objective>> one. Third, an individual or entity may not be <<conscious>> of possessing the attribute or, if conscious of possession, may not choose to enact any implied behaviors" (Mitchell et al., 1997).

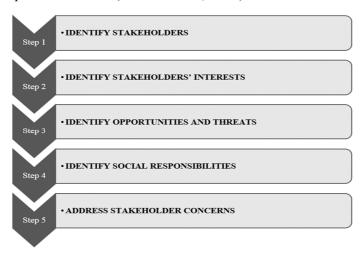


Figure 1. Stakeholder impact analysis

Source: Rothaermel, 2015, p. 13

Who are our stakeholders? Basically: (a). "primary stakeholders are those who have formal, official, or contractual relationships and have a direct and necessary economic impact upon the organization" (Savage et al., 1991) – a firms' "owners, customers, employees, and suppliers (...), its stockholders and board of directors" (Weiss, 2014); (b). "secondary stakeholders are diverse and include those who are not directly engaged in the organization's economic activities but are able to exert influence or are affected by the organization" (Savage et al., 1991) – "all other interested groups, such as the media, consumers, lobbyists, courts, governments, competitors, the public, and society" (Weiss, 2014). In these circumstances, identifying the most powerful stakeholders and their specific needs could be a quite tricky job – because, as Weiss (2014) argues, "a stake is any interest, share, or claim that a group or individual has in the outcome of a corporation's policies, procedures, or actions toward others". Moreover, stakes may be based on any type of interest; they are not always obvious; and stakes can be present, past, or future oriented.

What are our stakeholders' interests and claims? An organization's key stakeholders and the nature of their claims are shown in Table 1.

Table 1. An organization's key stakeholders and the nature of their claims

Stakeholder group	Nature of claim			
Stockholders	Dividends, capital appreciation			
Employees	Wages, benefits, safe working environment, job security			
Suppliers	Payment on time, assurance of continued relationship			
Creditors	Payment of interest, repayment of principal			
Customers	Value, warranties			
Government	Taxes, compliance with regulations			
Communities	Good citizenship behavior such as charities, employment, not polluting the			
Communities	environment			

Source: Dess et al., 2014

Given the very different (sometimes conflictual) nature of stakeholders' claims, in this step of the process it is equally important: (a). to identify stakeholders' interests and claims through the lens of the three stakeholder attributes and their respective additional implications; (b). to carefully look for insights from both within and among stakeholder groups, in search of "stakeholder multiplicity" – considering: "first, that stakeholder groups sometimes compete against and sometimes complement each other; secondly, that stakeholders may form strategic alliances, or cooperate, to increase the persuasive power of their combined claim; and thirdly, that stakeholder's potential to influence other stakeholders and the organization is often times determined by the particular nature of their role" (Neville, Menguc, 2006).

What opportunities and threats do our stakeholders present? Basically, stakeholders could present both opportunities and threats for a firm, and it is the strategist's job to capitalize on opportunities, while transforming threats into opportunities and/or minimizing their negative impacts. In doing so, stakeholders' potential to threaten the firm or to cooperate with it has to be considered based on their capacity, opportunity and willingness to threaten / cooperate (Savage et al., 1991). Therefore, "by assessing each stakeholder's potential to threaten or to cooperate with the organization, managers' may identify supportive, mixed blessing, non-supportive, and marginal stakeholders" (Savage et al., 1991). Furthermore, particular attention should be paid to recognizing actual or potential coalitions of stakeholders, especially in the context of "stakeholder activism" – which "has become a common occurrence in corporate life and a genuine managerial issue, as environmentalists, employees, community groups, human rights organizations, and charitable organizations increasingly use a variety of strategies to influence firms' actions (Rowley, Moldoveanu, 2003) – in order to "anticipate and design strategic responses toward these groups before or after they form" (Weiss, 2014).

What economic, legal, ethical, and philanthropic responsibilities do we have to our stakeholders? It is generally accepted that Carroll's (1991) model of corporate social responsibility (CSR pyramid – Figure 2) – developed in order "to characterize the firm's CSR in ways that might be useful to executives who wish to reconcile their obligations to their shareholders with those to other competing groups claiming legitimacy" (Carroll, 1991) – represents the benchmark in the field of identifying a firm's social responsibilities into a holistic manner.

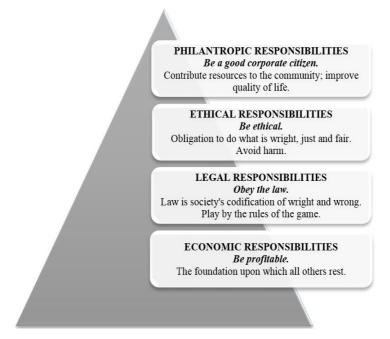


Figure 2. CSR Pyramid

Source: Carroll, 1991

More recently, Visser (2010) has developed the concept of CSR 2.0 / Systemic CSR, in order to fit the model of responsible business he has proposed to "the new age of responsibility" that is about to occur. The essence of CSR 2.0 relies on the four DNA responsibility bases/codes of businesses, each of them pursuing a particular strategic goal and being assessed by a series of key indicators – as follows:

- DNA Code: Value creation; Strategic goal: economic development; Key indicators: capital investment (financial, manufacturing, social, human & natural capital); beneficial products (sustainable & responsible goods & services); inclusive business (wealth distribution, bottom of the pyramid markets);
- DNA Code: Good governance; Strategic goal: institutional effectiveness; Key indicators: leadership (strategic commitment to sustainability & responsibility); transparency (sustainability & responsibility reporting, government payments); ethical practices (bribery and corruption prevention, values in business);

- DNA Code: Societal contribution; Strategic goal: stakeholder orientation; Key indicators: philanthropy (charitable donations, provision of public goods & services); fair labor practices (working conditions, employee rights, health & safety); supply chain integrity (SME empowerment, labor & environmental standards);
- DNA Code: Environmental integrity; Strategic goal: sustainable ecosystems; Key indicators: ecosystem protection (biodiversity conservation & ecosystem restoration); renewable resources (tackling climate change, renewable energy & materials); zero waste production (cradle-to-cradle processes, waste elimination) (Visser, 2010).

What should we do to effectively address the stakeholder concerns? In order to address stakeholder concerns, Carroll and Buchholtz (2014) have developed an integrative model of the strategies / actions a firm should follow in relation to each stakeholder type. Thus:

- For the supportive stakeholder (which has low potential for threat and high potential for cooperation), the strategy/action recommended are: involve; take offense, accommodate, pro-act; keep satisfied;
- For the marginal stakeholder (which has low potential for both threat and cooperation), the strategy/action recommended are: monitor; watch carefully; minimal effort; offense or defense;
- For the non-supportive stakeholder (which has high potential for threat and low potential for cooperation), the strategy/action recommended are: defend; be prepared; guard against; negotiate;
- For the mixed blessing stakeholder (which has high potential for threat and medium-to-high potential for cooperation), the strategy/action recommended are: collaborate, take offense, partnership, pool resources; keep informed (Carroll, Buchholtz, 2014).

But, as Rowley (1997) has emphasized almost two decades ago, "although focusing on individual stakeholder relationships is appropriate for classifying types of stakeholders, this analysis cannot be extended to predict firms' behaviors because each firm faces a different set of stakeholders, which aggregate into unique patterns of influence. Firms do not simply respond to each stakeholder individually; they respond, rather, to the interaction of multiple influences from the entire stakeholder set" (Rowley, 1997). Therefore, "the key challenge of stakeholder management is to effectively balance the needs of various stakeholders" (Rothaermel, 2015), based on "a partnering mentality that involves communicating, negotiating, contracting, managing relationships and motivating. These different aspects of stakeholder management are held together by the enterprise strategy which defines what the firm stands for" (Freeman, McVea, 2001).

# 4. Conclusion

The new realities and trends characterizing the business environment – especially its increasing complexity and the growing pressures towards sustainability – force: (a). firms – to reposition themselves against their stakeholders and within the global arena; (b). strategists – to reconsider their search for competitiveness (in terms of both means and ends). Thus, the stakeholder management approach will eventually lead firms to strategic and sustainable competitiveness, while consolidating their vocation as good corporate citizens. Within this framework, the stakeholder impact analysis is the decision tool able to strategically align business objectives with social and environmental concerns, and by doing so to synergistically integrate different stakeholders' interests and demands, while adding value for the business.

The advantages such an approach could bring are indisputable, if considering that, based on the understanding of "the complex web of exchange relationships among different stakeholders, (...) the firm can proactively shape the various relationships in order to maximize the joint value created, and manage the distribution of this larger pie in a fair and transparent manner" (Rothaermel, 2015); moreover, it could contribute to the emergence of "the fully sustainable organization" — "an organization that is itself sustainable because its stakeholders (...) will continue to support it. But it is also a sustaining organization because it is sustaining the wider society and the ecological environment (Benn et al., 2014).

Yet, the drawbacks and limitations this approach could raise cannot be ignored: if not properly internalized and managed by strategists, complexity will not be able to lead businesses to the desired goal – which will "complicate" the relationships among stakeholders; on the other hand, if not recognized as (business) imperative, sustainability will lose ground against the short term perspective

(looking only for profits) – which will determine more pressures from stakeholders. Each one of the above, if happening, will erode the potential of the proposed solution, while (re)placing the firm on the coordinates of a vicious cycle.

In conclusion, the paper brings into discussion the leading role that the stakeholder impact analysis should play in achieving strategic and sustainable competitiveness at business level. The main theoretical contribution of the paper results from the integrated, multi-level approach that has led us to the proposed solution at business level, while the managerial implications have been discussed above – in terms of both advantages and drawbacks/limitations. Future research directions could envisage: developing of an analytical framework able to dynamically capture the complex relationships between the stakeholder impact analysis and strategic and sustainable competitiveness; conducting a series of empirical researches in order to test the validity of the proposed solution.

#### References

Aiginger, K. (2006). Competitiveness: from a dangerous obsession to a welfare creating ability with positive externalities. *Journal of Industry, Competition and Trade*, vol. 6, iss. 2, pp. 161-177.

Benn, S., Dunphy, D., Griffiths, A. (2014). Organizational Change for Corporate Sustainability. New York: Routledge, 2014

Carroll, A., Buchholtz, A. (2014). Business and society: Ethics, sustainability, and stakeholder management. Cengage Learning, 2014.

Carroll, A. B. (1991). The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. *Business Horizons*, vol. 34, pp. 39-48.

Crane, A., Matten, D. (2007). Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization. Oxford: Oxford University Press, 2007.

Depperu, D., Cerrato, D. (2005). Analyzing international competitiveness at the firm level: concepts and measures. *Quaderni del Dipartimento di Scienze Economiche e Sociali, Università Cattolica del Sacro Cuore–Piacenza*, 32.

Dess, G.D., Lumpkin, G.T., Eisner, A.B., McNamara, G. (2014). *Strategic Management*. New York: McGraw Hill Education, 2014.

Eden, C., Ackermann, F. (2013). Making strategy: The journey of strategic management. London: SAGE Publications Ltd, 2013

Elkington, J. (2004). Enter the triple bottom line. The triple bottom line: Does it all add up, vol. 11, iss. 12, pp. 1-16.

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, , vol. 8, iss. 1, pp. 37-51.

Freeman, R. E. (2010). Strategic management: A stakeholder approach. New York: Cambridge University Press, 2010.

Freeman, R. E. (2007). Managing for Stakeholders. [online]. [cit 2015-11-27]. Available: http://ssrn.com/abstract=1186402

Freeman, R. E., McVea, J. (2001). *A Stakeholder Approach to Strategic Management*. [online]. [cit 2015-12-27]. Available: http://papers.ssrn.com/paper.taf?abstract\_id=263511

Gorzeń-Mitka, I., Okręglicka, M. (2015). Managing Complexity: A Discussion of Current Strategies and Approaches. *Procedia Economics and Finance*, vol. 27, pp. 438-444.

Grant, R.M. (2010). Contemporary Strategy Analysis. West Sussex: John Willey & Sons, Ltd., 2010.

Hill, C., Jones, G. (2013). Strategic Management. An Integrated Approach. Mason: South-Western, Cengage Learning, 2013.

Hitt, M., Ireland, R. D., Hoskisson, R. (2007). *Strategic Management: Competitiveness and Globalization*. Concepts and Cases. Mason: Thomson South-Western, 2007.

Holland, J. H. (2006). Studying complex adaptive systems. *Journal of Systems Science and Complexity*, vol. 19, iss. 1, pp. 1-8.

Ireland, R. D., Hitt, M. A. (1999). Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. *The Academy of Management Executive*, vol. 13, iss. 1, pp. 43-57.

Johnson, G., Scholes, K., Whittington, R. (2008). Exploring Corporate Strategy. Harlow: Pearson Education Limited, 2008.

Mayrhofer, U., Urban, S. (2011). *Management international. Des pratiques en mutation*. Paris: Pearson Education France, 2011.

Mitchell, R. K., Agle, B. R., Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of management review*, vol. 22, iss. 4, pp. 853-886.

Neville, B.A., Menguc, B. (2006). Stakeholder multiplicity: Toward an understanding of the interactions between stakeholders. *Journal of Business Ethics*, vol. 66, iss. 4, pp. 377-391.

Ogrean, C., Herciu, M. (2015). A Dynamic Model for the Global Corporation: The Triad Networks – Coevolution – Competitiveness. In Camillo, A. (ed.) *Global Enterprise Management*. Vol. I. New York: Palgrave Macmillan US, pp. 79-96.

Porter, M. E., Kramer, M. R. (2011). The big idea: Creating shared value. *Harvard Business Review*, vol. 89, iss. 1/2, pp. 62-77.

Rowley, T. J. (1997). Moving Beyond Dyadic Ties: A Network Theory of Stakeholder Influences. *Academy of Management Review*, vol. 22, iss. 4, pp. 887-910.

Rowley, T. I., Moldoveanu, M. (2003). When will stakeholder groups act? An interest-and identity-based model of stakeholder group mobilization. *Academy of Management Review*, vol. 28, iss. 2, pp. 204-219.

Savage, G. T., Nix, T. W., Whitehead, C. J., Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Perspective*, vol. 5, iss. 2, pp. 61-75.

Snowdon, B., Stonehouse, G. (2006). Competitiveness in a globalised world: Michael Porter on the microeconomic foundations of the competitiveness of nations, regions, and firms. *Journal of International Business Studies*, vol. 37, iss. 2, pp. 163-175.

UN (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*. [online]. [cit 2016-01-27]. Available: https://sustainabledevelopment.un.org/post2015/transformingourworld

Urry, J. (2005). The complexities of the global. Theory, Culture & Society, vol. 22, iss. 5, pp. 235-254.

Veliyath, R., Zahra, S. A. (2000). Competitiveness in the 21st century: Reflections on the growing debate about globalization. *Journal of Competitiveness Studies*, vol. 8, iss. 1, p. 14.

Visser, W. (2010). The age of responsibility: CSR 2.0 and the New DNA of business. *Journal of Business Systems, Governance and Ethics*, vol. 5, iss. 3, p. 7.

Weiss, J.W. (2014). Business Ethics. A Stakeholder and Issues Management Approach. San Francisco: Berrett-Koehler Publishers, Ltd., 2014.

Werther Jr, W. B., Chandler, D. (2010). Strategic corporate social responsibility: Stakeholders in a global environment. London: Sage Publications, 2010.

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# 48. FINANCING OF CURRENT ACTIVITY AND THE ECONOMIC CONDITION OF POLISH ENTERPRISES

**Abstract:** Short-term financing becomes one of the priorities in current financial management of the enterprises and becomes even more important in the periods of economic decline. The role of working capital management is undeniable and this is why it should be constantly analysed and improved. The efficient current financial management depends on many factors. This paper investigates its correlations with economic conditions of the company. The verification of author's hypothesis has been based on the results of questionnaire empirical studies conducted in 2014 on a group of 380 firms in Poland. The character of the studies was mainly qualitative, therefore statistical dependences were examined using Pearson's Chi-squared test as a measure of association between nominal variables. The studies resulted in finding some statistical dependencies that show the influence of economic condition of the enterprises on the management of their current financing. It allowed to confirm the hypothesis in a general form, but requires further detailed investigation in the future.

Keywords: working capital, current finances, financing, economic condition, enterprises

JEL Classification: M10, G32

# 1. Introduction

The unfavourable economic situation in European Union in previous years brings many problems and limitations for corporate sector (Mynarzová, Kaňa, 2014; Sipa, Skibiński, 2015).

The last financial crises (after 2008) has effected the availability of external financing for enterprises, especially small ones, in the form of higher interest rates, shortened maturities and increased request for loan collateral (Havierniková, Srovnalíková, 2014). As a result, nowadays, access to finances represents one of the most significant challenges for small business (Rupeika-Apoga, 2014).

The problems with financing of the activity refer not only to the development of the company, but also to the day-to-day functioning. Liquidity maintaining is the key factor of business survival, even more important than profitability or organization value (Ziółkowska, 2013). The liquidity management require, among others, avoiding the shortages in working capital through efficient raising of the short-term capital. The importance of current financial management explains the role of researches in the area of short-term financing. From this perspective the main goal of this paper is to identify the relations between the management of current financing of enterprises and their economic condition, as a factor determining the managerial process.

# 2. Selected aspects of current financing of the Polish enterprises in different economic condition

# 2.1. Methodology and research description

The study starts with a literature review in order to highlight the importance of working capital management and financing the current activity of enterprises, then one will go on to development of the hypothesis. The research indicates the relations between financial management in the area of using the sources of financing and the economic condition of enterprises in Poland.

In order to confirm/reject the hypotheses concerning relations between current financing of Polish enterprises and their economic condition, the author conducted a questionnaire survey in 380

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enterprises from the south of Poland. The research was realized in 2014. It presents opinions mostly, rather than financial data. The reason of such a solution is that there were microenterprises in the study group which conduct limited financial reporting; therefore, an access to the quantitative data was impossible.

During the elaboration of the paper, the generally accepted methods of economic research were used, including statistical analysis and graphical illustration methods. Due to the qualitative character of the obtained research material, the statistical analysis was conducted on the basis of Pearson's chi-squared test as a measure of association between nominal variables. Although range of the studies is wide, the result presentation is focused on the detailed results which are statistically significant.

The main aim of the studies is to identify the relations between the management of current financing of enterprises and their economic condition (evaluated in the 5-grade scale by the entrepreneurs). In the course of research process, two hypothesis ware proposed:

Hypothesis 1. Enterprises with better economic condition manage current finances more professionally than enterprises with poor economic condition.

Hypothesis 2. Enterprises with better economic condition base on equity capital to a greater extent than enterprises with poor economic condition.

# 2.2. Theoretical background

The corporate finance literature has traditionally focused on the analysis of long-term financial decisions, especially those connected with investment, capital structure or dividends decisions. However, short-term liabilities and assets are important ingredients of the firm's total assets, influencing its economic condition. Considering that the working capital management plays an important role for corporate profitability and risk, and hence for company value, the constant analysis of short-term activity and its efficiency has crucial of importance (de Almeida, Eid, 2014).

In previous studies, the importance of current management, especially working capital management was visible. Working capital is defined as the difference between current assets (cash, accounts receivable, inventories) and current liabilities and is often used to measure a firm's liquidity level (Okręglicka, 2016). Many researchers found the relationship between working capital management (liquidity management, CCC) and profitability in their investigations (Wang, 2002; García-Teruel, Martínez-Solano, 2007; Dong, Su, 2010; Baňos-Caballero et al., 2014; Enqvist et al., 2014). There are some statements, that insufficient current assets may limit an ability to maintain the efficiency of firm's functioning and further increase the risk of bankruptcy (Dunn, Cheatham, 1993). However, excessive liquidity can also be detrimental to a firm's profitability (Bhattacharya, Nicodano, 2001).

One of the most important elements of operational management in the company is financing of the current activities. Financing is one of key tasks in many enterprises. It is a process allowing the enterprise to survive or to progress (Kádárová et al., 2015). Many authors emphasize that a low level of working capital may deteriorate a enterprise's operating performance (Blinder, Maccini, 1991; Mun, Jang, 2015).

The main aim of operative financing is to finance the company current assets in order to maintain its constant run. It needs to be realized in the form of short-term financing but sometimes it has the form of middle-term financing (Kádárová, et al., 2015). The access of the economic entities to sources of financing depend on macroeconomic and microeconomic indicators. The enterprise size and life cycle has significant influence on financing of chosen activities. Access to financing is considered to be one of the main problems of economic entities, especially small (the majority of corporate sector) or new established (Lahiri, 2012; Kraemer-Eis, Lang, 2014). Even at a time of economic boom, the smallest companies can experience difficulties in securing financing (Pelly, Kraemer-Eis, 2012). Ang (1992), and Uzzi and Gillespie (1999) state, that the financing of small companies differs from the financing of large companies. It is a popular statement that access to financing creates more problems for SMEs than for large enterprises (Prohorovsa, Beiziterea, 2015). SMEs are severely limited by borrowing constraints or they might not be able to borrow from banks at all, or they are offered with unfavourable lending conditions (Luo et al., 2016). This is why many firms based their activity mostly on their own capital.

Analysing the external sources of financing, bank loans currently remain the main source of external financing for businesses (Kraemer-Eis et al., 2014). According to OECD data (2015) commercial bank loans are considered to be the main source of external financing for 1/3 of European

SMEs. Additionally, the smaller and newer a company is, the more funding problems it faces (Pelly, Kraemer-Eis, 2012). In turn, Casey and O'Toole (2014) indicate that there is a great degree of reliance on traditional bank lending and too little confidence in alternative means of financing among enterprises in the euro area. The extensive use of bank loans, even as seed capital, makes the company exceedingly sensitive to changes in the funding policy of banks (Robb, Robinson, 2010).

Shin and Soenen (1998) examine the relationship between different accounting measures of profitability and some aspects of working capital. They conclude that companies that manage their working capital more efficiently (i.e. a lower cash conversion cycle) have higher operating cash flow and are potentially more valuable. Deloof (2003) found that the companies could improve their profitability by reducing the number of days of accounts receivable and by reducing inventory levels. In the same way, Garcia-Teruel and Martinez-Solano (2007) explain that managers can create value by reducing the average number of days of inventory and accounts receivable. Therefore, the higher the cash conversion cycle, the lower company profitability could be. It is an valuable indication for managers to create a positive value for the shareholders by reducing the cash conversion cycle to a possible optimum level.

Although we can see the positive influence of current finance management on profitability of enterprises, there is a lack of evidence of reverse dependency.

# 2.3. Research results

The conducted research allowed to look for the differences in current finance management of separate groups of enterprises. One of the division criterion was the economic condition of enterprises.

Corporate management should be conducted not only on the basis of personal skills of the owner/manager, but also with use of managerial knowledge (Gorzeń-Mitka, Okreglicka, 2015; Lemańska 2014). Analysing the way of current finance management in Polish enterprises the significant differences are visible depending on the economic condition of the entity (Tab. 1). The enterprises in good or very good economic situation manage their working finances in more professional way, with established procedures and principles. In turn, those with poor condition are focused on intuitive form of management without clearly defined principles.

Table 1. Methods of management of current finances and the economic condition of enterprises

	Assessment of economic condition (%)				ı total	
	very good	good	average	bad	very bad	(%)
formalised (there are procedures/principles in place)	65,6	40,7	29,2	0,0	100,0	39,2
not formalised (intuitive, used as needs arise, without clearly defined principles)	34,4	59,3	70,8	100,0	0,0	60,8
Pearson's chi-square test = $30,765$ , p = $0,000$						

Source: Own research

In general, 1/5 of Polish enterprises declare the need of short-term capital which insures the turnover creation on the present level (Tab. 2). The research confirms that the worse the economic situation, the greater the need of current capital for the company.

Table 2. Need of current capital in comparison to the present turnover and the economic condition of enterprises

	Assessment o	Assessment of economic condition (%)				
	very good	good	average	bad	very bad	Total
yes	8,2	20,0	23,6	42,9	100,0	20,3
no	91,8	80,0	76,4	57,1	0,0	79,7
Pearson's chi-square test = $12,761$ , p = $0,013$						

Source: Own research

There are many reasons of shortages in working capital in enterprises, which need searching for external sources of financing. The author's own research indicate that only some of analysed reasons are correlated with the condition of the enterprise in statistical meaning (Tab. 3). We can point here the low profitability of the company, problems with enforcement of payments from counterparties – untimely payment of invoices and price and exchange rates fluctuations, etc. At the same time, it is puzzling that the level of sale with payment term doesn't correlate with condition of the enterprises, while this factor is suggested to be one of the more important reason of lack of current capital and thus, the insolvency risk of the economic entity (Paul, Boden, 2008; Paul and Wilson, 2006).

Table 3. Reasons for shortages of working capital in a company\*

	Assessment of economic condition (%)				total			
	very good	good	average	bad	very bad	(%)	Chi-2	p
low profitability	8,2	14,7	28,6	14,3	100,0	19,7	19,693	0,001
sale on invoice with payment term	19,7	30,0	23,6	42,9	0,0	25,8	4,398	0,355
the need to prepay the supply of materials, goods	14,8	20,7	23,0	14,3	0,0	20,5	2,268	0,687
problems with enforcement of payments from counterparties (untimely payment)	19,7	24,0	29,8	71,4	0,0	26,6	10,443	0,034
increased sales volumes	6,6	10,7	5,6	0,0	0,0	7,6	3,673	0,452
price fluctuations, exchange rates, etc.	18,0	6,0	3,1	0,0	0,0	6,6	16,826	0,002
need for constant investments	34,4	23,3	25,5	0,0	0,0	25,5	5,663	0,226
others	27,9	28,7	23,6	14,3	100,0	26,3	4,437	0,350

<sup>\*(</sup>selection of max 3 answers)

Source: Own research

The main source of current financing in the Polish enterprises remains still the equity capital, generated form profit accumulation (Fig. 1). Traditionally, it is the basic capital source for small and medium-sized enterprises. The research indicates that it is a dominant source for entities with at least average economic condition. Lack of profit prevents using the own financing in current activity and it gives no access to bank financing as well. The unprofitable enterprises turn toward overdraft and supplier credit.

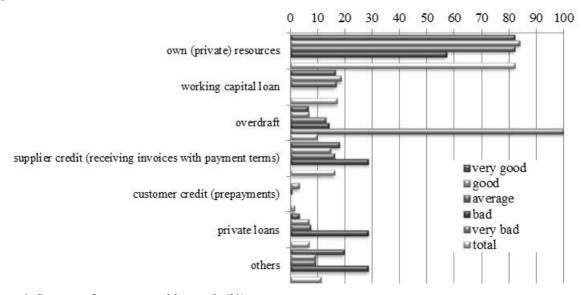


Figure 1. Sources of current working cash (%)

Source: Own research

The economic condition of the company could be both cause and effect in management of current finances. The detailed researches will be necessary to identify the true nature of this correlation.

# 3. Conclusion

The novelty of this paper derives from the fact that it presents managerial approach to the problem of correlation between current management and economic condition of the company. Many papers focus on the influence of the proper current management on the firm's profitability or stability. The author took an issue of inverse relationship – if or how the economic situation can determine the way of current finance management. There is an obvious lack of such consideration in literature.

The good economic situation is the basis for many activities, in every area of firm functioning. It creates and, in the same time, determines the decision making process. Managers and owners of enterprises have not only more options in the favourable financial situation, but they can also focus on the professionalism of management and improve the managerial methods and tools.

In the course of research process, the author tried to confirm two hypothesis. First hypothesis was generally confirmed, clearly indicating that enterprises with better economic condition manage current finances more professionally than enterprises with poor economic condition. Second hypothesis was also confirmed. Enterprises with better economic condition base on equity capital to a greater extent than enterprises with poor economic condition, however they use the external short-term capital from bank sector as well. It shows that the profitable companies have basically more financing options. They can use many financing sources, but they still prefer equity capital.

Finally, the indication of research limitation is needed. In this area author would like to emphasizes that the method of research group selection could not ensure the representativeness of the study, so it should be treated as initial research which constitutes the basis for the preparation of extended quantitative and qualitative research in the future.

# References

Ang, J.S. (1992). On the Theory of Finance for Privately Held Firms. Journal of Small Business Finance, vol. 1, pp. 185-203.

Baňos-Caballero, S., Gar-Teruel, P.J., Martínez-Solano, P. Working capital management, corporate performance, and financial constraints. *Journal of Business Research*, vol. 67(3), pp. 332-338.

Blinder, A.S., Maccini, L.J. (1991). The resurgence of inventories research: what have we learned? *Journal of Economic Survey*, vol. 5(4), pp. 291–328.

Casey, E., O'Toole, C. (2014). Bank-lending constraints, trade credit and alternative financing during the financial crisis: evidence from European SMEs. *Journal of Corporate Finance*, vol. 27, pp. 173-193.

de Almeida, J.R., Eid Jr., W. (2014). Access to finance, working capital management and company value: Evidences from Brazilian companies listed on BM&FBOVESPA, *Journal of Business Research*, vol. 67, pp. 924-934.

Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance and Accounting*, vol. 30(3-4), pp. 573–587.

Dong, H.P., Su, J.-T. (2010). The relationship between working capital management and profitability: a Vietnam case. *International Research Journal of Finance and Economics*, vol. 49(49), pp. 62-71.

Enqvist, J., Graham, M., Nikkinen, J. (2014). The impact of working capital management on firm profitability in different business cycles: Evidence from Finland, *Research in International Business and Finance*, vol. 32, pp. 36-49.

Garcia-Teruel, P., Martinez-Solano, P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, 3(2), pp. 164-177.

Gorzeń-Mitka, I., Okręglicka, M. (2015). Review of complexity drivers in enterprise, In Kocourek, A. (ed.), *Liberec Economic Forum 2015*. Proceedings of the 12th International Conference. Liberec: Technical University of Liberec, pp. 253-260.

Havierniková, K., Srovnalíková, P. (2014). The immunity of family business in the conditions of economic crisis. In Drobyazko S.I. (ed.), *Problems of social and economic development of business: Collection of scientific articles*, vol. I. - Montreal: Publishing house Breeze, pp. 179-183.

Kádárová, J. Bajus, R. Rajnoha, R. (2015). Optimal financing of the industrial enterprise. *Procedia Economics and Finance*, vol. 23, pp. 953-958.

Kraemer-Eis, H., Battazzi, F., Charrier, R., Natoli, M., Squilloni, M. (2014). Institutional non-bank lending and the role of debt funds. EIF Working Paper 2014/25. [online]. [cit.2016-03-05]. Available: http://www.eif.org/news-centre/publications/eif-wp-25.pdf.

Kraemer-Eis, H., Lang, F. (2014). The importance of leasing for SME financing. World Leasing Yearbook 2014, Euromoney, pp. 18-23.

Lahiri, R. (2012). Problems and prospects of micro, small and medium enterprises (MSMEs) in India in the era of globalization. In the International Conference on Interplay of Economics, Politics and Society for Inclusive Growth Organized by Royal College of Thimphu, Bhutan.(October 15 and 16, 2012). [online]. [cit.2016-03-05]. Available: http://www.rtc. bt/conference/2012.

Lemańska-Majdzik, A. (2014). Role of knowledge in managing an enterprise, In Hittmar S. (ed.), *Theory of Management 7*. *The selected problems for thedevelopment support of management knowledge base*. Scientific Papers, Zilina: EDIS - University of Zilina, pp. 19-22.

Luo, P., Wang, H., Yang, Z. (2016). Investment and financing for SMEs with a partial guarantee and jump risk, *European Journal of Operational Research*, vol. 249(3), pp. 1161-1168.

Mun, S.G., Jang, S.Ch. (2015). Working capital, cash holding, and profitability of restaurant firms, *International Journal of Hospitality Management*, vol. 48, pp. 1-11.

Mynarzová, M., Kaňa, R. (2014). Theory and practice of industrial policy of the EU in the context of globalization challenges. In Honová, I. et al. (eds.). *Proceedings of the 2nd International Conference on European Integration 2014*. Ostrava: VŠB – Technical University of Ostrava, pp. 499-507.

OECD (2015). New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments. [online]. [cit.2016-03-01]. Available: http://www.oecd.org/industry/smes/New-Approaches-SME-full-report.pdf.

Okręglicka, M. (2016). Internal innovativeness and management of current finances of enterprises in Poland, In Business Challenges in the Changing Economic Landscape - vol. 1, eds. Bilgin M.H., Danis H., Demir E., Can U., Springer 2016, pp. 225-237.

Paul, S., Boden, R. (2008). The secret life of UK trade credit supply: Setting a new research agenda. *The British Accounting Review*, vol. 40, pp. 272-281.

Paul, S., Wilson, N. (2006). Trade credit supply: an empirical investigation of companies level data. *Journal of Accounting-Business and Management*, vol. 13, pp. 85-113.

Pelly, R., Kraemer-Eis, H. (2012). Improving the funding landscape for entrepreneurs. SME centre policy brief – SMEs in the single market, *Lisbon Council Policy Brief*, vol. VI, no. 3.

Prohorovsa, A., Beiziterea, I. (2015). Trends, sources and amounts of financing for micro-enterprises in Latvia, *Procedia - Social and Behavioral Sciences*, vol. 213, pp. 404-410.

Robb, A., Robinson, D. (2010). The Capital structure decisions of new firms. *National Bureau of Economic Research*, Working Paper 16272, [online]. [cit.2016-03-07]. Available:http://www.nber.org/papers/w16272.

Rupeika-Apoga, R. (2014). Financing in SMEs: Case of the Baltic States, *Procedia - Social and Behavioral Sciences*, vol. 150, pp. 116-125.

Shin, H., Soenen, L. (1998). Efficiency of working capital management and corporate profitability. *Financial Practice and Education*, vol. 8(2), pp. 37-45.

Sipa, M., Skibiński, A. (2015). Innovative strategies of small enterprises in Poland. In Kocourek, A. (ed.), *Liberec Economic Forum 2015*. Proceedings of the 12th International Conference. Liberec: Technical University of Liberec, pp. 342-352.

Ukaegbu, B. (2014). The significance of working capital management in determining firm profitability: Evidence from developing economies in Africa, *Research in International Business and Finance*, vol. 31, pp. 1-16.

Uzzi, B., Gillespie J. (1999). Interfirm relationships and the firm's financial capital structure: The case of the middle market. *Research in the Sociology of Organizations*, vol. 16, pp. 107-126.

Wang, Y.J. (2002). Liquidity management, operating performance, and corporate value: evidence from Japan and Taiwan. *Journal of Multinational Financial Management*, vol. 12(2), pp. 159-169.

Ziółkowska, B. (2013). Zarządzanie procesami tworzenia wartości w przedsiębiorstwie. Perspektywa wirtualizacji. Monografie 27. Częstochowa: Wydawnictwo Politechniki Częstochowskiej, 2013.

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# 49. PRIORITIES OF PHYSICAL ENTITIES SELECTING CREDIT INSTITUTIONS AND CREDIT TYPES: LITHUANIAN CASE

Abstract: The study is aimed at identification of the priorities of physical entities while selecting credit institutions and credit types in Lithuanian borrowing market. The methods of the research include the analysis of the scientific literature, statistical data analysis, questionnaire survey (quantitative research), descriptive statistics and cross-variable analysis. The research has enabled to identify that credit obtaining physical entities give their priorities to such credit institutions as leasing companies, fast credit companies and banks. This data corresponds with the results showing that leasing and fast credits are the types of credits preferred by physical entities and taken with the highest frequency in Lithuanian borrowing market. The value of the obtained credits is comparatively low, which can be explained by the fact that high values are not typical of leasing and fast credits. Credits are basically used by the intended purpose, although fast credits are used not by the intended purpose more frequently than the other types of credits. The results propose that physical entities in Lithuanian borrowing market are inclined to obtain the credits under concessive terms, usually offered by fast credit companies rather than by commercial banks or credit unions. That is why, with a view to raising the competitiveness in Lithuanian crediting market, the institutions mentioned above are recommended to alleviate and simplify the terms of issuance of credits for physical entities.

Keywords: borrowing market, credit institutions, credit types, Lithuania, physical entities

JEL Classification: D14, E41, G21

# 1. Introduction

The priorities of physical entities while selecting a credit institution may vary since the need of borrowing might be caused by different reasons. With reference to Wilson (1997), searching for a suitable credit institution, qualitative crediting services and favourable crediting terms, physical entities appear "in the position of "a shopping person", who, at first needs to evaluate the possible alternatives and after that can start negotiating" (p. 547).

Analysing the issues of physical entities' borrowing, the majority of the studies are designed for the analysis of the external (Krisnanto, 2011; Monastyrskaya, 2011; Maiyaki, 2011; Chigamba, Fatoki, 2011; Podolskaya, Troshin, 2014, etc.) or internal (Jureviciene, Gausiene, 2010; Zukauskas, Zukauskiene, 2012) factors that determine the choice of a credit institution. The research is mostly carried out for particular countries, for instance, Nigeria (Maiyaki, 2011), South Africa (Chigamba, Fatoki, 2011), Lithuania (Gruzaite, Paliulyte, 2007; Rackauskas, Liesionis, 2013), Russia (Monastyrskaya, 2011; Jegorof et al., 2010), or particular social groups (students (Chigamba, Fatoki, 2011), 18-22 aged people (Podolskaya, Troshin, 2014).

However, Jegorof et al. (2010) notes that borrowing market, unlike fund market, is indefinite since each borrowing contract is unique with its financial and non-financial crediting terms (credit volumes,

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crediting duration, pay off terms, etc.). Hence, the choice of a credit institution depends not only on the external factors, but also on the type of the credit offered. That is why, analysing the priorities of credit obtaining physical entities, it is purposeful to consider both groups of the factors mentioned above, following the systematic approach.

The study is aimed at identification of the priorities of physical entities while selecting credit institutions and credit types in Lithuanian borrowing market. The purpose of the study has been detailed into the following objectives: 1) to review the scientific concepts of a credit and credit institution; 2) to identify the types of credits available to physical entities in Lithuanian borrowing market; 3) to select the methodology of the research; 4) to identify the priorities of physical entities while selecting credit institutions and credit types in Lithuanian borrowing market. The methods of the research include the analysis of the scientific literature, statistical data analysis, questionnaire survey (quantitative research), descriptive statistics and cross-variable analysis.

# 2. Review of the scientific concepts of a credit and a credit institution

From the scientific point of view, a credit can be interpreted as the particular expression of monetary relationship (Jasiene, Staroselskaja, 2010; Deimantaite-Gedmintiene, 2012; Shaitanova, Michailof, 2012), a commercial trust while borrowing money for the interest (Zaltauskiene, Novosinskiene, 2002; Gudelyte, Valuzis, 2012) or borrowing money for the particular fee (Jimenez, Saurina, 2005; Bikas et al., 2007).

The action of issuance of a credit is usually performed by a particular credit institution. A credit institution is referred to a commercial bank or another credit company providing crediting services (Mileryte, Jureviciene, 2010). It can also be treated as "an enterprise that is involved in taking deposits from non-professional market members and borrowing money" (Gudelyte, Valuzis, 2012, p. 13). With reference to the Act of the Financial Institutions of the Republic of Lithuania, No. 91-3891, a credit institution is "an enterprise that has the licence for taking deposits and other kinds of repayable funds from non-professional market participants and borrows the collected funds" (2002, p. 4). Following the findings made by Kiyak and Paulioliene (2014), the main credit institutions in Lithuanian borrowing market directly providing credits to physical entities include commercial banks, credit unions, fast credit companies and leasing companies.

# 3. Types of credits available to physical entities in Lithuanian borrowing market

Credit obtaining is issuance of the funds disposed by a creditor (a credit institution) to a borrower (debtor) (Lloyd, 2006; Chowdhury, Ahmed, 2009; Lebedef, 2006). In the scientific literature, the credits issued by credit institutions are grouped by borrowers (physical and juridical entities), and by type (see Table 1.).

Table 1. Types of credits available to physical and juridical entities in Lithuanian borrowing market

Types of credits available to physical entities	Types of credits available to juridical entities
Housing credit	Credit line
Consumption credit	Long-term credits for business development
Leasing	Credits for small and medium business
Credit cards	Working capital funding
Credits for students	Credits for agriculture
Credit JESSICA for renovation of apartment blocks	Overdraft
Credit of significant opportunities	Investment funding

Source: Compiled by the authors with reference to Zilinskas, Lembutis, 2013, p.75

As it can be seen in Table 1, the main types of credits available to physical entities include housing credits, consumption credits, leasing and credit cards. Although leasing and credit limits on credit cards can be attributed to the group of consumption credits (following the regulations of the Civil Code of the Republic of Lithuania, 2000), seeking for the detailed analysis in this research, they will be treated as a separate type of credit since inclusion of a wider variety of credit types enables to have a deeper insight into the credit market trends and changes (Shcheglova, 2010; Lukina, 2012; Shaitanova, Michailof, 2012; Janof, 2012).

According to Blank (2003), different types of credits may be linked with different elements of the credit terms, i.e. different monetary value, purpose, duration, costs, etc. In addition, physical entities may apply to a credit institution having or not having the information on its financial indicators, obtain

credits with different frequency and use the credit by the intended or not intended purpose (Lebedef, 2006; Lukina, 2012). Considering that, the factors of credit obtaining frequency, its monetary value, the frequency of the use of the credit by the intended purpose as well as physical entities' interest in credit institutions' financial indicators before applying for a credit will be included in the research.

# 4. The methodology of the research

The quantitative method - questionnaire survey — was engaged for the research considering its simplicity, opportunity to involve a big number of respondents and low costs of the research. The selected data collection instrument included the questions that were formulated with a view to obtaining the data on the respondents' priorities while selecting a credit institution and a type of credit as well as the data on credit obtaining frequency, credit monetary value, the frequency of the use of the credit by the intended purpose, physical entities' interest in credit institutions' financial indicators before applying for a credit and respondents' social — demographic characteristics. All the questions included in the data collection instrument were of the closed type, i.e. with the provided answer alternatives.

The survey was carried out in the credit institutions (banks, credit unions, leasing companies and fast credit companies) in Klaipeda city, Lithuania, from November 3 to November 7, 2014. The basic criterion of the involvement of the respondents in the survey was their experience of taking at least one credit in any credit institution. The sample of the survey - 300 people - represents the general entirety of the population living in Klaipeda city (N = 133.530) with 6 per cent error rate.

Processing the data of the survey, percentage distribution of the answers as well as the arithmetic averages of the evaluations were calculated. For the data analysis, the methods of descriptive statistics and cross-variable (vertical and horizontal) analysis were engaged.

# Identification of the priorities of physical entities while selecting credit institutions and credit types in Lithuanian borrowing market

The results of the research have revealed that credit obtaining physical entities give their priorities to such credit institutions as leasing companies (32 per cent of the respondents), fast credit companies (31 per cent of the respondents) and banks (28 per cent of the respondents). The number of the respondents obtaining credits from credit unions is comparatively low (9 per cent of the respondents). This data corresponds with the results showing that leasing (pointed by 33 per cent of the respondents) and fast credits (pointed by 31 per cent of the respondents) are the types of credits preferred by physical entities (see Figure 1).

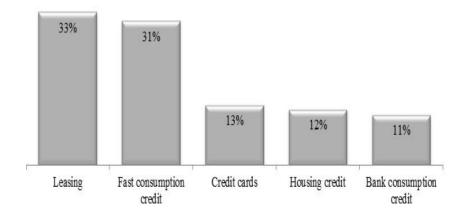


Figure 1. The priorities of physical entities while selecting a credit type (%)

Source: Own work

The data in Figure 1 also shows that credit cards, housing credits (both pointed by 13 per cent of the respondents) as well as consumption credits (pointed by 11 per cent of the respondents) are obtained much less frequent. This might be caused by more constrained terms of the issuance of the two latter credit types.

The priorities of physical entities to fast credits have also been confirmed by the data showing the frequency of credit obtaining (see Figure 2).

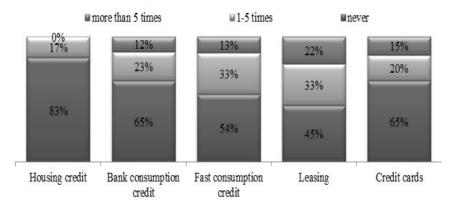


Figure 2. Frequency of taking a credit of a particular type (%)

Source: Own work

As Figure 2 reveals, leasing and fast credits are used with the highest frequency -33 per cent of the respondents have obtained these credits 1-5 times, and respectively 22 and 13 per cent of the respondents more than 5 times throughout their lives. The other types of credits obtained less frequent.

Concerning the value of the credits obtained by physical entities, it has appeared to be comparatively low – from 1000 to 10000 Litas (from about 290 to 2806 EUR), as it was pointed out by 49 per cent of the respondents, or up to 1000 Litas (about 290 EUR), as it was pointed out by 39 per cent of the respondents. The comparatively low value of the obtained credits is explained by the fact that the biggest part of the respondents obtain such credit types as leasing and fast credits whereas higher values (100000 Litas (about 28962 EUR) and more) are typical of housing credits.

The survey also showed that the credits obtained by physical entities are not always used by the intended purpose, although 69 per cent of the respondents pointed out doing so. What is more, 20 per cent of the respondents usually, 7 per cent – sometimes, 3 per cent – occasionally, and 1 per cent – never use the credit by the intended purpose, which proposes that approximately 11 per cent of credit obtaining physical entities do not use the credit by the intended purpose.

More detailed data was drawn applying cross-variable analysis. The results of the horizontal cross-variable analysis on frequency of the use of the obtained credits by the intended purpose vs types of credits have been reflected in Table 2.

Table 2. The results of the horizontal cross-variable analysis on the frequency of the use of the obtained credits by the intended purpose vs types of credits, per cent

Frequency of the use	Types of credits							
of the obtained credits by the intended purpose	Housing credit	Consumption credit	Fast credit	Leasing	Credit cards	Total		
Always	19	7	18	47	9	100		
Usually	0	17	50	0	33	100		
Sometimes	0	27	64	0	9	100		
Occasionally	0	37	63	0	0	100		
Never	0	0	100	0	0	100		

Source: Own work

The data presented in Table 2 illustrates that fast credits are used not by the intended purpose more frequently than the other types of credits, which proposes that the physical entities, who obtain fast credits, do not have any defined strategies for spending of the borrowed funds. For consumption credits, frequency of the use of the credit by the intended purpose is lower whereas leasing and housing credits are always used by the intended purpose. Thus, there exists the link between the frequency of the use of the obtained credits by the intended purpose and the type of the credit.

The interest in credit institutions' financial indicators is also a significant part of physical entities' borrowing behaviour. The research has revealed that 66 per cent of the respondents regularly check credit institutions' financial indicators before selecting one or another to apply for a credit (see Figure 3).

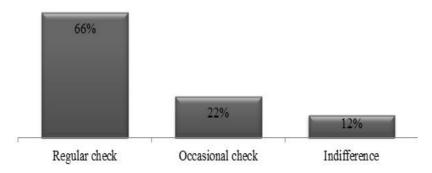


Figure 3. Physical entities' interest in credit institutions' financial indicators before applying for a credit (%)

Source: Own work

Figure 3 also shows that the number of the respondents who only sometimes or never check credit institutions' financial indicators is significantly lower than that of the respondents who regularly check the indicators mentioned above. More detailed data was drawn applying cross-variable analysis (see Table 3).

Table 3. The results of the vertical cross-variable analysis on the physical entities' interest in credit institutions' financial indicators before applying for a credit vs the types of credit institutions (%)

Interest in credit institutions' financial	Types of credit institutions					
indicators before applying for a credit	Bank	Credit union	Fast credit company	Leasing company		
Regular check	100	77	17	80		
Occasional check	0	23	44	20		
Indifference	0	0	39	0		
Total	100	100	100	100		

Source: Own work

The vertical cross-variable analysis has revealed that the respondents applying for credits to fast credit companies show the minimal interest in their financial indicators in comparison to the respondents borrowing from banks, leasing companies or credit unions. With reference to these results, it can be presumed that such physical entities' borrowing behaviour might be indirectly influenced by concessive crediting terms applied by fast credits companies (crediting terms applied by fast credit companies are the least strict in comparison to the ones applied by the other researched credit institutions).

The horizontal cross-variable analysis has revealed the links between the interest in credit institutions' financial indicators before applying for a credit and the types of the obtained credits (see Table 4).

Table 4. The results of the horizontal cross-variable analysis on the physical entities' interest in credit institutions' financial indicators before applying for a credit vs the types of the obtained credits (%)

Interest in credit	Types of credits					
institutions' financial indicators before applying for a credit	Housing credit	Consumption credit	Fast credit	Leasing	Credit cards	Total
Always	18	9	15	45	13	100
Usually	0	21	52	15	12	100
Sometimes	0	5	78	0	17	100

Source: Own work

The data presented in Table 4 illustrates that the respondents obtaining fast credits and using credit cards show less interest in the credit institutions' financial indicators before applying for a credit in comparison to the ones obtaining consumption, housing and leasing credits. Thus, there exists the link between the interest in credit institutions' financial indicators before applying for a credit and the types of the obtained credits.

Summarising, it can be stated that credit obtaining physical entities give priorities to borrowing from leasing companies, fast credit companies and banks. Commonly chosen types of credits include leasing and fast credits. The value of the obtained credit occasionally exceeds 10000 Litas (about 2806 EUR). The above mentioned results propose that physical entities in Lithuanian borrowing market are inclined to obtain the credits under concessive and simplified crediting terms (usually offered by fast credit companies). The biggest part (69 per cent) of physical entities use the obtained credits by the intended purpose, although fast credits are used not by the intended purpose more frequently than the other types of credits. Finally, although the biggest part of physical entities regularly check credit institutions' financial indicators before applying for a credit, users of fast credits and credit cards show less the interest in the credit institutions' financial indicators in comparison to the physical entities obtaining consumption, housing and leasing credits.

# 6. Conclusions

The theoretical analysis of the scientific literature has enabled to identify factors that are related to physical entities' borrowing behaviour and might have the impact on their priorities while selecting a credit institution and a credit type. With reference to the results of the empirical research, the following conclusions can be made:

- 1) Credit obtaining physical entities give their priorities to such credit institutions as leasing companies (32 per cent of the respondents), fast credit companies (31 per cent of the respondents) and banks (28 per cent of the respondents). This data corresponds with the results showing that leasing and fast credits are the types of credits preferred by physical entities and taken with the highest frequency in Lithuanian borrowing market.
- 2) The value of the obtained credits is comparatively low and occasionally exceeds 10000 Litas (about 2806 EUR), which can be explained by the fact that high values are not typical of leasing and fast credits
- 3) The biggest part of physical entities use the obtained credits by the intended purpose, although fast credits are used not by the intended purpose more frequently than the other types of credits.
- 4) Although the biggest part of physical entities regularly check credit institutions' financial indicators before applying for a credit, users of fast credits show less interest in comparison to the physical entities obtaining consumption, housing and leasing credits.

The above-mentioned results propose that physical entities in Lithuanian borrowing market are inclined to obtain the credits under concessive terms, usually offered by fast credit companies rather than by commercial banks or credit unions. That is why, with a view to increasing the share of the credits issued for physical entities and raising the competitiveness in Lithuanian crediting market, the institutions mentioned above are recommended to alleviate and simplify the terms of issuing credits for physical entities.

# References

Bikas, E., Cepiene, I., Jasiene, M. (2007). Pinigai. Kreditas. Valstybe. Finansai. Vilnius: Vilnius University Publishing, 2007.

Blank, I. A. (2003). Osnovy Finansovogo menedzmenta. Kiev: Nika-Centr, 2003.

Chigamba, T. A., Fatoki, O. (2011). Factors Influencing the Choice of Commercial Banks by University Students in South Africa. *International Journal of Business Management*, vol. 6, iss. 6, pp. 66-76.

Chowdhury, T. A., Ahmed, K. (2009). Performance Evaluation of Selected Private Commercial Banks in Bangladesh. *International Journal of Business and Management*, vol. 4, iss. 4, pp. 86-97.

Deimantaite-Gedmintiene, D. (2012). Bankininkysytes Zinynas. Vlinius: The College of Social Sciences, 2012.

Gruzaite, A., Paliulyte, A. (2007). Siaulių Miesto Gyventoju Suinteresuotumo Imti Paskolas Tyrimas. *IT ir Vadyba: Siuolaikines aktualijos ir Tendencijos*, vol. 4, iss. 1, pp. 104-110.

Gudelyte, L., Valuzis, M. (2012). Banku Valdymo ir Ju Prieziuros Pagrindai. Vilnius: The College of Social Sciences, 2012.

Janof, V. V. (2012). Teoreticiskije Podchody k Sisteme Kreditovanija Fiziceskich Lic. *Ekonomika i Upravlenije: Novyje Vyzovy i Perspektyvy*, vol. 3, iss. 2, pp. 204-208.

Jasiene, M., Staroselskaja, J. (2010). Lietuvos Banku Konkurencingumas ir Banko Pasirinkimas. *Pinigu studijos*, vol. 2, iss. 2, pp. 29-41.

Jegorof, A. V., Karmazina, A. S., Cekmareva, J. N. (2010). Analiz i Monitoring Uslovij Bankovskogo Kreditovanija. *Dengi i Kredit*, vol. 10, iss. 2, pp. 16-22.

Jimenez, G., Saurina, J. (2005). *Credit cycles, credit risk, and prudential regulation* [online]. [cit.2015-05-28]. Available: http://www.bis.org/bcbs/events/ rtf05JimenezSaurina.pdf.

Jureviciene, D., Gausiene, E. (2010). Finansines Gyventoju Elgsenos Ypatumai. *Verslas: Teorija ir Praktika*, vol. 3, iss. 11, pp. 222-237.

Kiyak, D., Paulioniene, L. (2014). Lietuvos Kredito Uniju Veiklos ir Makroekonominiu Rodikliu Tarpusavio Priklausomybes Tyrimas. *Vadyba*, vol. 1, iss. 24, pp. 105-112.

Krisnanto, U. (2011). The Customers' Determinant Factors of the Bank Selection. International Research Journal of Business Studies, vol. 1, iss. 4, pp. 59-70.

Lebedef, J. A. (2006). Ocenka Riskov Kreditovanija Fiziceskich Lic (Problema Issledovanija Eje Aktualnosti, Ideja Reshenija [online]. [cit.2015-05-14]. Available: http://ej.kubagro.ru/2006/01/pdf/13.pdf.

Lloyd, B. T. (2006). Money, Banking and Financial Markets. Mason: Thomson, 2006.

Lukina, O. O. (2012). Osobennosti Ocenki Kreditosposobnosti Fiziceskogo Lica. *Nauka i Sovremennost*, vol. 16, iss. 4, pp. 139-142.

Maiyaki, A. A. (2011). Factors Determining Bank's Selection and Preference in Nigerian Retail Banking. *International Journal of Business and Management*, vol. 1, iss. 6, pp. 253-257.

Mileryte, E., Jureviciene, D. (2010). Gyventoju Busto Kreditavimo Analize Sisteminiu Poziuriu. *Mokslas – Lietuvos Ateitis*, vol. 2, iss. 2, pp. 55-61.

Monastyrskaya, G. M. (2011). Doverije Kak Factor Konkurentosposobnosti Banka. *Vestnik OGU*, vol. 8, iss. 127, pp. 183-186.

Podolskaya, T. O., Troshin, A. N. (2014). Issledovanije Potrebitelskogo Povedenija pri Vybore Kommerceskogo Banka. *Koncept*, vol. 6, iss. 6, pp. 1-7.

Rackauskas, M., Liesionis, V. (2013). Kredito Unijos Nariu Finansine Elgsena Atsizvelgiant i Ju Asmenines Savybes. *Vadyba*, vol. 1, iss. 22, pp. 127-134.

Shaitanova, L. M., Michailof, N. O. (2012). Sovremennyje Tendencii Izmenenija Uslovii Kreditovanija Fiziceskich Lic. *Sibirskij Ekonomicheskij Zurnal*, vol. 3, iss. 16, pp. 1-9.

Shcheglova, S. S. (2010). Teoretichiskije Aspekty Klasifikacii Objektov i Vidov Kreditirovaniija Fiziceskich Lic. *Ekonomika Kryma*, vol. 1, iss. 30, pp. 26-30.

The Act of the Financial Institutions of the Republic of Lithuania (2002). Vilnius: No. IX-1068.

The Civil Code of the Republic of Lithuania (2000). Vilnius: No.VIII-1864.

Wilson, K. G. (1997). Science and Treatment Development: Lessons from the History of Behavior Therapy. *Behavior Therapy*, vol. 6, iss. 28, pp. 547-558.

Zaltauskiene, N., Novosinskiene, A. (2002). Credits Market Development in Lithuania. *Engineering Economics*, vol. 3, iss. 29, pp. 59-66.

Zilinskas, A., Lembutis, V. (2013). Triju Didziausiu Lietuvos Komerciniu Banku Priimtu Indeliu ir Suteiktu Paskolu Lyginamoji Analize. *Mokslo Taikomieji Tyrimai*, vol. 1, iss. 6, pp. 73-87.

Zukauskas, S., Zukauskiene, R. (2012). Studentu Nuostatos Skolinimosi Atzvilgiu ir Ju Skolinimosi Elgesys. *Social Work*, vol. 1, iss. 11, pp. 209-220.

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# 50. THE DEMAND FOR TECHNICAL WORKERS ON THE CZECH LABOUR MARKET

Abstract: As the Czech economy has grown and the unemployment has fallen during 2015, many Czech employers have experienced a serious shortage of qualified and motivated technical workers. Today, Czech employers are looking for specialists with both secondary and higher education, but the problem is that the professional and personal qualities of applicants often do not meet the requirements of employers. The goal of the paper is to discuss employers' requirements and applicants' qualities currently prevailing on the Czech labour market and define useful ways of dealing with the shortage of technical workers in the Czech companies. The paper is based on both secondary sources and the authors' research. The results are different strategies, policies and practices of dealing with the shortage of technical workers in the Czech

Keywords: human resource management, labour market, shortage of technical workers

JEL Classification: J21, M12

# 1. Introduction

In connection with continuous and fundamental changes in business conditions in the global economy, qualified and motivated people are seen as the most important source and the greatest wealth of any organization (Kucharčíková, 2014). Each organization also needs other resources, e.g. material, finance, or information, but qualified and motivated people are indispensable for achieving expected organizational performance (Armstrong, Taylor, 2014). Suitably qualified and motivated people determine the future prosperity and competitiveness of the organization.

As the Czech economy has grown and the unemployment has fallen during 2015, many Czech employers have experienced a serious shortage of qualified specialists in technical professions. Today, Czech employers are looking for specialists with both secondary education (e.g. lathe operators, welders, electricians, programmers, etc.) and higher education (e.g. specialists in transport and logistics, mechanical engineers, civil engineers, electrical engineers, etc.)., but the problem is that the professional and personal qualities of applicants often do not meet the requirements of employers.

From the perspective of common job requirements, suitable job applicants must demonstrate: 1) relevant professional knowledge and skills, 2) suitable work and social habits, and 3) appropriate development potential for successful performance, professional growth and career advancement (Šikýř, Bušina, 2014). However, to find such applicants on today's Czech labour market is not easy.

In general, among the unemployed on the Czech labour market are mainly - and constantly unskilled workers, young people aged 20 to 29 and people aged 50 and over. Especially long-term unemployment among young people and people aged 50 and over seems to be a serious social problem that is associated with significant costs in the Czech Republic as well as in the other European countries (Sirůček, Pavelka, 2013).

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A common problem of employing young people is that young people usually have better theoretical knowledge than practical experience in the field of their interest (Stanciu, Banciu, 2012). Many young people of various specializations often lack relevant professional skills and social habits (Cutillas et al., 2011). Some young people also have no real idea about their future career, but often require positions that do not match their abilities, just to get a job of their dreams, a job promising them high earnings and rapid career (Garcia-Arical, Van der Velden, 2008). This leads to the fact that employers usually hire experienced workers than young people with no relevant experience and unreal expectations.

A common problem of employing people aged 50 and over is that older people are traditionally seen as inflexible when it comes to changes, innovations and technologies. The traditional fear is that older people will be stuck in their ways and employers are not willing to invest in ineffective and unpromising people (Němec, Syrůček, 2015).

Subjectively employers are afraid of organizational and performance problems of employing young people and people aged 50 and over, but objectively employers have lack of effective strategies, policies and practices of employing young people and people aged 50 and over as well as lack of understanding of specific needs of these people. To deal with the shortage of qualified and motivated technical workers, employers must learn how to create appropriate and attractive employment opportunities for young people and people aged 50 and over and how to effectively develop potential of these people.

# 2. Goal and methodology

The goal of the paper is to discuss employers' requirements and applicants' qualities currently prevailing on the Czech labour market and define useful ways of dealing with the shortage of technical workers in the Czech companies.

Achieving the goal of the paper is based on both the analysis of available secondary data (especially the statistical data processed by the Czech Statistical Office and the Ministry of Labour and Social Affairs of the Czech Republic) and the results of two empirical surveys conducted by authors.

The first survey (Šafránková, 1996-2013) was longitudinal sociological survey on competencies and employability of graduates from the Czech Technical University in Prague from 1985 to 2012. The numbers of respondents were as follows: 1996 – 681 graduates from 1985 to 2012; 2003 – 1,357 graduates from 1993 to 2000; 2005 – 828 graduates from 1985 to 1993 and from 2000 to 2003; 2009 – 380 graduates from 1999, 2004, and 2008; 2010 – 340 graduates from 2000, 2005, and 2009; 2011 – 67 graduates from 2010; 2013 – 460 graduates from 2008 and 2012.

The second survey (Šikýř, 2014) was survey on the link between human resource management and organizational performance and the application of best practices in human resource management conducted from February to May 2014. The tool used for data collection was a questionnaire that included eleven multiple choice questions focused on the value of employees, the conditions under which an employee can be considered as the most valuable source, the approach to human resources management, the conditions that affect human resource management, the role of line managers, HR professionals and outsourcing in human resource management, the impact of human resource management on organizational performance, the results achieved through human resource management, the existence of best practices in human resources management, the potential best practices in human resource management, the benchmarking in human resource management. The questionnaire was distributed by email to HR directors, HR managers and HR specialists of well-known and successful organizations in the Czech Republic. The relevant data were obtained from 80 organizations.

# 3. Results and discussion

The Czech economy showed substantial recovery and significant growth in 2015. According to the data of the Czech Statistical Office (CSU, 2015a) the gross domestic product in the first quarter increased by 4.2% year-on-year, in the second quarter was higher by 4.4% year-on-year and in the third quarter was higher by 4.5% year-on-year. The development was supported by household consumption and investments, general government expenditure and foreign demand.

The increase in the gross domestic product was accompanied by a decrease in unemployment and by an increase in vacancies. Based on the date of the Ministry of Labour and Social Affairs of the Czech Republic (MPSV, 2015), the Figure 1 shows the share of unemployed persons (the ratio of available job seekers aged 15 to 64 years in the population of the same age) from December 2012 to December 2015 and the figure 2 shows the number of vacancies registered by job offices from December 2012 to December 2015. By December 2012 job offices registered altogether 545,311 job seekers and 34,893 vacancies. There were 15.6 job seekers for one vacancy at average. By December 2013 job offices registered altogether 596,833 job seekers and 35,178 vacancies. There were 17.0 job seekers for one vacancy at average. By December 2014 job offices registered altogether 541,914 job seekers and 58,739 vacancies. There were 9.2 job seekers for one vacancy at average. By December 2015 job offices registered altogether 453,118 job seekers and 102,545 vacancies. There were 4.4 job seekers for one vacancy at average.

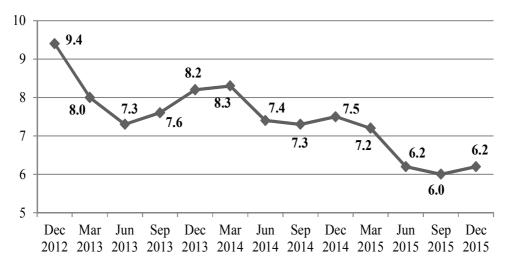


Figure 1. The share of unemployed persons in the Czech Republic (%)

Source: Authors based on the data of the Ministry of Labour and Social Affairs of the Czech Republic (MPSV, 2015)

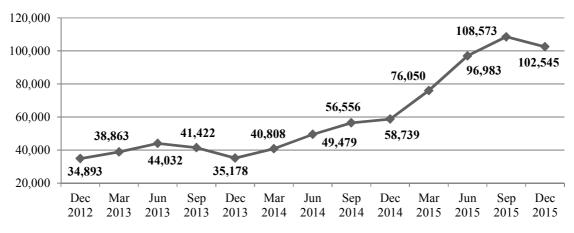


Figure 2. The number of vacancies registered by job offices

Source: Authors based on the data of the Ministry of Labour and Social Affairs of the Czech Republic (MPSV, 2015)

In general, among the unemployed are mainly unskilled workers, young people aged 20 to 29 and people aged 50 and over. Based on the data of the Czech Statistical Office (CSU, 2015b), the Figure 3 shows the number of job seekers aged 20 to 29 and job seekers aged 50 and over registered at job offices from 2004 to 2014 (as at 31 December).

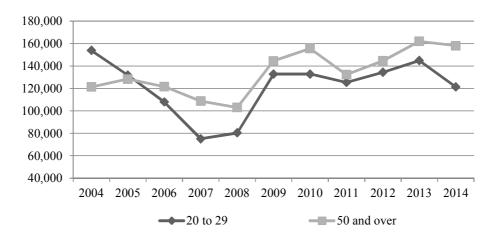


Figure 3. The number of job seekers aged 20 to 29 and 50 and over registered at job offices (as at 31 December)

Source: Authors based on the data of the Czech Statistical Office (CSU, 2015b)

As the Czech economy has grown, many employers in different industries (e.g. manufacturing, energetics, construction, transport, information technologies, etc.) are willing to employ new people, but they face a serious shortage of suitable applicants, especially qualified and motivated technical workers with both secondary and higher education. A common problem of employing the unemployed, especially young people and people aged 50 and over, is that their professional and personal qualities often do not meet the requirements of employers. In terms of common job requirements, suitable job applicants must demonstrate relevant professional knowledge and skills, suitable work and social habits, and appropriate development potential. And that is the problem, because most of young people do not meet the requirements for professional skills and experience, as well as social behaviour and professional motivation. Coming to work, most of them do not have any real idea about their profession. They often do not know the main duties or primary responsibilities of the work. Even if they worked during their studies, they usually have no understanding of how to perform daily work tasks and how to solve real professional problems. They do not know how to use their theoretical knowledge in practice. They also do not have the teamwork skills. They lack the ability to collaborate and communicate with colleagues, managers and clients. They are not able to analyse the available information, identify key issues, express their views and discuss alternative solutions. They lack relevant professional skills and social habits, but they want great earnings and rapid career. This leads to the fact that employers usually employ experienced workers than young people with no relevant experience and unreal expectations.

Employing people aged 50 and over seems to be another problem. These people are traditionally seen as loyal and hardworking, but inflexible, ineffective and unpromising. This leads to the fact that employers are not willing to invest in them. In addition, many people believe that the age alone is a barrier for getting a job, but the fact is that employers can really benefit from an age diverse workforce, mixing the new ideas of young people with the life experience of older people.

This idea leads to proposals for dealing with the actual or potential shortage of suitable applicants or workers. The basic step is to change traditional stereotypes and apply a positive approach to the employment of young and older people, which means to focus on their strengths, not weaknesses. The next step is to apply proven strategies, policies and practices in talent and diversity management to create appropriate and attractive employment opportunities for young and older people and to ensure effective development of their potential.

Talent management includes the processes of planning, resourcing and developing qualified and motivated people that the employer needs now and in the future to achieve its strategic goals. The process of talent planning should define how many and what sort of people are needed. The process of talent resourcing includes obtaining suitable people within and outside the organization. Internally it involves identification and development of talented people within the organization. Externally it involves attracting talented people outside the organization, especially attracting talented students and graduates of secondary schools and universities. In this connection, employers should establish and

maintain effective relationships with suitable secondary schools and universities to have a chance to meet, attract, and select talented young people and potential workers. This approach allows employers to understand the needs and perspectives of young people to create appropriate and attractive employment opportunities for them. The process of talent development then allows talented people to learn and develop their knowledge, skills and abilities for successful performance, professional growth and career advancement in the organization.

Diversity management means creating and maintaining employment opportunities and working conditions with regard to the natural diversity of people. In terms of the employment of young and older people, the aim of diversity management is to gain a competitive advantage by employing people of all ages. Age diverse groups of people have various knowledge, skills and abilities that add value to the workplace and play a key role in achieving success of the organization. Age diverse groups of people are more experienced, have lower absenteeism, and are more flexible and often more productive than younger groups of workers. In addition, age diverse groups of people have a chance to interact with different generations of co-workers, which improves their relationships and understanding, as well as their morale and motivation, and makes the organization more attractive to workers and other stakeholders.

These strategies, policies and practices in talent and diversity management allow employers to find effective ways of dealing with a shortage of qualified and motivated people.

# 4. Conclusion

Many employers value qualified and motivated people as the most important source in their organizations. Employers require and appreciate people with relevant professional knowledge and skills, suitable work and social habits, and appropriate development potential for successful performance, professional growth and career advancement. However, to find such people on today's labour market is not easy, although there are some unemployed people.

Many Czech employers have experienced a serious shortage of suitable applicants, especially qualified and motivated technical workers with both secondary and higher education, as the Czech economy has grown and the unemployment has fallen during 2015. In general, among the unemployed on the Czech labour market are mainly - and constantly - unskilled workers, young people aged 20 to 29 and people aged 50 and over. A common problem of employing the unemployed, especially young people and people aged 50 and over, is that their professional and personal qualities often do not meet the requirements of employers. Subjectively employers are afraid of organizational and performance problems of employing young and older people, but objectively employers have lack of effective strategies, policies and practices of employing such people.

To deal with the shortage of qualified and motivated people, employers should take two key steps. Firstly, employer should change traditional stereotypes and apply a positive approach to the employment of young and older people, which means to focus on their strengths, not weaknesses. Secondly, employers must apply proven strategies, policies and practices in talent and diversity management to create appropriate and attractive employment opportunities for young and older people and to ensure effective development of their potential.

In terms of talent management employers should establish and maintain effective relationships with suitable secondary schools and universities to have a chance to meet, attract, and select talented young people and potential workers. In terms of diversity management employers should create age diverse groups of people to mix the new ideas of young people with the life experience of older people. These approaches allow employers to understand the needs and perspectives of different groups of people to create appropriate and attractive employment opportunities for them.

These issues open up new possibilities for further research in the field of talent and diversity management.

# Acknowledgements

This paper was supported by the Internal Grant Agency of the College of Regional Development in Prague [IGA Z8 02 2015].

# References

Armstrong, M., Taylor, S. (2014). Armstrong's Handbook of Human Resource Management Practice (13th ed.). London: Kogan Page Limited, 2014.

CSU (2015a). *Quarterly National Accounts, GDP resources and uses and GDP preliminary estimate*, [online]. [cit. 2015-12-27]. Available: https://www.czso.cz/csu/czso/quarterly-national-accounts-gdp-resources-and-uses-and-gdp-preliminary-estimate.

CSU (2015b). Structure of job applicants registered at the employment offices (as at 31 December), [online]. [cit. 2015-12-27]. Available: https://vdb.czso.cz/vdbvo2/faces/en/index.jsf?page=statistiky&filtr= $G \sim F_M \sim F_Z \sim F_R \sim F_P \sim S_null_null_\#$ katalog =30853.

Cutillas, I. C., Monfort, J. H., Tortajada, P. E. (2011). Labour Market Access of Graduates in Law: Teaching and Learning of Skills and Abilities in the European Higher Education Area. In Chova, L. G., Torres, I. C., Martinez, A. L. (eds.). 5th International Technology, Education and Development Conference, pp. 328-332.

Garcia-Aracil, A., Van der Velden, R. (2008). Competencies for young European higher education graduates: labor market mismatches and their payoffs. *Higher Education*, vol. 55, iss. 2, pp. 219-239.

Kucharčíková, A. (2014). Investment in the human capital as the source of economic growth. *Periodica Polytechnica, Social and Management Sciences*, vol. 22, iss. 1, pp. 29-35.

MPSV (2015). Unemployment in the Czech Republic [online]. [cit. 2015-12-27]. Available: http://www.mpsv.cz/en/ 1614.

Němec, O., Surynek, A. (2015). Age Management as a Part of Corporate Social Responsibility. In Loster, T., Pavelka, T. (Eds.), *The 9th International Days of Statistics and Economics*, pp. 1180-1190, [online]. [cit. 2015-12-27]. Available: http://msed.vse.cz/msed 2015/article/55-Nemec-Otakar-paper.pdf.

Sirůček, P., Pavelka, T. (2013). Youth Unemployment in the Czech Republic and the Impact of Economic Crisis. In Loster, T., Pavelka, T. (eds.). *The 7th International Days of Statistics and Economics*, pp. 1278-1287, [online]. [cit. 2015-12-27]. Available: http://msed.vse.cz/files/2013/229-Pavelka-Tomas-paper.pdf.

Stanciu, S., Banciu, V. (2012). Quality of higher education in Romania: are graduates prepared for the labour market? In Bekirogullari, Z. (eds.). 3rd International Conference on Education and Educational Psychology, pp. 821-827.

Šafránková, J. (1996, 2003, 2005, 2009, 2010, 2011, 2013). Positions of CTU graduates on labour market. Sociological surveys. Praha: CTU in Prague.

Šikýř, M. (2014). Nejlepší praxe v řízení lidských zdrojů. Praha: Grada Publishing, 2014.

Šikýř, M., Bušina, F. (2014). Human Resource Management in the Czech and Slovak Building Industry. In Loster, T., Pavelka, T. (eds.). *The 8th International Days of Statistics and Economics*, pp. 1477-1486 [online]. [cit. 2015-12-27]. Available: http://msed.vse.cz/msed 2014/article/255-Sikyr-Martin-paper.pdf.

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# 51. IMPORTANCE OF SOCIAL MEDIA IN JOB SEARCHING FOR YOUNG PEOPLE FROM GENERATION Y

Abstract: Young people from the generation Y are entering the labour market. Processes and tools for job searching for different positions are changing in present time. Social media are more important in job searching than any time before. This article is dealing with importance of social media in job searching for young people. We are focused on so-called generation Y. The main aim of the article is identify present importance of social media in job searching in the group of young people (present university students). The research was done by questionnaire survey on the group of students of Faculty of Social and Economic Relations, Alexander Dubček University of Trenčín. The survey group consist of students in 3rd, 4th and 5th year of study. In this article we focused on importance of social media in job searching, contemporary trends, and attitudes of young people to the possibility of job searching through social media. We formulate deductions; identify trends and the future of social media in job searching.

**Keywords:** social media, generation Y, job searching

JEL Classification: J20, J24

# 1. Introduction

According to the Slovak statistical office, unemployment rate in Slovakia was 11,4% in the third quarter of 2015. Unemployment of young people (under 25 years) is a big problem in Slovakia. In this group the unemployment rate was 24,8 % in March 2015. In this indicator Slovakia belongs to the worst 7 countries of EU together with Spain, Portugal, Italy, Croatia, Cyprus and Greece.

We focused on unemployment of young people from Generation Y and on modern ways of searching a job through social media.

The way of looking for a job has notably changed within the last ten years. From the origin paper advertisements through specialized work portals which are as agents between candidates and employers to social media.

Nowadays social media play important role also in looking for a job. HR managers use social media to look for the right candidates. We speak about social recruiting. On the other hand candidates use internet and specialized portals for looking for a suitable occupation.

In the last years social media contribute to this role. Majority of companies use social network for external communication. Either to promote the company image or products and services. Accordance to Leonardi et al. (2013) we can talk about enterprise social media.

From job searching point of view the most used social network is an occupative platform LindedIn.com which was launched primarily to link professionals from different businesses and at the same time it is optimized for looking for a job.

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In Slovakian conditions the next one is Facebook.com. Even it is primarily designed to other purpose human resources managers use it very often to get information about potential candidates. Facebook is the most wide spread social media in Slovakia. Other social media do not play an important role.

Zheng and Cheok (2011) analysed in Singapore young people's use of social networks. While in 2008 only 30% of the young people from Singapore made use of social networks, by 2011 99% of young people between 7 and 24 years of age had become social network users.

The paper deals with social media and its role in looking for a job of young people from Generation Y. We analyze questionnaire survey carried out at Faculty of social and economic relations and its students.

# 2. Social media in job searching and Generation Y

Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content (Kaplan, Haenlein, 2010). Social network is a web service allowing an individual to create public or semi-public profile within limited system interconnected with other users who they share content with, and it allows them to look through and list the connections with other users within this system (Boyd, 2008).

There currently exists a rich and diverse ecology of social media sites, which vary in terms of their scope and functionality. Some sites are for the general masses, like Facebook. Other sites, like LinkedIn, are more focused to professional networks. Media sharing sites, such as MySpace, YouTube, and Flickr, concentrate on sharing videos and photos (Kietzmann et al., 2011).

Why young people use social media? According to Colas et al. (2012) the driving force behind this use falls between two extremes: seeking to cover the social need young people have to share experiences, and activity being recognised by others, thus establishing new social relationships. Regarding young people's motivations, these are preferably of an individual nature, aimed at covering an emotional dimension; the social network is a virtual space that is emotionally gratifying and allows young people to express their intimate feelings through the perception others have of them.

Generation Y we can define as people which was born between years 1980 and 2000. Generation Y is also called Echo Boomers, Millenials, Internet generation, or Nexters (Eisner, 2005).

This people significantly affect the labour market. Part of this group work more than 10 years, part of them (born after 1990 and younger – current graduates) are looking for job opportunity. Some of Generation Y members are on position of recruiters in companies or working agencies or they work like headhunters.

# 2.1 The aim and methodology of the research

In this article we focus on analyse of utilization of social media by university students. We analyse also approach and attitudes of students to job searching through social media. Job search is a crucial step for university graduates' school-to-work transition, which involves the identification of employment goal and pursuit of that goal (Boswell et al., 2012)

The survey was done in November and December 2015 through on-line questionnaire. The questionnaire was available online at: docs.google.com. 181 respondents participated in the survey – students of Faculty of social and economic relations at Alexander Dubček University of Trenčín. In the survey group there was 43 male (23.8%) and 138 female (76.2%), students of all 5 year-classes of university study. Almost all of these students were born between year 1990 and 1995. They are younger part of Generation Y – future graduates, mostly in the next 3 years.

The first part of the questionnaire examined socio-demographic characteristics of respondents; it means data about age, gender, year-class of respondents. The questionnaire consists of 24 questions. As far as the article size is limited there are presented only results of selected questions from the questionnaire.

# 2.2 Results of research

181 respondents participated in the survey. Most of them (56.9%) has between 23 and 24 years of age as mentioned in table 1 below.

Table 1. Number of survey participants by age

Categories	Under 20 years	20 to 22 years	23 to 24 years	25 and more years
Number	5	48	103	25
Percentage (%)	2.8	26.5	56.9	13.8

Most respondents (54.7%) study in 5 year-class at the university. Students in 5 year-class are according to the topic of the survey the most important. They are young people who will become successful graduates of the university in half a year. Number of respondents by year-classes is in the table 2 below.

Table 2. Number of survey participants by year-classes

Categories	1 <sup>st</sup> year of study	2 <sup>nd</sup> year of study	3 <sup>rd</sup> year of study	4 <sup>th</sup> year of study	5 <sup>th</sup> year of study
Number	10	17	36	19	99
Percentage (%)	5.5	9.4	19.9	10.5	54.7

Source: Own work

In the next figure 1 we can see which social media use our respondents from survey.

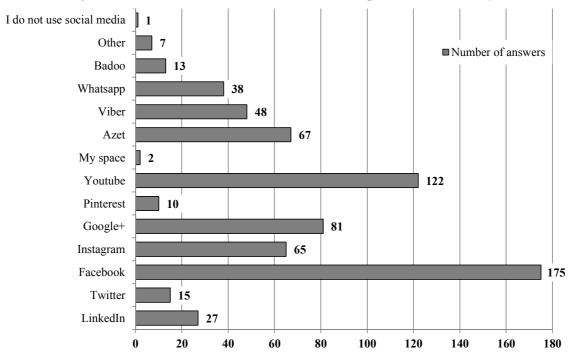


Figure 1. Which social media do you use?

Source: Own work

Very interesting is a comparison in which social media are students from the survey active. More than 96% of respondents are using facebook.com.

Facebook is the most widespread social media globally and also in Slovak republic. Video sharing network Youtube.com is on the second place (67.4%) and Google+ with 44.8% of users is on the third place. Slovak social network Azet.sk with 37% is on the fourth place and professional social network LinkedIn is on the eight place and it is used by 14.9% of respondents.

We investigated how students characterize themselves as social media users. 13 of them (7.2%) characterize themselves as intense user, 146 as active users and only 20 of them as passive users. Just 1 respondent (0.6%) do not use any social network. This numbers refer to table 3 below.

Table 3. How do you characterize yourself as a social media user?

Categories	Intense user	Active user	Passive user	I do not use any social media
Number	13	146	20	1
Percentage (%)	7.2	81.1	11.1	0.6

Students are very active in social media. The next question refers to how many hours in average they spend on social media sites daily. More than 2/3 of respondents spend more than 2 hours daily on social media sites (on PC, tablets and of course on smartphones). Accurate numbers we can see in the figure 2 below.

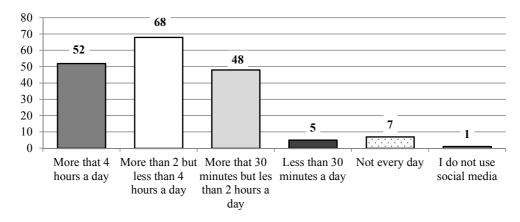


Figure 2. How many hours in average you spend on social media sites daily?

Source: Own work

As we can see the time spend on social media sites is really huge. People from the Generation Y are very active in social network and use more and more mobile devices.

In the next question we asked if students use social media for looking for a work occasions. Only 166 students responded to this question. 24 of them (14.46%) use social media for looking for a work occasions significantly, 63 of them (37.95%) average and 39 (23.49%) of them do not use social media for looking for a work occasions. Detailed data represent the Figure 3 below.

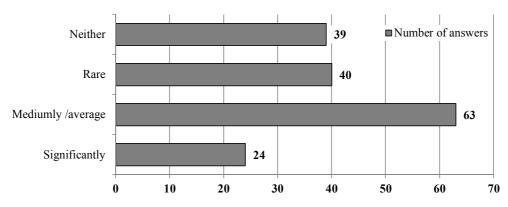


Figure 3. Do you use social media for looking for a work occasions?

Source: Own work

In the question if they have ever got a job offer through any social media, student answered that almost half of them got offer for a job through social media more than one time (47.2%). Only 30% of respondents answered that they never got a job offer through social media. This question was answered by 180 respondents. Detailed data represent the Figure 4 below.

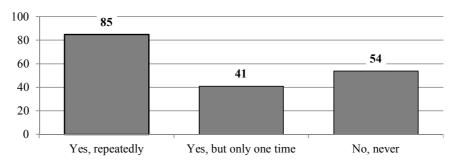


Figure 4. Have you ever got a job offer through any social media?

As we can see student in generation Y have a lot of work opportunities through social media. Another question was: Have you ever required for a job through any social media? We received 179 answers. Only 36 respondents (20.1%) did request someone for a job repeatedly. 88 respondents (49.2%) never requested anybody for a job through social media. Detailed data represent the Figure 5 below.

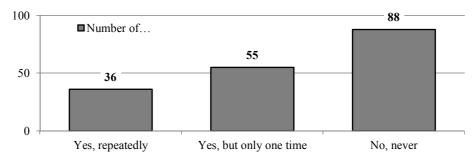


Figure 5. Have you ever required for a job through any social media?

Source: Own work

We can claim that students from generation Y mostly react on job opportunities through the social media, rather than request someone to get a job.

The question "Did you get in the past a job through social media?" 42 students answered yes, several times and 32 other ones got a job through social media only once. The most of the respondents (59.1%) don't have any experience with getting a job through social media. Detailed data represent the Figure 6 below.

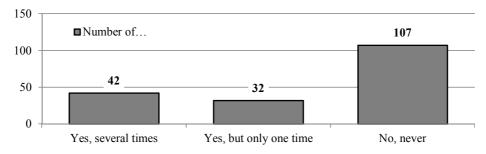


Figure 6. Did you get a job through any social media in the past?

Source: Own work

The question "Do you consider social media as a place where you can find a job or a place where a potential employer can find you?" 46.9% of respondents answered absolutely yes or rather yes. 32.6% of respondents answered rather no. 17.1% of students do not consider social media as a place to find a job. Exact answers we can find in the Figure 7.

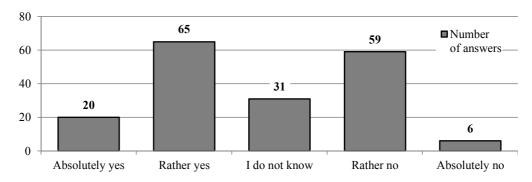


Figure 7. Do you consider social media as a place where you can find a job, eventually a place where potential employer can find you?

# 2.3 Discussion

There were not too many similar studies in Slovakia which focused on potential of social media in job searching. In survey realized by consultancy company Pricewaterhousecoopers in 2012 only 10% of students used Facebook for job searching. Yet 93% of them used Facebook regularly. Only 12% of them had LinkedIn account. Our survey shown that that numbers are going up.

According to the survey from 2014, realized by personal agency Grafton recruitment (2010 respondents – job candidates), 54% of candidates used social media for job searching. According to this survey 9 of 10 personalists used LinkedIn and 30% of them used Facebook during their work.

By Jobvite (2014) Social recruiting survey 2014 (1855 respondents – HR professionals and recruiters across industries in the USA) 94% of companies use for recruiting LinkedIn, 66% Facebook, 52% Twitter, 21% Google+ and 15% Youtube.

The percentage of companies that use social networking sites to research job applicants has been steadily growing, from 39% in 2013, up to 43% in 2014, and 52% in 2015 according to CareerBuilder's annual social media recruitment survey (careerbuilder.com, 2015).

With increasing requirement for flexibility and mobility and accelerating tempo in the process of obtaining and processing information the availability of information independently on time and place gains increasingly importance (Kajanová, Sedláček, 2014).

# 3. Conclusion

We can claim that personal profile on any social media is very strong tool for the potential candidates to get a job. Of course it can also be an obstacle (in getting a job) because of inappropriate status, images or comments. For some recruiters it is a weak point of the candidate if they have absence from social media. Good profile and comfort behavior on the social media is very important.

The Internet and mobile technologies, social media and social networks became a part of everyday life of young people. The Internet became a fundamental tool for successful job search and not only personalists but also job candidates are aware of it. (Potkány, Sedláček, Hajduková, Hitka, 2013)

According to our experience, previous works and this research we can summarize what are contemporary trends in job searching through social media:

- Importance of digital profiles in social media is increasing. For current candidates actualized profile on any kind of social media is the key for success.
- LinkedIn is a King. At the moment, a large proportion of job postings for professional roles and applications happen on LinkedIn. The role of facebook.com and twitter.com is also increasing.
- Almost all recruiters monitor potential candidates on social media sites or verify their abilities or skills through their connections, references and portfolio of works.
- Creativity and the ability to distinguish from another candidates has significant role. This refers also to employers who through communication on social media sites try to impress right candidates.
- Another trend in social media is mutual interactions between users, mutual evaluation and confirmation of skills.

We assume that potential of social media in job searching will be very high in the future. Not only the importance of social media in job searching will rise, but for some occupations mainly professional social media sites (e.g. LindedIn.com nowadays) will become the only and exclusive way to get a job. Nowadays we speak mainly about occupations in IT and creative business.

The main deductions from our survey we can resume as:

- Young people spend a lot of time on the internet and especially on social media. In our survey 28.7 % of the respondents spend on the social media more than 4 hours. It's a quite long time in the virtual world.
- University student from our survey use social media mainly for other activities as job searching (fun, relax, connection with friend and family). However they think social media is a place where they can find a job or where they can be contacted by recruiter/potential employer.
- In the sphere of job opportunities young people from Generation Y react more on outside impulse instead of they are initiative themselves.

As shown in our survey, young people spend a lot of time on social media sites. Besides fun and contacting friends and families, using social media in order to find a job becomes more and more important. According to our survey almost 70% of respondents got a job offer through social media sometimes. More than a half of respondents made use of social media to get a job. More than 40% of respondents affirmed that they got a job through any social media in the past. Half of them got a job repeatedly. The fact that more than 2/5 of respondents consider social media as a place where job opportunities can be found is also very important.

The area of using social media in job searching is very dynamic. There is a wide scope for other researches in the future. In this field new methods, mobile applications and start-ups which constantly change the labour market and job searching are developed.

#### References

Boswell, W.R., Zimmerman, R.D., Swider, B.W. (2012). Employee job search: Toward an understanding of search context and search objectives. *Journal of Management*, vol. 38, iss. 1, pp. 129–163.

Boyd, D. M., Ellison, N.B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer - Mediated Communication*, vol.13, iss. 1, pp. 210 - 230.

CareerBuilder (2015), Post, tweet, pin, follow: How social media can help – and hurt – the job hunt [online], [cit.2015-12-22]. Available: http://advice.careerbuilder.com/posts/post-tweet-pin-follow-how-social-media-can-help-and-hurt-the-job-hunt.

Colas-Bravo, P., Gonzalez-Ramirez, T., de Pablos-Pons, J. (2013). Young People and Social Networks: Motivations and Preferred Uses. *Comunicar*, vol. XX, iss. 40, pp. 15 -23.

Eisner, S.P. (2005). Managing generation Y. S.A.M. Advanced management journal, vol. 70, iss. 4, pp. 4-15.

Jobvite (2014). Jobvite Social recruiting Survey 2014 [online]. [cit. 2015-12-22] Available:

 $https://www.google.sk/url?sa=t\&rct=j\&q=\&esrc=s\&source=web\&cd=3\&cad=rja\&uact=8\&ved=0\\ahUKEwjtnIWJjPLJAhXJWRQKHZISCS4QFggxMAI\&url=https%3A%2F%2Fwww.jobvite.com%2Fwp-$ 

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Kajanová, H., Sedláček, M. (2014). Readiness of students to use M-learning in education - case study Slovakia. In *SGEM* conference on psychology & psychiatry sociology & healthcare education: Conference proceedings volume III Education & educational research. Sofia: STEF92 Technology, pp. 737-744.

Kaplan, A. M., Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, vol. 53, iss. 1, pp. 59–68.

Kietzmann, J.H., Hermkend, K., McCarthy, I.P., Silvestre, B.S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, vol. 54, iss. 3, pp. 241-251.

Leonardi, P.M., Huysman, M., Steinfield, Ch. (2013). Enterprise Social Media: Definition, History, and Prospects for the Study of Social Technologies in Organizations. *Journal of Computer-Mediated Communication*, vol. 19, iss. 1, pp. 1-19.

Potkány, M., Sedláček, M., Hajduková, A., Hitka, M. (2013). Utilization and the Effect of Social Networks on Job Search of Slovak University Students. *WSEAS Transactions on advances in engineering education*, vol. 10, iss. 3, pp. 91–100.

PriceWaterHouseCoopers (2012). *Študenský barometer 2012* [online]. [cit. 2015-12-21] Available: http://www.pwc.com/sk/sk/publikacie/assets/2012/pwc-studentsky-barometer-2012.pdf.

Zheng, R. Cheok, A. (2011). Singaporean Adolescents' Perceptions of On-line Social Communication: An Exploratory Factor Analysis. *Journal Educational Computing Research*, vol. 45, iss. 2, pp. 203-221.

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### 52. THE ROLE OF ENVIRONMENTAL ACCOUNTING IN ACHIEVING CORPORATE SUSTAINABLE DEVELOPMENT

Abstract: The major objective of this paper is to stress a role of environmental accounting in developing management's strategic initiatives in the field of environmental protection. Socially responsible behavior of a company implies undertaking various activities for prevention, removal and minimizing the harmful effects on the environment. Such a responsible strategic approach ultimately leads to numerous cost savings, improvement of profitability and reputation and finally enables corporate sustainable development. In order to achieve its goal, this research will be methodologically based on the qualitative approach of published articles' content analysis and the analysis of corporate practice in designing environmental accounting systems that allowing better identification and control of costs and benefits related to environmental protection activities. Analysis of different accounting practices in producing financial and nonfinancial environmental information requires distinction between environmental financial and management accounting, given the fact that they create different types of information intended for internal and external users. Management needs such information for the purposes of identification and control of environmental protection costs, making decisions about more efficient use of resources, projecting costs and benefits of further activities and attempts to increase company's value through a socially responsible behavior.

The expected results of this research should confirm the premise that increased awareness of the need of environmental protection and achieving sustainable development motivates companies for more frequently producing obligatory and voluntary external and internal reports about their environmental activities. At the same time, environmental accounting supporting these initiatives but we expect that in future new tools will be developed that will improve the quality and scope of its informational offer, which may be the area of potential for further research.

**Keywords:** environmental financial accounting (EFA), environmental management accounting (EMA), environmental protection, sustainable development

JEL Classification: M14, M41, Q56

#### 1. Introduction

Increased awareness of the need of environmental protection has initiated companies to pay much greater attention to publishing reports on their efforts and activities with social and environmental impact. There has been a widespread opinion lately that companies, like individuals, represent members of society that acquire benefits from it, so at the same time they have an obligation to "pay back" the society in same way (ACCA, 2012). Therefore, socially responsible corporate behavior implies undertaking numerous activities for environmental protection and improving conditions in wider social community (through the jobs created, training of employees, charities etc.). Such a responsible strategic approach in long-term should enable corporate sustainable development and increase of company's value. In other words, it means that economic development is no longer sufficient per se and that it must be followed by protection of natural resources and environment, so companies could achieve a long-term sustainable development and demonstrate responsibility to future generations. Therefore, companies, as major environmental pollutants, begin with more intense publishing of mandatory or voluntary reports on their activities with environmental influence. A new and broad reporting concept like this, which is based on satisfying a wide array of social interests, implies that expenses associated with human resources and environmental protection cannot be considered a cost, but an investment in the future and a source of innovation (Kamieniecka et al., 2013).

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As a natural consequence of increased reporting requirements, environmental (green, eco) accounting has been recently developed as a tool for preparing environmental reports required by various internal and external stakeholders. A basic challenge faced by environmental accounting refers to finding ways to go beyond traditional accounting practices and create adequate tools for preparing financial and non-financial information on activities with environmental impact, that are needed for decision making. The main objective of this research is to point out the role of environmental accounting in improving the quality of corporate environmental reporting and achieving a long-term sustainable development.

#### 2. Methodology of research

This research will try to provide answers to the following basic questions: What kind of accounting information is appropriate for reporting on companies' activities with environmental impact? Does current accounting practice and quality of produced information satisfy the need for better informing of internal and external users? Does environmental accounting include sufficient volume of information in official financial statements, considering the concern of investors about future environmental risks? Do performance measures for environmental cost-benefit analysis satisfy actual management needs?

In order to provide answer to research questions mentioned above, investigations of the environmental accounting's role in achieving corporate sustainability will be based on interpretive methodology approach. It includes observation and content analysis of existing researches in literature, along with the analysis of the current corporate environmental accounting practices. Reliance on secondary contextual data and the use of qualitative methods is necessary in order to employ meaning-based technique of data analysis, which allows us more options in process of description and understanding phenomena of environmental protection and sustainable development. It also enables examination of research problem from close range, which overcomes limitations of large sample studies, which often hide issues that can be better identified and explained by focused qualitative studies.

#### 3. Corporate sustainable reporting and a new role of accounting

Given the fact that in their efforts to increase profit and spread business activities, companies adversely affects the environment through environmental pollution and consumption of limited natural resources, their responsibility cannot be traditionally limited only to stakeholders like investors or tax authorities. Corporate economic development in new circumstances cannot be sufficient objective by itself, so in the recent couple of decades paradigm of sustainable development has proclaimed to comprise accepting broader responsibility to the social community, natural environment and, even, future generations, which will one day require "accountabilities". Accordingly, economic development, which has ultimately led to devastating consequences for the environment, has modified into the concept of sustainable development, which should enable the future economic success of companies to be followed by eliminating negative environmental effects, preservation of natural resources and improving the quality of life.

Therefore, mandatory or voluntary reports on social and environmental impact of companies' activities, which have increasingly been published in the past years, are in most cases referred to as *Corporate Sustainable Reports (CRS)*, although they could be found in wide range of other terms. Mandatory reports (or selective information within annual reports) arise as a result of increased international and national regulation on environmental protection, formulated by national governments and international bodies, such as EU and UN, in a form of laws, directives or guidelines. On the other hand, companies more often publish entirely voluntary reports about their environmental impacts and sustainable development, realizing that they have a positive influence on the public perception of corporative image and reputation. Research has shown that voluntary reports are most often prepared by large and politically sensitive companies (pertaining to oil, gas or petrochemical industry), the activities of which have a highest environmental impact (ACCA, 2012).

Corporate sustainability reporting can be a part of annual reports, independent reports, company websites etc., but recently many large companies publish independent (separate, stand-alone) reports focused on environmental and social issues. It should be noticed that preparation of stand-alone reports is often an expensive and complex process considering the problems in using different narrative and numerical (financial and nonfinancial) measures of performance. This paper will comprise only the environmental aspect of sustainability reporting, which is probably the most important, given the consequences of raising pollution, climate changes and the lack of planetary resources. In that context,

subject of reporting might be any activity affecting environmental conditions through prevention, removal or minimizing the harmful effects. Those activities refer to resource consumption, holding of inventories, efficiency of production and distribution, waste disposal, emission of hazardous substances, product disposal and recycling, noise, radiation, sanitation of industrial sites, etc.

It is important to stress that voluntary nature of corporate sustainability reports carries the risk of selective and incomplete disclosing information on the effects of company's activities. Therefore, some authors advocate the need for better regulation of content of voluntary reports, in order to enable comparability and increase responsibility for presented information (Nickell et al., 2014). In this sense, corporate sustainability reporting should clearly indicate how companies prevent, remove or mitigate harmful environmental influences caused by their activities and what they intend to do about it in the next period. In the field of better shaping of voluntary (non-mandatory) environmental reports of significant use are the efforts of numerous non-profit and non-governmental organizations, to prescribe comprehensive frameworks for corporate sustainability reporting and specify how companies should disclose numerous environmental and social issues. Among such organizations particularly noteworthy are GRI (Global Reporting Initiative), SRG (Sustainability Reporting Guidelines) and International Organization for Standardisation with a series of ISO standards.

The emergence of environmental reporting has naturally brought entirely new challenges to accounting. It had to renew its informational offer and create new reporting approaches and techniques, in order for support of new reporting concepts to be provided. Environmental accounting can broadly be defined as a set of rules and techniques for measuring effects of firm's environmental activities and incorporating the information obtained in decision making and in the reporting system. As such, it implies all accounting areas affected by the companies' response to environmental demands (Gray et al., 1993). Given the fact that environmental accounting has a capability to provide both financial and nonfinancial information dedicated to internal and external users there is a need for separating environmental accounting into the Environmental Financial Accounting (EFA) and the Environmental Management Accounting (EMA).

#### 4. Environmental financial accounting

Generally, EFA is directed toward serving external users by preparing and disclosing information about environmental issues within annual report (as a part of financial statements or their notes) or by creating specific environmental reports. EFA mainly focuses on reporting the costs of environmental liabilities and other financially material costs, revenues and assets, which meet the recognition criterion (Stanciu et al., 2011). However, requests of external stakeholders for disclosing environmental information caused significant change in financial reporting practice. In the past decades, pressures on companies to perform responsible environmental activities and report about their effects originate from all sides.

For example, customers are interested in biodegradable products that fulfill ecological standards or expect from a company to take responsibility for product disposal and recycling, competition has an indirect influence by performing better environmental protection activities, governments and local communities expect environmental protection rules to be strictly followed, etc. In that sense, firms with extensive environmental disclosures may benefit from improved relationships with stakeholders, reduced regulatory risks, reduced costs of capital and improved overall reputation (Nickell, 2014). Despite the importance of the requests mentioned above, we believe that investors in financial markets today represent stakeholders with the strongest influence on EFA practices. Particularly, investors lately need to be better informed about corporate environmental activities, in order to protect their investments from future costs that might occur as a consequence of current environmental risks. Assumption that global financial markets could be harnessed to improve sustainability of global economy, by valuing firms on the basis of their environmental behaviour and costs, may motivate companies for better environmental reporting in return for access to capital markets (Thistlethwaite, 2011).

Interaction between accounting regulation and financial markets has significant implications for the way in which financial markets value corporate environmental performance. In that sense, International Accounting Standards Board (IASB) is an important source of authority whose solutions contained in International Accounting and International Financial Reporting Standards (IAS/IFRS) affect and shape the mechanisms of companies' market valuation. Harmonization of financial reporting rules and worldwide acceptance (a limited or full-scope) of IFRS provide a chance for

creating global comparability of environmental reporting practices (Thistlethwaite, 2011). However, analysis of IFRS solutions indicate a limited possibility for reporting for most environmental issues, so they are bounded in the notes to financial statements or other descriptive parts of annual report, as a type of qualitative information. In that way, conventional financial accounting does not seem to be suitable for environmental reporting, because it is not primarily designed to capture environmental impacts of firms' activities (Bracci et al., 2013).

Although there is still no IAS/IFRS explicitly focused on environmental issues (exception are specific interpretations, like IFRIC 1, 2 and 6), many problems related to recognition and measurement of specific environmental costs and liabilities are treated in detail in several standards. For example, IFRSs pay detailed attention to obligations referred to property sanitation, disposal of electronic equipment or capitalization of environmental costs. Environmental liabilities represent obligations resulting from historical pollution events, that cause costs of cleaning up the contaminated sites, wastewater treatment, decommissioning of plants, violation of environmental rules etc. According to IAS 37, firms are obliged to create provisions for these costs if there is a legal obligation or a long-term commitment of the company towards the reduction, prevention or reparation of environmental damage, like in the case of a long-term dismantlement of the nuclear power plant (Bracci, 2013). However, recognizing the costs of environmental liabilities is followed by difficulties and uncertainty, because they are often contingent according to the options present in pricing inputs (different specific requirements to clean-up environmental pollution under different national laws) and the availability that future event will confirm a firm's loss. Such an accounting treatment of environmental liabilities has strongly been criticized in the last decade by different stakeholder groups, because it leads to underestimation and underreporting of the environmental costs and liabilities (Thistlethwaite, 2011).

Unlike environmental liabilities which represent causes of past events, *environmental risks* represent effects of company's current environmental activities on future financial performance. Since these risks reflect the possibility of future environmental losses, it is difficult to calculate their exact amounts and estimate whether they are significant enough to be consider material. Environmental risks refer to a very long period (like potential damage of climate changes) and do not constitute a present obligation (firm could avoid the materialization of these risks), so accounting rules are restrictive in the area of their recognition and measurement, leaving room for their display in the statements' notes. However, there are very strong and reasonable pressures on the part of financial market for a broader disclosure of environmental risks in financial statements, which forces IASB to take actions to solve this problem (Thistlethwaite, 2011).

IASs/IFRSs allow inclusion of numerous *environmental costs*' categories in profit or loss, such as: costs of energy consumption; costs associated with waste management; costs of prevention, protection and environmental security; costs of remedying, reducing and restoring environmental damage, etc. However, many of the recognized environmental costs are included in the widely classified cost categories in profit or loss, and it is difficult to identify and analyse their specific amounts. According to IAS 16, there is also an opportunity for *capitalization of environmental costs* related to various ecosustainable initiatives (like research and development of new technologies and processes) within category of fixed assets, but that opportunity basically depends on the presence of the future economic benefits for the firm and possibility to link costs to them (Bracci, 2013).

According to IAS 1 entities prepare additional environmental reports "...particularly in industries with significant environmental factors...", but "...reports and statements presented outside financial statements are outside the scope of IFRSs" (IAS 1, par.14). Moreover, financial reporting normative specifies what kind of environmental information should be disclosed in the notes to financial statements to evidence firm's environmental initiatives and illustrate published environmental records (Bracci, 2013). Suggested qualitative data refer to annual environmental records, environmental strategy, indications about main environmental problems and risks, ability to implement environmental initiative, presence of environmental audits, etc. On the other hand, quantitative information should disclose some provisions for environmental risks and, possibility for activation of potential environmental liabilities, criteria for evaluation, etc. Besides mandatory accounting standards, which specify how different environmental issues should be treated, voluntary accounting standards have been developed recently by different organizations in order to increase the volume and improve the quality of environmental disclosures. For example, The Climate Disclosure Standards Board (CDSB) has recently developed standards for including effects of climate changes in the regular financial statements.

Obviously, one of the factors affecting the EFA's ability to produce wider range of environmental information is the lack of materiality of the most of environmental issues, which prevents their disclosure according to IFRS provisions. Thus, many environmental costs or liabilities are not included in financial reports, despite the high probability of their occurrence in the future. As a result of limited potential of EFA to make environmental costs, liabilities, assets or risks more visible, measurable and recordable, informational asymmetries related to firm's environmental performance may force investors to allocate their assets in more sustainable and green direction (Thistlethwaite, 2011).

Therefore, it should not be surprising that financial accounting is often recognized as a system which has little to do with environmental issues or, even worse, as a practice whose "reported profit figures in financial statements lie at the very heart of environmental crisis" (Gray et al., 2002). Although financial accountants have potential to influence the way investors and other stakeholders value corporate performances, they are at the same time "governed by professional rules and standards that limit their ability to measure firm's corporate performance. Financial accountants are not rule makers, but rather referees who ensure the game is played by the rules" (Thistlethwaite, 2011).

According to some researchers, main challenge for IASB is "whether it will make statement of environmental assets and liabilities part of mandatory set of financial statements that firms in environmentally sensitive industries should periodically publish" (Negash, 2012). Negash states that global IFRS can be used as a device for monitoring the corporate environmental behaviour, but it must be coupled with radical changes in conceptual framework and new definitions of assets, liabilities and profits. Otherwise, practice of inadequate or limited recognition and disclosure of provisions for past and current environmental obligations in financial statements (or even non-disclosure of their amounts and adequacy in notes) leads to threatening of investors' interests, by overestimation of reported profit figures and underestimation of contingent liabilities.

#### 5. Environmental management accounting

Increased awareness of environmental challenges more than ever forces managers to take care about environmental impact of their decisions. EMA is a system of tools and techniques aimed at identifying and measuring these environmental impacts from the cost-benefit perspective. It should help managers make better environmental decisions at strategic, operational and product levels, by giving them relevant information about costs, benefits and overall consequences of undertaken or planned activities (Medley, 1997). According to IFAC guidelines, cost-benefit analysis from environmental point of view should consider the extent to which benefits of an action, decision or policy outweigh related costs. There is also a suggestion that EMA should be focused on both physical information on the flow of inputs (materials, energy) and outputs (products, waste, emissions), as well as monetary information on related costs and benefits (IFAC, 2005).

Environmental benefits may include revenues from recycled items, cost savings from energy or eco-efficient projects or licensed clean technologies. However their measurement is related to numerous difficulties, since they often have a broader meaning, like in the case of benefits from improved corporate reputation, legislation compliance or natural environment protection. On the other hand, environmental costs are much more tangible and, in the broadest sense, they refer to effects of environmental compliance (prevention, eco-sustainable projects) or non-compliance (penalties, remediation, sanitation etc.). Environmental costs are costs of any firm's undertaken activity related to preventing, reducing or repairing the environmental harmful effects. EMA has a potential to improve the management of environmental costs by identifying, analysing and reporting costs that are, within the scope of EFA, either unrecognized or invisible since they are classified under broad cost categories. In addition, EMA can help in improving the efficiency of environmental management in the area of reducing costs, control of the material, energy and waste flow, valuation and prioritizing of environmental activities, accurate costing and pricing of products, designing more eco-sustainable products or processes, making environmentally responsible capital investment decisions and improving corporate long-term sustainability (Stanciu et al., 2011).

Companies usually measure in monetary terms environmental costs associated with research and development, equipment, regulatory compliance, production, recycling, disposal, maintenance, pollution, waste management, prevention, restoration, fines, etc. Some of these costs should be capitalized, as investments in clean-up devices or development of eco-efficient production technologies, which leads to their subsequent recognition. It is important to say that measurement of

environmental costs in monetary terms can also be difficult, given the non-financial nature of the most of environmental data, which is why the use of inadequate measures for quantifying physical inputs and outputs is a serious limitation of traditional EMA practice (Gadenne, 2002). Therefore, some researchers suggest that usage of recently developed strategic cost analysis tools, such as life cycle costing, activity-based costing (ABC), full cost accounting or value chain analysis may expand the scope and improve the quality of environmental cost information, as opposed to traditional measurement techniques (Debnath, 2011). For example, ABC can help in better identification of environmental costs that are usually hidden inside overheads, which include most firms' environmental activities. Conversely, traditional cost accounting systems assign these costs to all manufactured products, although some of them require more cleaning-up of pollution than others, causing inadequate pricing and environmental decisions (Nickell et al., 2014).

One of the fundamental problems that EMA is faced with is a treatment of costs that occur outside of firm's boundaries and for which firm has no formal responsibility. For example, a purchaser usually has responsibility for disposal and recycling of products, but question is whether they really take over all costs associated with the disposal (Lanen, 2005, p. 370). Assuming that portion of external costs is "assigned" to environment or to other participants of a company's supply chain, inclusion of these costs could contribute to a more responsible and reliable reporting. However, some researches show that measurement of external environmental costs, like water, land, air and noise pollution or recycling, have not been highly rated by the respondents from analysed companies, which indicates a minor extent of external cost measurement (Gadenne, 2002).

Some authors argue that building up interaction between EFA and EMA may result in higher visibility of costs and effects of corporate environmental performance. Given the fact that EFA is covered by obligatory standards and reporting rules, which "has not yet attempted to internalize costs and expenses outside the boundary of financial transaction, leaving these 'contingent' at best, we could see management accounting as more accessible ... area that could meet the demands of decision-making" (Debnath, 2011). In other words, one of the basic EFA's shortcomings related to underestimating of real environmental costs could be retrieved by performing different EMA analysis, since its activities are not obliged by accounting rules. It should fill the gap created by informational asymmetry between investors and their investments according to insufficiently disclosed environmental risks in financial statements. There is even opinion that, in response to rising legislative requirements and stakeholder concerns, environmental costs should be identified by EMA and after that more extensively disclosed in the notes or even in the main body of financial statements of companies from environmentally sensitive industries, such as mining, chemical, gas, oil or electrical (Gadenne, 2002).

In addition, regardless of the fact that there are no external reporting requirements specifically associated with EMA, its information is widely used in companies for preparation additional voluntary reports aimed at external users. These corporate sustainability (or environmental) reports are guided by different international guidelines, like GRI or ISO standards, so they are more often comparable and helpful in better understanding of future environmental risks. For example, ISO 14000 series of international environmental standards recommends a development of comprehensive environmental management systems (EMS), that should be based on clearly defined environmental objectives and enhanced systems for monitoring the progress of their achievement, through precise measurement of environmental costs and other performances (Kamieniecka et al., 2013). In that sense, the role of EMA is to provide assistance to management in monitoring the development of corporate environmental behaviour toward sustainability.

#### 6. Conclusion

In response to increasing concerns by stakeholders, providing broader information on environmental matters in recent years becomes one of the most important challenges faced by accounting. Nevertheless, despite the mentioned concerns, it seems that in practice a stronger connection between environmental issues and financial reports has not been established yet. Traditional accounting is often considered a main cause of slowing down the progress in achieving better environmental performance and wider integration of social and financial reporting. One of the reasons for that kind of perception lies in the existing reporting rules, which are technically narrow by their nature (prudence, materiality, matching etc.) and blind for wider long-term environmental problems that exceed the framework of

the reporting period. Such ignorance of recognition of many crucial environmental risks lead to the limited volume of disclosed information on environmental costs, assets and liabilities. Furthermore, even if information about environmental costs or liabilities meets the criterion of tangibility and measurability, it is still prepared selectively and has reduced visibility since it is only a part of the broader positions in financial reports. Therefore, although global IASs/IFRSs have a potential to cover all complex social and environmental aspects, they still have to recognize a larger environmental business context, either by including a minimum set of necessary information within the existing framework of financial reporting or by introducing an entirely new mandatory record.

Given these facts, the opportunity to account for environmental issues is currently left only in the EMA, although there are numerous variations in the scope and quality of produced information, depending on the different levels of environmental management engagement. Regarding this matter, voluntary environmental reports are criticized as having very little to do with corporate environmental performances, since they often comprise extensive promotional material directed only towards improving corporative image. Therefore, this area needs a wider scope of regulation and more harmonised rules that will enable creating comparable and environmentally directed reports.

In order to be effective, environmental accounting also must be aligned with substantial changes in the organization culture and management, which should encourage environmental behaviour of all employees, including accountants. We hope that urgency of environmental problems will prevail over technical accounting issues, so that external users may be provided with more useful information. We also expect that, along with more environmental compliance with accounting regulation, further development of environmental audit and meaningful legislation pressures may create a proper climate for improved environmental reporting, which is the area of potential for future research.

#### References

ACCA (2012). ACCA qualification paper P1 [online]. [cit.2015-12-09]. Available: http://www.accaglobal.com/ca/en/student/exam-support-resources/professional-exams-study-resources/p1/technical-articles/environmental-accounting-and-reporting.html.

Bracci, E., Maran, L. (2013). Environmental management and regulation: pitfalls of environmental accounting? *Management of Environmental Quality: An International Journal*, vol. 24, no. 4, pp.538-554.

Debnath, S., Bose, S.K, Dhalla, R.S. (2011). Environmental Management Accounting: An Overview of its Methodological Development. *International Journal of Business Insights & Transformation*, vol. 5, no. 1, pp. 44-57.

Gadenne, D., Zaman, M. (2002). Strategic environmental management accounting: an exploratory study of current corporate practice and strategic intent. *Journal of Environmental Assessment Policy and Management*, vol. 4, no. 2, pp. 123-150.

Gray, R., Bebbington, J., Walters, D. (1993). Accounting for the Environment. London: Paul Chapman (for) ACCA, 1993.

Gray, R., Bebbington, J. (2002). Accounting for the Environment: Second Edition. London: Sage Publications. 2002.

IAS 1 Presentation of Financial Statements. (2013). *International Financial Reporting Standards, A guide through IFRS*, London: IFRS. 2012.

IFAC (2005). *International Guidance Document: Environmental Management Accounting* [online]. [cit.2015-12-12]. Available: https://www.ifac.org/system/files/publications/files/international-guidance-docu-2.pdf.

Kamieniecka, M., Nozka, A. (2013). Active Citizenship by Knowledge Management & Innovation. *Proceedings of the MakeLearn Management, Knowledge and Learning International Conference*. Zadar: International School for Social and Business Studies, pp. 923-934.

Lanen, W. (2005). Spoilage, Waste and Scrap, Including Green Accounting. Weil, R., Maher, M. (eds.). *Handbook of Cost Management*. Hoboken, New Jersey: John Wiley & Sons, Inc., pp.367-388.

Medley, P. (1997). Environmental accounting – what does it mean to professional accountants? *Accounting, Auditing & Accountancy Journal*, vol. 10, no. 4, pp. 594-600.

Negash, M. (2013). IFRS and environmental accounting. Management Research Review, vol. 35, no. 7, pp. 577-601.

Nickell, E. B., Roberts, R. (2014). The Public Interest Imperative in Corporate Sustainability Reporting Research. *Accounting* and the Public Interest, vol. 14, pp. 79-86.

Stanciu, I.C., Joldoş, A.M., Stanciu, F.G. (2011). Environmental accounting, an environmental protection instrument used by entities. *Annals of the University of Petroşani, Economics*, vol. 11(2), pp. 265-280.

Thistlethwaite, J. (2011). Counting the Environment: The Environmental Implications of International Accounting Standards. *Global Environmental Politics*, vol. 11(2), pp. 75-97.

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## 53. FINANCING ALTERNATIVES TO SMALL MEDIUM-SIZED ENTERPRISES IN ALBANIA

**Abstract:** Small medium-size enterprises account about 98 percent of total business in Albania and contribute to more than 70 percent of GDP and more than 50 percent of employment. As in other developing countries, small medium enterprises in Albania are facing several difficulties: administrative barriers, lack of qualified work force, technology innovation, capital shortage, informality, small markets etc. The paper will be focused on one of those problems: financing alternatives. Actually the most used financing sources of these businesses in Albania are the retained earnings or the internal funds. Does it come because of Albanian owners' mentality or because of the lack of other financing alternatives, or the inability of the business to provide external financing? The aim of this paper is to describe the alternative financing forms used by small and medium-sized businesses in Albania, pointing out the reasons of their utilization. Based on a questionnaire data analysis, the paper will conclude with some recommendations toward the business, the financial institutions and the government as well, in order to improve the business environment in Albania regarding the financing facilities.

Keywords: financing, loan, small medium-sized enterprises

JEL Classification: G20, G21, L25, L26

#### 1. Introduction

Small medium-sized enterprises play a key role in the transition economies, especially in the developing countries. They have an important impact in economic growth, employment level, poverty reduction and technologic process. This is the reason why the development of small and medium size enterprises have been in the focus of the Albanian government policies. Small medium-sized have been developed in Albania since in the early of '90. The familiar business has been the first kind of business developed in the post communism Albania. In 1991, a great part of population was unemployed. They realized that the state could not offer them a job. Therefore they opened their own small informal business, mainly in the trade sector. As the people got self-employed, they got more incomes and expanded their business. Actually micro and small business in Albania constitutes the major part of the total business.

After studding the literature and explaining the research methodology and data base, the paper will firstly discuss the definitions of small medium-sized enterprises given by European Commission and the Albanian law. The development and the key features of the small medium-sized enterprises in Albania, according to the official statistics, will be shortly presented in the third section of the paper. The fourth section describes the financing alternatives of business in Albania, including the results of the survey conducted for purpose of this paper. The conclusions are presented in the final section.

#### 2. Literature review

One of the major challenges faced by small and medium-sized enterprises is the capital required to finance their operations. Empirical evidence shows that finance contributes about 25 percent to the success of small and medium-sized enterprises (Ogujuiba et al., 2004). Access to finance by the small medium-sized enterprises is a very critical success of the small medium-sized enterprises (Gbandi, 2014). Using a panel of state-level banking information over 1993-2002, Vera and Onji (2010) showed that small banks are participating less in small business lending. All over the world, small and

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medium-sized enterprises use formal sources and informal sources to finance their activities (Gelinas 1998). Both formal and informal forms of financing have their advantages and disadvantages.

Several factors determine the forms of financing. Sources of small business finance and the capital structure varies with firm size and age (Berger, 1998).

Informal financing is easy provided and in general there is no need for collateral. Informal lenders rely less often on collateral than formal lenders (Kislat et al., 2013). Informal financers are often better positioned to efficiently monitor and reinforce payment when legal enforcement is difficult and time-consuming (Allen, Qian, 2010). Some papers show that informal finance based on reputation and relationships may support the growth of the private sector in countries with less developed legal and financial system (Allen, Qian 2005). On the other hand there are studies suggesting that only the development of formal banking sector has a significant positive impact on firm and provincial economic growth. Ayygari (2010) found that firms with bank financing grow faster than similar firms without bank financing.

While information asymmetries make lending more difficult for formal financers to provide loans to small firms, informal financers can complement formal financers in selecting borrowers (Degryse et al., 2013). Informal finance might function in an efficient way and formal financial institutions could not substitute it immediately but for future policy directions the long-term vision could be formalising informal financial institutions as a step towards building an efficient, modern financial system (Tanaka, Molnar, 2008). The credit market in which informal finance is eliminated, will allocate funds in some inefficient way, and the efficiency of allocating credit funds can be improved once informal finance is allowed to coexist with formal finance (Yifu, 2006).

Small medium-sized enterprises may benefit from the public funds as well. Gregowy and Rutherford using a cross-sectional data set concluded that the larger firms are more likely to use public equity funding or long-term debt as opposed insider funding.

#### 3. Research methodology and data used

The paper uses primary and secondary data. The primary data was collected during 2014 in Tirana. A survey was carried out to collect the necessary information through the use of a questionnaire for small medium-size enterprises financing sources. The questionnaire contained questions about the number of employees, the financing sources actually used by the business, and the financing alternatives they were looking for. The survey was limited in the cities of Tirana and Durres. According to the official statistics, 54 percent of small medium-size enterprises are located in these cities.

Several difficulties were faces at this phase, because it was not easy to interview the business owners, either because they were still operating in informal market, or they refused to give information about the number of employees and the financing sources. They were afraid that the information will be used against them.

The secondary data are obtained from the Institute of Statistics of Albania (Instat). Their include information about the number of small and medium-sized enterprises and the sectors were these enterprises exercise their activity. This information, as reported by an official office, includes only the enterprises licensed by the licence office. Therefore there may be differences among the primary data, based on formal market, and secondary data, based on formal and informal market as well.

#### 4. Definition of small medium-sized enterprises

The definition of small medium sized enterprises may be made through qualitative and quantitative indicators. According to Scot and Bruce (1987) small and medium-sized enterprise is a business with the following characteristics:

- The business managers are the owners as well;
- The capital is owned by a sole individual or a very small number of persons;
- Operating area is mostly local one. The owners and the employees are of the same community, and the markets belong to the same community.

But still, classification of small and medium-sized enterprises is a questionable issue regarding especially the country context and the period of time. For this reason the definition of small and medium-sized enterprises has been changed over time, taking into consideration economic growth and inflation during large period of time. The qualitative indicators are more difficult to be measured and to be processed. This may be the reason, that the definition given by the European Commission

includes three quantitative indicators. The first definition for small and medium-sized enterprises has been recommended by European Commission in 1996. It was replaced by the Commission Recommendation concerning the definition of micro, small and medium-sized enterprises in 2003, which entered in force on first January 2005 and is mandatory for national state aid schemes and Community programmes (Table 1). The definition outlines three different ceilings corresponding to micro, small and medium-sized enterprises. Even thought 99% of all European business falls under the staff headcount ceiling, the other criteria are equally important and need to be assessed based on each specific case.

Table 1. Business criteria classification according to the European Commission

Business	Number of employees	Turnover	Balance sheet Total
Medium	Up to 250	Euro 50 million	Euro 43 million
Small	Up to 50	Euro 10 million	Euro 10 million
Micro	Up to 10	Euro 2 million	Euro 2 million

Source: European Commission, 2009

The country economic profile has an important impact on the relative size of the enterprises in several countries. Therefore the definition of small medium-sized enterprises in Albania has been changed over time.

The first definition of small and medium-sized enterprises in Albania is made in 2002. But due to the rapid growth of Albania economy and due to the engagement of Albanian government to comply with European standards, the definition of small medium-sized enterprises has been changed in 2008 as indicated in Table 2.

Table 2. Business criteria classification according to the Albanian Law

Business	Number of employees	Turnover
Medium	50-249	Up to ALl 80 million
Small	10-49	Up to ALl 50 million
Micro	Up to 9	Up to ALl 10 million

Source: Own work

#### 5. Profile of small medium-sized enterprises in Albania

According to the statistics of the Institute of Statistics in Albania, at the end of 2014, there were recorded 112,537 enterprises: 94.56 percent of them are micro enterprises, 4.1 percent of them are small, and the rest are medium and large-sized enterprises. As the Table 3 shows, the number of small medium-sized business has been continuously increased.

The medium and large-sized businesses are grouped together by "Instat", for confidentiality reasons, due to the very small number of them. It is clearly that the major part of Albanian business is micro-sized, employing a maximum of four persons, mostly familiars.

Table 3. Active enterprises by size in 2014

Total manulan	Grouped by	y the number	of employed			
Total number	1-4	5-9	10-49	50+		
112,537	101,025	5,387	4,647	1.478		

Source: Instat, 2014

About 85 percent of business produces services: forty percent of business performs trade activity, followed by accommodation and food service activity.

### 6. Financing alternatives of small medium-sized enterprises – empirical results and discussion

As literature review suggests, there are several alternatives to finance business today. In Albania, where the capital market does not exist and the development of non-bank financial institutions is modest. As result, business has few financing sources at disposal. According to a survey conducted in

Tirana and Durres, where about 52 percent of the total business is located, the small and micro enterprises mainly use internal funds and the bank loans to finance the business. The results of the survey are shown in the Table 4.

Table 4. Alternative financing sources of Albanian business

Retained Earnings	82,00%
Remmitancies	8,00%
Bank Loans	2,00%
Informal Loans	8.25%
Donor Credit	0.51%
Other	0.04%

Source: Own work

About ninety percent of the surveyed business use internal funds to finance their activity. Eight percent of them lend from relatives and friends, and a very small share of them uses the channels of financial system to fulfil their financial needs.

#### 6.1. Internal funds

The major part of the small medium-sized enterprises uses the internal funds as the financing source of their activity. There are two kinds of internal funds: retained earning and remittances. Several years ago, remittances have been a key factor of smoothing poverty of Albanian families. But these transfers have been declined due to the international economic crises and due to the brokerage of the relationships of the emigrants with their parent families.

While the importance of remittances has been declined during the last years, the utilization of retained earnings is increased as the businesses have been consolidated. There are many reasons why Albanian small medium-sized enterprises rely on internal funds for financing their activities: the inability of small medium-sized enterprises, especially the new ones, to have access on bank loans; the lack of Albanian business culture to provide external financing from third parties or to collaborate with other partners; the informal economy, which automatically "close the doors" of banks and other financial institutions, etc.

#### 6.2. Foreign donors

Small medium-sized enterprises financing from EU – Phare donors has started since 1992. The programme has opened a special credit line for small medium-sized enterprises and it has been effective until 1997. But it was evaluated unsuccessful. In 1994, German government has launched a credit line for small enterprises as part of the project "Stimulation of new businesses in Albania". In 1999 it was followed by the establishment of the German Development Fund, which signed an agreement with Italian Albanian Bank (today San Paolo Bank).

Actually there are two investment Funds operating in Albania: Albanian American Development Foundation (AADF), established with United States of America government funds, and "Albanian Restructured Enterprises Fund" established from Italian government. The Albanian American Enterprise Fund was established pursuant to the Support for Eastern Europe's Democracy Act of 1989. Incorporated in 1995, the AAEF's primary purpose was to promote private sectors in Albania. The Albanian American Development Foundation (AADF) was created in 2009 by the Albanian American Enterprise Fund with support and encouragement of United States Agency for International Development and the United States government. The AADF is not a profit organization governed by a Board of Trustees which operates entirely in Albania. AADF supports the education for sustainable development, entrepreneurship; leadership development, and support for cultural tourism and eco-tourism.

The programme for the development of small and medium enterprises in Albania is a joint programme of the Italian government and the Albanian government to support the development of small and medium enterprises with funds. The programme is guided by the Credit Line Steering Committee, composed by Ministry of Economy, Ministry of Finance, and Italian Ministry of Foreign Affairs. The donor programmes, until now, have focused their activities, on road infrastructure, and agriculture and forestry sector.

#### 6.3. Commercial Banks

The major part of the interviewers answered that they would be firstly directed to a commercial bank if they would need external funds. Commercial banks are the primary lending institution in Albania. Albanians are familiar with banks, because they were the sole financial institution during the communism period operating in Albania. They are still the largest financial institution, as bank assets account about 96 percent of the total financial system assets. The banking system has expanded due to the privatization and the entry of the foreign investments. All commercial banks are completely private and their total assets accounted to 91.56 percent of GDP in 2014. The banking system is mainly owned by foreigners. There are 16 banks operating in Albania (2015): two of them have domestic private and foreign capital, and the others have foreign private capital.

Over years lending in the system was more oriented toward business. According to the statistics of the Bank of Albania, in 2014, about 74 percent of total lending was accorded to business. The lending activity of the bank system has been expanded until 2011. Thereinafter the total of bank credit has been almost in the same level, because of the macro-prudential measures taken from the Bank of Albania, which aimed at boosting lending to the economy. The non performing loans constitute the most serious problem of the banking sector. They have been increased from 3.5 percent in 2008 to 23 percent in 2014 (Fig. 1).

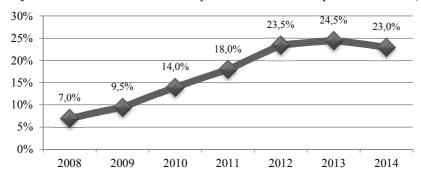


Figure 1. Non performing loans as the ratio of total credit

Source: Bank of Albania

Therefore, actually the small and medium-sized enterprises, find more difficult to provide financing from the banks. But there are other difficulties faced by Albanian business in obtaining the loan from the banks. The main obstacle is the requirement for collateral, which is very high. The commercial banks require the collateral to be valued with a coefficient of approximately 1.3 of the credit amount and the required collateral is specified in limited categories. It is very difficult, especially for micro and small business, to find the collateral of such kind and value.

The banks from the other side seem to be not very interested to finance the small and micro business because of poor documentation submitted by the business, the lack of real business plans and the informality that characterize this sector of economy.

#### 6.4. Non-bank financial institutions

As we pointed out, the banking sector is the dominant part of the Albanian financial system. Bank of Albania has the authority to license and supervise the commercial banks, non-bank financial institutions, savings and loans associations and their unions. In December 2014, there were 22 non-bank financial institutions operating in Albania. The loan portfolio structure continuously is dominated by business lending, oriented in sectors of "Trade, repair of vehicles and households appliances" (29.3%) and "Agriculture, hunting and forestry" (12.9%).

#### 6.4.1. Micro-credit and lending institutions

Actually there are six lending institutions and two micro credit institutions in Albania that have the lending rights. Similarly there are two micro credit institutions. The loan portfolio of lending institutions accounts about 61 percent of the total loan portfolio of non-bank financial institutions. Micro-credit institutions share a very small part of the loan portfolio (about 1.5 percent).

These institutions specifically cover rural areas and urban areas focusing their services where is a lack of commercial banks.

#### 6.4.2. Leasing

Leasing activity in Albania is regulated and supervised by the Bank of Albania. Currently six subjects have the right to exercise this activity. Among non-bank financial institutions, leasing companies are listed the second according to the share of their loans to the total non-bank loans (36.5%).

The loan portfolio of these institutions is still limited, but taking into account the fact that in other countries financial leasing is founded as an alternative lending for small medium-sized enterprises and individuals, it fulfils the demand in these sectors where the presence of commercial banks is not evident.

#### 6.4.3. Factoring

The product of factoring in Albania is still in its initial stages. Regarding the factoring, the first association was licensed in 2010. There are three factoring institutions operating in Albania. Factoring financing has totally business purposes. It accounts about 1.27 percent of non-bank institutions loans.

#### 6.5. Informal credit

Informal credit constitutes a credit provided outside the financial system. The informal credit may be obtained from relatives, friends and the familiars of the business owners. Informal credit has been a dominant form of financing in the early of 90'. But at the end of 1997, with the bankruptcy of the pyramid schemes, the Albanians trust in the informal credit has been declined. As result of the confidence losing in such institutions and as result of the measures anti-informality, Albanian business have been less relied in this form of financing during the following years. But during the last two years, because of the limiting and strengthen of the credit provisions, as the survey shows, Albanian have started to reuse the informal lending.

The informal loan has the advantage of requiring less time and they have smaller cost. They do not require collateral and avoid the evaluation procedures required by lending institutions. These are the reasons, why Albanian businesses have recently used the informal sources to finance their activities.

#### 7. Conclusions

Small and medium-sized enterprises, due to the lower required capital, have been rapidly grown up, especially the micro businesses which account about 95 percent of the total business in Albania. Due to the Albanian economy level, the classification criteria of small medium-sized enterprises differ from the classification criteria of European Commission. Internal funds constitute the main financial source of Albanian businesses, followed by the informal lending from relatives and friends. In need of external financing, almost all of them would be directed to a commercial bank to lend money and do not know anything about other financing alternatives offered by Albanian financial system.

The Albanian business owners should understand that in order do expand their activity and to grow up, they have to get partners to finance their activity. In order to lower the risk, the partners should be found within the financial system.

The Bank of Albania should review the lending procedures, in order to facilitate the process and reduce the financing cost for the small business.

The government should formulate policies that will encourage small medium-sized enterprises to provide financial sources within financial system. The government and the Bank of Albania have to stimulate the transparent and effective financial reporting practices from the businesses. Financial transparency can help businesses to receive credit as the banks will have more information to which to base their lending decision. As result the commercial banks will tend to reduce their requirements for high level of collateral and small and medium business in particular will benefit more funds from banks.

#### References

Aidis R. (2003). *Entrepreneurship and economies in transition*. Discussion Paper No. 2003-015/2, Tinbergen Institute, pp. 1-29. [online]. [cit.2016-02-15]. Available: http://papers.tinbergen.nl/03015.pdf.

Allen, F. Qian, J. (2010). Comparing legal and alternative institutions in finance and commerce. In Heckman, J., Nelson, R. (eds.). *Global Perspectives of rule of Law*, pp. 118-144. [online]. [cit.2016-02-15]. Available: https://www2.bc.edu/~qianju/Allen-Qian-CompareInst-Jan09.pdf.

Ayyagari, M., Demirgüç-Kunt, A., Maksimovic, V. (2010). Formal versus informal financing – Evidence from China. The

Review of Financial Studies, vol. 23(8). pp. 3048-3097.

Allen, F. Qian, M., Qian. J. (2005). Law, Finance and economic growth in China. *Journal of Financial Economics*, vol. 77(1), pp. 57-116.

Bank of Albania (2014) *Statistics*. [online]. [cit.2016-02-15]. Available: http://www.bankofalbania.org/web/Statistika 230 1.php.

Berger, A.N., Udell, G.F. (1998). The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. *Journal of Banking Finance*, vol. 22, pp. 613-673.

Berger, A.N., Frame, W.S. (2007). Small business credit and scoring. *Journal of Small Business Management*, vol. 45(1), pp. 5-22.

Cook, L. (1999). Trade credit and bank Finance: Financing small firms in Russia. *Journal of Business Venturing*, vol. 14 (5), pp. 495-518

Degryse, H., Lu L., Ongena, S. (2013). *Informal or formal financing? Or Both? First evidence on the co-funding of Chinese firms*. CentER Discussion paper, vol. 2013-034. [online]. [cit.2016-02-15]. Available: http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2289779.

European Commission (2014). *Evaluation of the user guide definition to the SME definition*. Final Report. ENTR/172/PP/2012/FC. [online]. [cit.2016-02-15]. Available: ec.europa.eu

European Commission (2009). Concerning the definition of micro, small and medium sized enterprises. Working Paper. [online]. [cit.2016-02-15]. Available: ec.europa.eu

Gbandi, E.C., Amissah G. (2014). Financing options for small and medium sized enterprises in Nigeria. *European Scientific Journal*, No 1, pp. 327-341.

Gelinas, J.B. (1998). Freedom from debt: the re-appropriation of development through financial self-reliance. Dhaka-Ottawa: University Press, 2014.

Government of Republic of Albania, Law n. 10042, "On the small and medium sized enterprises", 2008

Government of Republic of Albania, Law n. 8957, "On the small and medium sized enterprises", 2002.

Gregory, B.T., Rutherford, M.W., Oswald, S., Gardiner, L. (2005). An empirical investigation of the growth cycle theory of small firm financing. *Journal of Small Business Management*, vol. 43, iss. 4, pp. 382-392.

Instat (2014) Statistics. [online]. [cit.2016-02-15]. Available: http://www.instat.gov.al/al/themes/rregjistri-statistikor

Kislat, C., Menkhoff, L., Neuberger, D. (2013). *The use of collateral in formal and informal lending*. Kiel Working papers 1879, Kiel Institute for World Economy. [online]. [cit.2016-02-15]. Available: mercury.ethz.ch

Myers, S.C. (1977). Determinants of corporate borrowing. Journal of Financial Economics, vol. 5 (2), pp. 147-175.

Office for Development Cooperation (2011). *Enchasing SMEs Development in Albania*. Report. Italian Embassy. [online]. [cit.2016-02-15]. Available: http://www.italcoopalbania.org/pdf/20111031095801 pbm finale web.pdf

Ogujiuba, K.K., Ohuche, F.K., Adenuga, A.O. (2004). *Credit availability to small and medium scale enterprises in Nigeria*. Working paper. pp 1-25. [online]. [cit.2016-02-15]. Available: http://econwpa.repec.org/eps/mac/papers/0411/0411002.pdf

Scott M., Bruce R. (1987). Five stages for growth in small business. Long Run Planning, vol. 20, iss. 3, pp. 45-52.

Tanaka K., Molnar M. (2008). What is different about informal finance? Revue Économique, vol. 59, pp. 1131-1143.

Vera, D., Onji, K. (2010). Changing in the banking system and small business lending. *Small Business Economics*, vol. 34(3), pp. 293-308.

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### 54. DEVELOPMENT OF THE THREE-LEVEL SYSTEM OF COOPERATIVE MARKETING IN UKRAINIAN TOURISM

Abstract: The aim of this article is to develop methodical positions and practical recommendations on forming the cooperative marketing system, which is considered as the preferred means of Ukrainian travel agencies effective functioning under globalization. The research subject is scientific and methodological issues and praxeological aspects of marketing activity of the tourism agencies, the prospects for effective implementation of the cooperative marketing concept in tourism. The research methodology includes: the historical method, desk review, system analysis, morphological analysis, and methods of marketing research (desk and field). The basis of cooperative marketing system development has been highlighted for tourism agencies. The procedure of organizing a general cooperative marketing system is suggested in the form of three-level closed cycle: macro-, meso- and micro-level. The article proved that the concept of balanced tourism is a necessary condition of development of the cooperative marketing system in Ukraine. The stages of organizing tourism centers have been defined, whereas the development of those poses a necessary requirement for creating a cooperative marketing system for tourism agencies. The elements and logic for creating the infrastructure of information support have been defined for the decision-making within tourism agencies.

Keywords: cooperative marketing, tourism agency, tourism center, three-level system, informational support structure.

JEL Classification: L 220, L 290, M 310

#### 1. Introduction

Over the past twenty years, the tourism industry has continued to expand and has become one of the highest-growth industries in the world (Liu, Chou, 2016). Tourism is developed together with cultural and heritage industries, recreation and leisure industries, sports, health promotion and wellness industries, etc. (Xiao, 2013). A framework of tourism marketing knowledge is constantly developed (Dolnicar, Ring, 2014). Especially the discussion about the importance of interfirm networking and partnerships to overcome business challenges is visible in the literature (Dudensing et al., 2011).

All the industrial factors that define the efficiency of implementation of the cooperative marketing in tourism agencies (TA) can be viewed as two groups (Анализ рынка, 2014). The first group is called *co-action factors*, since their direction is of simile to the cooperative marketing: high level of client involvement in product exchange, lengthy contacts between enterprises and clients of tourism product, and the latter's motivation to be involved with the provider of services (Любіцева, 2013, pp. 57-59). The second group is *re-action factors*, the motivation in which lays in comprehension that they are to be null and void (moreover, by introducing cooperative marketing), i.e.: high risks of change in demand with time and location (Mambrisauw, 2015); demand flexibility in relation to income and prices, as well as its dependence on political, social and environmental conditions (Ajayi 2015); unbalanced inflexible proposition as opposed to flexible demand (Ali Adel Ali Ibrahim, 2015); largely subjective choice of the product (Maigana Amsami, 2015); alternative means of work and objectives of partners in the industry (Герасименко, 2013, p. 35).

As per abovementioned, developing the cooperative marketing system within a TA is to be based on the following:

- 1) TA's marketing system is a function of, first of all, an objective factor, i.e. its environment; second of all, a subjective ideas of its management concerning the reasonability of certain concepts in regard to TA's objectives (Шульгіна, Ткешелашвілі, 2011).
- 2) Introducing a cooperative marketing micro-system in a TA is part of the process of creating state marketing macro-system and regional meso-systems in accordance to international regulations on tourism services (Szulgina, 2014, pp. 155-157).

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#### 2. The aim, research subject and research methodology

Based on the aforementioned the aim of this article is to develop methodical positions and practical recommendations on forming the cooperative marketing system, which is considered as the preferred means of Ukrainian travel agencies effective functioning under globalization.

The research subject is scientific and methodological issues and praxeological aspects of marketing activity of the tourism agencies, the prospects for effective implementation of the cooperative marketing concept in tourism.

The research methodology includes: the historical method (to study the evolution of marketing concepts and the role of marketing in the enterprise activity); desk review (to study the latest theoretical and practical developments in marketing), system analysis (to determine the effect of macro-, meso- and microfactors at creating conditions for the development of marketing approaches in tourism), morphological analysis (to development the overall and corporate systems of cooperative marketing and describe the essential characteristics of their components), and field marketing research – questionnaire (to justify a three-level infrastructure of information decision support).

Field studies was conducted in 2013-2015 on the basis of sample population of 126 tourism agencies' managers by using PASW data processing.

#### 3. The conditions for the three-level system development in Ukrainian tourism

Objective processes happening on the world tourism market (its globalization, interdependency of countries, weakening of the political and economic borders; introduction of modern service technologies and corporative quality systems; client's familiarity with information and increased demands) cause new requirements for national tourism companies to arise (Божко, 2012). Now, a lot of companies realize that using separate marketing elements is less and less effective when they're intuitive and seek for unified business strategy that will be based on the secure and complete information as for resource potential of tourism and its market profile. The evidence of ever growing popularity of cooperative marketing software is that: annual expenses on CRM-systems within 2000-2015 increased for 146% (from USD 2,6 to 48,9 billions) (Босовська, 2015, pp. 241-244).

Meanwhile, all levels of state authorities, scholars and entrepreneurs are all increasingly aware that it is necessary to move form just declarations of tourism priorities to creating real conditions for its rapid development. In Ukraine, tourism (like worldwide) can become a powerful instrument of economic, social and cultural growth, as well as facilitate openness and PC, strengthen relations between cultures and the feeling of belonging to a single community.

However, increasing the tourism activities has negative as well as positive influence: increased traffic, overuse of natural resources, changes in landscape due to uncontrolled construction and pollution due to tourists' behavior. This altogether can cause (and has caused) serious environmental problems. Besides, uncontrolled tourism (according to many countries' negative experience) disturbs local traditions and lifestyle and pressures cultural resources (Близнюк, 2011).

#### 4. Basic provisions for the development of the system

Hereby we can conclude that implementing cooperative marketing on any TA shall require organized relations both within it and in higher level systems, such as: industry meso-system and state macrosystem.

First of all, the basis for forming an internal corporate quality system (QS) as a part of the cooperative marketing has to be a national QS of a National tourism product (NTP).

Second of all, the implementation of a marketing system on a TA must correspond to the national concept of balanced tourism, implementation of which is reasonable in order to achieve progressive development of the state, region, enterprise, or a person.

Third of all, the TA attractiveness for clients and investors (and thus the results of its activity) shall increase if the regional tourist centers are organized throughout Ukraine steadfastly.

Fourth of all, realizing the cooperative marketing in TA shall be more effective in case a system approach is used for the organization of the information support infrastructure in regard of decision-making both state-wise and regionally.

#### 4.1. Characteristics of the macro-level of the system

According to the suggested procedure, the organization of general economic marketing system is presented as a closed three-level cycle. *Macro-level* (cooperation within "state-region-state", "state-region-agency-state" and "state-agency-state") stipulates that respective authorities initiate standardizing distinct criteria that allow defining the level of correspondence between NTP quality and international regulations, as well as its accordance to the balanced tourism concept (Горбань, 2015).

Besides licensing of tourism agencies and certifying the hotel and restaurant services, it's important to introduce the lobbying of urgent laws needed to stimulate the tourism development and negate faults within existing national legislation that interfere with enterprise initiative in this industry. Foremost, the tax liability is to be lessened and a clear procedure of land plot acquisition for tourism centers is to be set, that will restrict possible corruption due to ambiguous exegesis of Land Code.

The recently introduced relationship between business and authorities requires reforming to a more constructive format.

First of all, one should implement governmental visits to tourist agencies beyond regular inspections, to stop possible hindrances. Second of all, a forum should be opened on the governmental site to hold open discussions regarding most vital issues. It will provide the government with opinions of both entrepreneurs and clients, as well as ensure monitoring of market processes. All stages of solving the problem should be discussed, though, including suggestions and alternatives, responsibilities and sanctions should the complications arise, the terms violated or tasks fail to be achieved.

#### 4.2. Features of the meso-level and micro-level of the system

*Meso-level* (cooperation between "region-agency-region") provides that organization of the QS of NTP is a matter of both tourism departments within regional state administrations and local tourism centers.

Main tasks of these structures shall be developing the development program for tourist regions as per concept of balanced tourism of the country and its realization by involving investments that will ensure innovation of local enterprises and quality of their product. The latter shall largely depend on further communication between entrepreneurs and local authorities, as well as local tourism information support.

*Micro-level* (cooperation between "agency-client-agency") has a double function in economic system. On one hand, this is a core level (thus main object) of the system, since the TA produce NTP. On the other, the system efficiency is controlled on this level. TA is in most direct contact to the client, and their needs is the reason for the system's existence (Tamanna Islam, 2015).

#### 5. Balanced tourism as a necessary requisition of cooperative marketing system in Ukraine

The ideological basis for creating an effective system state-wise and within TAs should consist of *balanced tourism principles*, therefore environmental- and culturally-friendly. Tourism can't be just a way of making money where even landscape is not more than a resource. The attitude on all levels (international, interregional and local, entrepreneurs and clients), the scope and vision of tourism have to be re-percept, adjusting it to local mentality, traditions and reasonable management of local resources and environmental protection. Meanwhile, it should be advocated that fast short-term advantages are often unreasonable and rational and careful use of tourism resources should be introduced for the future.

The importance of the abovementioned is even more evident in regard of the measures taken to develop the product of XXI century – people's health. The idea of health protection, increasing stress resistance, life expectancy and elimination of diseases has to control both production and services in post-industrial society. However, it's important to mention that implementing this is only possible through health environment, and tourism is an important part of that (Поклонський, 2013, p. 133).

#### 5.1. The framework events and documents for sustainable development

This concept is being implemented *internationally* through the following:

- The Charter of Balanced Tourism being approved be the participants of the International Conference on Balanced Tourism (Davos Declaration, 2007);
- "XXI Century Agenda of Travel and Tourism Industry Development: environmental balance" documented by three leading international organizations (WTTC<sup>2</sup>, WTO<sup>3</sup> and Earth Council) (Любіцева, 2013, pp. 264-273);

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<sup>&</sup>lt;sup>2</sup> WTTC – World Travel and Tourism Council.

<sup>&</sup>lt;sup>3</sup> WTO – World Tourism Organization.

- "Recommendation on Balanced Tourism Development for Local Plan Developers" being published (WTO);
- The foundation of WTTC Global Program of Environmental Management and Information Green Globe:
- Introduction of the Program of grants by EU for environment (Thermie, LIFE etc.);
- The Discussion by EC on environmental issues, Colloquiums on developing a new Ethic Code for Tourism among other measures.

Various international activities on balanced tourism are not restricted to the above list, but no more then set a framework. The transition from identifying the problems caused by tourism to taking measures on solving them must happen *nationally* by adopting laws and regulations, as well as programs, recommendations and strategies for governmental and non-governmental organizations.

#### 5.2. The main tasks for the all-level system-participants for the balanced tourism implementation

In this regard the major parameters of cooperative marketing system implementation within TA in Ukraine are an effective frame of sanctions where harm is inflicted and efficient motivational measures. Thus among urgent tourism activities for the state the development of Environmental Code is vital to stimulate:

- Proper attention to the organization of structure, location and plans of tourism centers and routs;
- Effective management of tourist attraction to Ukraine;
- Natural and cultural heritage protection and preservation (i.e., by introducing obligatory expertise
  of construction plans on any tourism objects and their environmental affect);
- Technical decision-making on power-perseverance;
- Using environment-friendly products etc. (Шульгіна, Ткешелашвілі, 2011, pp. 104-112).

As for spreading the concept of balanced tourism, founding the contests among TAs with environmental prizes is of importance (Туризм:..., 2016).

Meanwhile, if the suggested principles are ignored it is highly probable that following risks occur: international companies shall ignore local interests, and won't care for local economics, transferring income out of the country; fragile ecosystems shall be ruined for the development of tourism infrastructures and a lot of tourists; the architectural and landscaping dissonance; anthropological overload on certain tourism objects etc. (Туризм:..., 2016).

Locally, the models of tourism development strategies tend to be more detailed. Since tourism consequences are felt mostly by locals, the decisions should allow the local community to be the recipient of the positive outcome of tourism development. In order to achieve this, the plans should be developed by tourism professionals, politicians and local representatives.

Some TA can contribute to balanced tourism development by including in their programs initiatives like: motivating environment-friendly attitude among employees and tourists; creating reservations; respective planning of the land-plot; lessening pollution; economical water and power consumption; lessening the transport use (differentiating); rational anthropological load.

Therefore the concept of balanced tourism is a necessary condition of development of the cooperative marketing system in Ukraine, since all mentioned levels help accentuate perseverance of the existing natural and historical potential and stimulates taking practical decisions on turning this potential into tourism products, attractive on the world tourism market.

#### 6. The order of formation of tourist information centers

As a proof of the importance of these suggestions we can name negative tendencies, like low temp of sales of tourism products, high level of illegal tourism, poor client evaluation of hotel and tourism services etc. These are considered symptoms of a more serious problem, one that can most generally be seen as: most of internal and external tourists do not find Ukraine, bar a few regions, attractive tourism country. This is mostly due to lack of *tourism information centers (TIC)*, creating which is yet another important issue of cooperative marketing system of TA (Мельниченко, 2007, p. 85).

This problem must be sold in stages and multidimensional (Милинчук, 2013). The suggested procedure assumes two conditions necessary for the project: local authorities and enough local TA willing to promote the tourism product professionally; state restrictions removed and sanctions for interfering with tourism development introduced.

Stage one – preparations (analysis). The workshops of regional tourism development are organized, including scholars (guides, marketing specialists etc.), business representatives (tourism, hotels, restaurants) and state. They agree on regional tourism data and a plan of mutual activities. If necessary, this stage can include a few activities, such as brainstorming, SWOT-analysis, ranging ideas (attractiveness for clients, needed investments, income, risks, implementation etc.). This stage is important due to its ontology, since the success of the whole project depends on the choices on tourism made here.

Stage two – projects. Based on the analysis a collaboration program is developed, and mutually attractive projects are agreed upon. The main strategy for most on Ukraine on this stage is concentrated marketing. When resources are lacking, it's more important to concentrate on a few projects. Those should include the main characteristics of attractive core for tourists: difference from other regions, availability, harmony with other tourism products.

Stage three – pilot. The developed projects are practically tested in real life. All the participants should concentrate their efforts on attracting clients. The *tourism information centers* (TIC) are of utmost importance, they are opened for purposes of: information (on local attractions, tours, hotels, restaurants etc.); consultancy (TE on selling and clients on buying tourism products); research (data to correct the programs) etc. Besides that, an educational program with prospective expanding is to be started on social responsibility of tour experience for guests that includes not just TEs, but ordinary civilians (like in Turkey, Bulgaria etc.). This program should involve state, educational and business institutions and social organizations.

Stage four – correcting and implementing the tourist center programs, that should in the end be: complex (able to meet the demands of various levels of clients); due diligence (warranting the obligations and providing truthful information on the company and its service); ability to self-expand (includes components that are flexible to the environment); reasonable socially and economically (as for social, cultural, environmental and other development f the region); mentally and culturally effective (harmless to local specifics and able to create pride in the region and willingness to attract tourists) (Шульгіна, Ткешелашвілі 2011, pp. 117-124].

Therefore, developed tourism centers are a basis for proper development of national tourism as they help attract clients and differentiate local TAs. Their effective existence is to be ensured by one of their basic elements, TIC, that are to create a complete *informational support structure* for TA decision-making.

#### 7. The informational support structure for TA decision-making

This structure is to be multileveled for specific purposes in providing current, truthful, complete and correct data

Part of the structure on *TA level* is MIS, *the purpose* of creating which is to create the data base for reasonable decision-making. This is achieved by following *tasks*:

- Collecting inner data on activity results of the TA (scope of tourist flow through the TE, character dynamics on marketing and finance, effectiveness and innovations etc.);
- Creating a data base on clients (their social, demographic and behavioral habits, preferred tourism products, attitude to products and TA, communication specifics);
- Developing a data base on local and international tourism partners (their strategies, scope of work, management, funds and equipment, service technologies etc.).

Fulfilling those tasks asks for respective organizational, time and funding resources, as well as qualified personnel. That's why TA usually chooses one of two MIS saturation means: fill it with data on their own or transfer the obligation to consultants company.

We regard that mainly, TAs, especially small ones, have a lot of reason to involve outsourcing as it allows them to have access to (on contracted terms) properly collected, analyzed and systematized data. From here on it is obvious that such organizations are to be created first, thus the need in local TICs (Фролова, Фролова, 2014).

Thus, *the regional structure level TIC* is to be created *in order to* create the data base of tourism development in the region by expanding the TA information capabilities and facilitate its clients.

The main *task of TIC* is to promote tourism products of their region, assisting TA in finding best differentiation points and clients in opening new tourism possibilities. To complete this task, TIC accumulate information from regional TAs; research, analyze and publish data on historical, cultural,

natural and other features of the region; assists in holding massive marketing research (including on omnibus terms); provides TA (as per contractual terms) with the results of national and their own research; provides informational assistance and consultancy for new product development; can co-organize regional and national communication campaigns (Забуранна, 2016).

Besides, TIC take active and beneficial part in promoting adjacent or thematically or otherwise related regions, as well as corrects informational flow within the structure. But the efficiency of its work is foremost dependent on regional development, and it defines the main direction of its efforts. On the other hand, it's also important to not just divide functions reasonably (to avoid double-tasking) on different structure levels, but provide TIC with necessary general information, which belongs to the competence of the highest-state-level of the system in question.

State level of the structure is purposed to create a useful informational field for national tourism development as an industry in general and regionally and on TA levels specifically. This can be achieved through following tasks (Шульгіна, Ткешелашвілі 2011, p. 216-218):

- monitoring national tourism market features (competition and their parameters, market correlation dynamics between participants, particulars of their marketing complexes, correlation between demand and offer on the market, price fluctuation etc.);
- research of international tourism using the abovementioned characteristics, as well as comparing it
  with local data, defining the perspectives of new technologies worldwide, managing services and
  implementing possibilities of those for local TAs;
- examining the consumers of tourism product using representative panels for their deep segmentation, classification of real and latent needs of segment representatives, clarification of the level of its satisfaction and brainstorming new ideas on marketing complexes and TA positioning, defining the scope of found and hidden problems as well as methods of their solving;
- drawing conclusions on local, national and worldwide tendencies of tourism development, suggesting recommendations on creating strategies of promoting national and regional tourism product of TAs.

Meanwhile, the probability of problems to do with sole ownership of important information arising nationally or regionally has to be minimized through a certain course of actions.

First of all, Central Laboratory is State tourism and resort authority business partner making TIC a regional authority partner respectively. This partnership is mutually beneficial: State tourism and resort authority attracts the Central Laboratory as a long-term massive client, while the laboratory in order to preserve client's trust offers a beneficial and various cooperation programs. Both CL and TIC are to be considered rather flexible in this, allowing them to perform research independently and outsource other marketing companies for it should the need arise.

Second of all, the conclusions of CL and TIC are not imperative, and the relationship between TAs and both these structure levels are built on mutually beneficial basis. TAs provide necessary information as per statistical forms, providing the base with its data. In this regard, the latter leave the TAs their right to acquire fragments of data report with necessary general information.

Third of all, the financial results of these departments' activity is to be dependent on successful activities of the tourism industry in general. While the first are to interest the market participants in the importance of their complete and correct information and suggestions and prove its efficiency, the latter can only be interested if the advantages of this and the efficiency of investments is respective.

#### 8. Conclusion

Thus the efficient way to lead Ukraine out of the outskirts of worldwide tourism industry and economy in general is stimulating the economy development through protecting certain industries, specifically tourism. This requires first and foremost comprehending that the tourism enterprises are unable to compete with companies that appeared on the market due to globalization not just from other countries, but international groups.

The suggested framework of macro- and meso-systems of cooperative marketing allows unifying the efforts of industry professionals of all levels and becoming a solid basis for effective realization of this concept of the enterprises of the tourism industry throughout Ukraine. The main provisions on the development of the cooperative marketing system include the forming an internal corporate quality

system, coordination of a marketing system on a TA with the national concept of balanced tourism, organization of regional tourist centers throughout Ukraine, and development of the information support infrastructure in regard of decision-making both state-wise and regionally.

Effective implementation of marketing cooperation should be based on the concept of sustainable tourism which will contribute to the preservation and development of the existing natural and historic potential and encourage the adoption of practical solutions to transform this potential into attractive tourist products.

The author believes that the proposed methodology of systematic monitoring of environmental factors will be the basis for the formation and development of tourist agencies marketing information system.

Prospects for future research consider the development of evaluation criteria system to assess the effectiveness of cooperative marketing implementation to travel agencies activity in Ukraine.

#### References

Amsami, M. (2015). Customers' satisfaction toward staff, products and services of the retail Islamic banks in Northeast Nigeria: an empirical study. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, vol. 24, iss. 7. [online]. [cit.2015-12-19]. Available:

http://gssrr.org/index.php?journal=JournalOfBasicAndApplied&page=issue&op=view&path%5B%5D=118/.

Arowosegbe, A.A., Mohamed, S.F. (2015). A systematic change management capability maturity assessment framework for contracting organizations. American Scientific Research Journal for Engineering Technology and Sciences (ASRJETS), vol. 13, iss. 1 [online]. [cit.2015-04-10]. Available: http://astrjetsjournal.org/index. php/american\_scientific\_journal/article/view/809/.

Анализ рынка туристических услуг в Украине. (2014). [online]. [cit.2015-09-24]. Available: http://proconsulting.ua/products/131373-analiz-rynka-turisticheskikh-uslug-ukrainy-2014-god.html/.

Declaration, D. (2007). Climate Change and Tourism. *Responding to Global Challenges*. Davos, Switzerland, 3 October. Second International Conference on Climate Change and Tourism, [online]. [cit.2015-12-23]. Available: http://www.sdt.unwto.org/sites/all/files/docpdf/decladavose.pdf/.

Dolnicar, S., Ring, A. (2014). Tourism marketing research: Past, present and future. *Annals of Tourism Research*, vol. 47, pp. 31-47.

Dudensing, R.M., Hughes, D.W., Shields, M. (2011). Perceptions of tourism promotion and business challenges: A survey-based comparison of tourism businesses and promotion organizations, *Tourism Management*, vol. 32, pp. 1453-1462.

Ibrahim, A.A.A. (2015). Building and increasing the productivity of human resource management. *International Journal of Scientific & Technology Research*, vol. 4, iss. 1, [online]. [cit.2015-12-19]. Available: http://www.ijstr.org/final-print/jan2015/Building-And-Increasing-The-Productivity-Of-Human-Resource-Management.pdf/.

Islam, T., Rahman, S., Nahar, N. (2015). Factors affecting customer satisfaction in 3G service. *American Scientific Research Journal for Engineering Technology and Sciences (ASRJETS)*, vol. 14, iss. 3 [online]. [cit.2015-11-17]. Available: http://astrjetsjournal.org/index.php/american scientific journal/article/view/1186/.

Liu, C.S., Chou, S. (2016). Tourism strategy development and facilitation of integrative processes among brand equity, marketing and motivation, *Tourism Management*, vol. 54, pp. 298-308.

Mambrisauw, A. (2015). Planning model collaboration for acceleration local autonomy (case study respect program in Raja Ampat). *International Journal of Scientific & Technology Research*. vol. 4, iss. 1, [online]. [cit.2015-12-23]. Available: http://www.ijstr.org/final-print/jan2015/Planning-Model-Collaboration-For-Acceleration-Local-Autonomy-case-Study-Respect-Program-In-Raja-Ampat/.

Мадзігон, В. (2015). Роль майбутнього маркетолога, його завдання та ефективність в туристичній діяльності ринкової економіки. *Молодь і ринок*, vol. 2(121) [online]. [cit.2015-04-11]. Available: http://www.file:///C:/Users/LM/Downloads/Mir 2015 2 6.pdf/.

Мельниченко, С. (2007). *Інформаційні технології в туризмі: теорія, методологія, практика*. Київ: Київський національний торговельно-економічний університет.

Szulgina, L. (2014). Marketing współpracy jako najnowsza koncepcja marketingu turystycznych agencji Ukrainy, *Zarządzanie Publiczne*, vol. 2, iss. 26, pp. 149-162.

*Tourism Trends and Marketing Strategies UNWTO – UNWTO World Tourism Barometer* (2015). [online]. [cit.2015-10-17]. Available: http://mkt.unwto.org/en/barometer/.

Xiao, H. (2013). Dynamics of China tourism and challenges for destination marketing and management. *Journal of Destination Marketing & Management*, vol. 2, pp. 1-3.

Близнюк, А. (2011). *Маркетингове управління туристичним підприємством: шляхи розвитку та реструктуризації.* Київ: Фенікс, 2011.

Божко, Л. (2012). Генезис та еволюція наукового туристського дискурсу. // Вісник Харківської державної академії культури. 2012. Вип. 37. [online]. [cit.2012-12-18]. Available: http://tourlib.net/statti\_ukr/bozhko2.htm/.

Босовська, М. (2015). *Інтеграційні процеси в туризмі*. Київ: Київський національний торговельно-економічний університет, 2015.

Герасименко, В. (2013). Ринки туристичних послуг: стан і тенденції розвитку. Одеса: Астропринт, 2013.

Горбань, Г. (2010). Особливості формування попиту на туристичний продукт. [online]. [cit.2015-07-02]. Available:: http://tourlib.net/ .

Забуранна, Л. (2011). Методика дослідження стану та проблем розвитку національного туристичного ринкут Вісник Тернопільського національного економічного університету. vol. 4. [online]. [cit.2016-01-09]. Available: http://tourlib.net/statti\_ukr/zaburanna2.htm/.

Любіцева, О. (2013). Ринок туристичних послуг (геопросторові аспекти). Київ: Альтерпрес, 2013.

Милинчук Е. (2006). Системный поход к исследованию основных проблем туризма. Туризм и культурное наследие. Межвузовский сборник научных трудов. [online]. [cit.2013-11-24]. Available: http://tourlib.net/statti\_tourism/milinchuk2.htm/.

Поклонський, Ф. (2013). Теоретичні та практичні аспекти управління розвитком малого підприємства сфери туризму. Донецьк: ДонНУЕТ, 2013.

Туризм: практика, проблемы, перспективы. (2016). [online]. [cit.2016-01-09]. Available: http://www.tourism.ru/.

Фролова, Г., Фролова В. (2014). Організаційні засади маркетингових досліджень у сфері туризму. *Вісник Бердянського університету менеджиенту і бізнесу*, vol. 3(27), [online]. [cit.2014-08-23]. Available: http://www.file:///C:/Users/LM/Downloads/vbumb 2014 3 11.pdf/.

Шульгіна, Л., Ткешелашвілі М. (2011). *Маркетингове управління туристичними підприємствами*. Київ-Тернопіль: Астон, 2011.

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## 55. INTERGENERATIONAL COOPERATION IN THE ORGANIZATION - VIEW FROM A GENDER PERSPECTIVE

**Abstract:** The ageing of labour resources is a global problem which determines the contemporary labour market. It is a problem which is becoming more and more visible in Poland as well. It is estimated that every tenth employee is over the age of 55. It is important to understand that these people may be a significant resource of knowledge for organisations, whose valuable experience will disappear upon them ending their professional activity. A correctly conducted process of sharing knowledge, somehow enforced by current employment structures, may be a key factor for the success of modern business. In this publication, an assessment of intergenerational cooperation in Polish organisations was attempted. The aim of the paper was to identify differences in selected areas of intergenerational cooperation within the organisation from a gender perspective. Results of this research have been based on an author's pilot survey.

Keywords: gender differences, intergenerational cooperation, age management

**JEL:** J11, D64, J16

#### 1. Introduction

Determinants of success or failure may belong to a number of areas of an organisation, such as: strategies, IT technologies, skills, knowledge, or organisational culture, etc. (Lemańska, Okręglicka 2015a). One of the factors in the success of contemporary enterprises is a properly conducted process of knowledge sharing, forced to some extent by the current structure of employment. According to Ziółkowska (2013, pp. 20-59), the effective organization of business processes provides to increase the potential of employees from different age groups and leads to the effectiveness use of their. It is estimated that every tenth employee in Poland is a person above 55 years of age and this may be an important intellectual resource for any organisation. However, they are also employees of retirement age, whose valuable experience will disappear along with the output of their occupational activity.

Demographic changes observed in the world's most developed countries are leading to an increase in the number and proportion of old people. Population ageing and lower birth rates have been regarded in Western Europe as a threat to the labour market for over 20 years. Skibiński and Sipa (2015) indicate how the resulting decrease in labour force may soon cause serious labour shortages and a collapse of the pension system. Growing awareness of this problem causes changes in the objectives of labour market

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policy. In many countries, one of the main priorities of this policy is to increase labour market participation of old people. In this context, a lot of attention is given to the need to ensure that old people stay in work as long as possible, mainly by encouraging them to retire at an older age.

The dynamics of the process of population ageing can be considered in two aspects: firstly, as changes in the population age structure between two selected time periods, and secondly as continuous changes (e.g. annual) in the age structure, which form a trend (Lutz, 2010). In general, the bigger the dynamics of the process, the bigger the increase in the share of the elderly and the bigger the decrease in the share of the young population. What is important for the demographic future in Poland analysed is the pace of this process as well as the process of transformations of the population age structure, understood as changes in proportions of the different age groups.

The relationship between the past and present development of the processes that are part of natural growth on the one hand, and future age structures of population on the other hand, is obvious and has a characteristic of feedback. It is also obvious that both a low birth rate and increasing life expectancy contribute to the intensification of the process of population ageing from the bottom of the age pyramid (i.e. decreasing share of young people) and from the top of the age pyramid (increasing share of the elderly). What is important for the demographic future of Poland as analysed, is the pace of this process as well as the process of transformation of the population age structure, understood as changes in proportions of the different age groups. In view of the above, work forces have had a degree of differentiation in the fields of age and skill, and this diversity has grown significant over the last three decades. It has been observed that the number of women in the labour force has increased significantly, as have the proportion of, for example, different ethnic groups (Shenhav, Haberfeld, 1992). Anti-discrimination policy and the emergence of a dynamic, competitive global marketplace have played a significant role in this widening scope. According to Edgar (2004), in a diverse workforce, it is reasonable to assume that differences in views and attitudes could exist which, therefore, justifies examining demographics data (Edgar, 2004).

Another reason for considering demographics is that certain of human resources management policies and practices target specific groups within a labour workforce. For example, a practice from New Zealand, Equal Employment Opportunity' (EEO) initiatives in New Zealand, targets, in particular, women and Maori. It is not unreasonable to assume that groups targeted for preferential treatment may have different attitudes towards particular policies than the views held by other, non-targeted, groups. As indicated by Pfeffer (1985), "sensitivity to demographic consequences, especially in the field of ageing, can help provide a context to understand organizational functioning".

In the context of observed demographic trends, intergenerational cooperation has played, and will continue to play, a more and more significant role for organisations. As previously stated, the results of this research have been based on an author's pilot survey. In this publication, an assessment of intergenerational cooperation in Polish organisations was attempted. The results of this research have approximate characteristics and refer only to the examined sample size.

#### 2. Theoretical background

The gradual ageing of the workforce is becoming evident in various European regions, owing to the smaller number of newly employed young people. This trend is caused by lower birth rates across all the EU States, along with national peculiarities. Moreover, the trend is compensated for neither by the increasing presence of women in the labour market nor by the rate of growth in net migration. This means that, in order to give continuity and preserve their working activity, small enterprises, their owners and employees, are faced with the need to find ways and means of transferring practical knowledge and tacit competence to other employees. Practical knowledge and tacit competence, coupled with technical and operational practices, are deemed the core values to continue the business. As indicated by Sipa and Skibiński (2015) the employees must be interested in expressing and exchanging information and in sharing their knowledge about innovation in order to achieve success.

Every element of the activity of an enterprise should be subject to an effective management (Lemańska, Okręglicka, 2015b). The available literature on identity and identification can enrich our understanding of intergenerational behaviour in organisations and society in general. Wade-Benzoni (2003), indicate a feature that leads the present generation to categorise future generations as part of their in-group, and conditions under which people feel that it is consistent with their identity or self-concept to act on behalf of the next generations. According to Wade-Benzoni (2003), the Intergenerational identification is defined as the perception of oneness among generations such that multiple, for example two or more, generations

consider themselves as part of the same group. It was found that intergenerational cooperation is more likely to occur when intergenerational identification is at a high level.

In the future, intergenerational knowledge transfer will be one of the knowledge-based economy's main challenges for entrepreneurs. The perception of intergenerational cooperation is very important by gender. Men and women experience differences in perception in the workplace. According to Ritvo and Litwin (1994), an employee's gender can illustrate differences in perception related to organisational structure, problem-solving style, and view of work-related conflict. Also, differences in individual working style are notable. According to their book, women perceive that individual work styles should be collaborative, where everyone works as part of a whole. Men, on the other hand, perceive that work should be completed independently without the assistance of others. Women also tend to be more supportive managers, whereas men are more direct.

An interesting finding on gender perspective views in business decision-making was presented by Gorzeń-Mitka (2015). She revised the literature on risk management in this area. Gorzeń-Mitka (based on Croson and Gneezy, 2009; Powell, Ansic, 1997; Booth, Nolen, 2012) indicate how women are more risk averse than men, are more sensitive to social cues, and have a lower preference for competitive environments. Additionally, she stresses that the research findings before 1980 were instrumental in establishing a dominant view that substantial gender trait differences exist in the nature and outcomes of management decisions involving risk.

#### 3. Methodological information

During the study, identification of differences in selected areas of intergenerational cooperation in the organisation from a gender perspective, was performed in enterprises in the Silesian and Malopolska provinces. The survey was conducted from March - April 2015 on a sample of 138 companies, using the diagnostic survey method based on the CAWI (Computer Assisted Web Interviews) technique. The research sample of N=138 included employees in different age groups. The research sample was selected using the method of purposive (non-probability) sampling. The main premise for sampling was the fact that the respondents are employees at different productive ages and with different work experience and knowledge about the functioning of the enterprises in which they are employed. The researchers used a questionnaire consisting of 23 open, semi-open, and closed dichotomous questions, scales of responses (nominal, ratio, and rank scale), and demographics. The following table (no 1.) illustrates the descriptive statistics of the study sample by gender perspective.

Table 1. Characteristic of the study sample by gender perspective

FEATURES			%	Total (%)
Gender	male		52,2%	
Gender	female			47,8%
	um to 25 years ald	male	7.5%	23.2%
	up to 25 years old	female	15.7%	23.270
	25–34 years old	male	20.4%	33.3%
	23-34 years old	female	12.9%	33.370
	25 20 years old	male	10.2%	15.9%
A == =================================	35–39 years old	female	5.7%	13.970
Age group	40 44 years ald	male	5.7%	20.3%
	40–44 years old	female	14.6%	20.3%
	45 40 years ald	male	4.3%	5.8%
	45–49 years old	female	1.5%	3.8%
	50 or older	male	0.0%	1.4%
	30 of older	female	1.4%	1.470
	logg than 5 years	male	25.7%	49.3%
	less than 5 years	female	23.6%	49.5%
Employment period	5 10	male	14.3%	23.2%
at the organisation	5–10 years	female	8.9%	23.2%
		male	12.9%	27.5%
	more than 10 years	female	14.6%	27.3%
	caniar managament	male	5.7%	7.2%
	senior management	female	1.5%	
Professional status at the		male	15.7%	26.1%
organisation	junior management	female	10.4%	
-		male	25.7%	66.7%
	regular employee	female	41.0%	

Source: Own study

The following research hypotheses were proposed with the main aim of the project in mind:

- H1 perception of the problem of aging of human resources in a company depends on gender differences;
- H2 perception of intergenerational cooperation in a company depends on gender differences;

In this case, we proposed two complementary hypotheses:

- H2.1. perception of intergenerational cooperation "older younger" in the organisation depends on gender differences;
- H2.1. perception of intergenerational cooperation "younger older" in the organisation depends on gender differences;
- H3 perception of intergenerational cooperation determinants depends on gender differences.

In this case, we proposed five complementary hypotheses:

- H3.1. perception of working atmosphere and the relationship between employees as an intergenerational cooperation determinant depends on gender differences;
- H3.2. perception of reducing the marginalisation of 45+ and 50+ employees as an intergenerational cooperation determinant depends on gender differences;
- H3.3. perception of improvement of the company's reputation as an intergenerational cooperation determinant depends on gender differences;
- H3.4. perception of intergenerational cooperation as an impulse for innovative ideas depends on gender differences;
- H3.5. perception of efficiency and productivity in a company as an intergenerational cooperation determinant depends on gender differences.

Analysis of the survey results has allowed for both a full and partial verification of the hypotheses. This paper examines gender behaviour by testing three main hypotheses related to the intergenerational cooperation in enterprises. These hypotheses does gender differ due to intergenerational cooperation view in company. This study refers to univariate analysis, rather than analysis of one variable at any one time. All numbers and percentages are produced with IBM SPSS 19. Pearson's chi-squared test is the analysis tool for testing our hypothesis. It was assumed that a probability value at the level of p<0,05 is statistically significant, whereas p<0,01 is statistically highly significant.

#### 4. Results and discussion

Perception of the problem of aging of human resources in a company (H1)

Firstly, we tested hypothesis H1 - perception of the problem of aging of human resources in a company depends on gender differences. Results of Pearson's chi-squared test are in table 2.

Table 2. Perception of the problem of aging of human resources in a company depends on gender differences (Pearson's chi-squared test)

	Pearson's chi-squared test					
Factor	Chi^2	df	P			
	Gender					
Aging of human resources in company	5.298	1	0.021			

Source: Own study

The results in table 2 allow full approval of hypothesis H1. In light of the present study, it can be concluded that perception of the problem of aging of human resources in a company depends on gender differences (probability value at the level of p<0.05 - statistically significant).

Perception of intergenerational cooperation in a company (H2)

Secondly, we tested hypothesis H2 - perception of intergenerational cooperation in a company depends on gender differences. Results of Pearson's chi-squared test are in Table 3.

Table 3. Perception of intergenerational cooperation in a company depends on gender differences (Pearson's chi-squared test)

	Pearson'test	s chi-so	quared
Factor	Chi^2	df	P
	Gender		
Perception of intergenerational cooperation "older – younger" in the organization (H2.1)	12.198	5	0.032
Perception of intergenerational cooperation "younger - older" in the organization (H2.2.)	15.682	5	0.007

Source: Own study

The results in table 3 allow full approval of hypothesis H2. In light of the present study, it can be concluded that perception of intergenerational cooperation in a company depends on gender differences (H2.1 - probability value at the level of p<0.05 - statistically significant; H2.2 - probability value at the level of p<0.01 - highly statistically significant).

Perception of intergenerational cooperation determinants (H3)

Finally, we tested hypothesis H3 - perception of intergenerational cooperation determinants depends on gender differences. Results of Pearson's chi-squared tests are in table 4.

Table 4. Perception of intergenerational cooperation determinants depends on gender differences (Pearson's chi-squared test)

Factor	Pearson's chi-squared test					
Factor	Chi^2	P				
	Gender					
Perception of working atmosphere and the relationship between employees as an intergenerational cooperation determinant (H3.1)	8.133	1	0.004			
Perception of reducing the marginalization of 45+ and 50+ employees as an intergenerational cooperation determinant (H3.2)	2.276	1	0.131			
Perception of improve the company's reputation as an intergenerational cooperation determinant (H3.3)	0.773	1	0.379			
Perception of intergenerational cooperation as impulse to innovative ideas (H3.4)	1.168	1	0.279			
Perception of efficiency and productivity in company as an intergenerational cooperation determinant (H3.5)	6.287	1	0.012			

Source: own study

The results in table 4 allow partial approval of hypothesis H3. In light of the present study, it can be concluded that perception of intergenerational cooperation determinants depends on gender differences only in two determinants: working atmosphere and the relationship between employees, and the efficiency and productivity of a company (H3.1, H3.5 - probability value at the level of p<0,01 – highly statistically significant).

#### 5. Conclusions

This paper examined whether the gender of an organisation's employees is reflected in the approach to intergenerational cooperation in the company. The focal point of the research was identification of differences in selected areas of intergenerational cooperation in companies from a gender perspective. The research undertaken by the authors delivered a partial answer in this regard. In light of the present study, it can be concluded that the perception problem of aging of human resources in a company depends on gender differences. Whether the perception of intergenerational cooperation determinants depends on gender differences only in working atmosphere and the relationship between employees, and efficiency and productivity in a company [requires further research].

The process of knowledge transfer between co-employees from different generations and groups was differentiated depending on the age and gender of the employees who are playing a significant role in the functioning of the organisation. It turns out that such decisions will have an effect on the competitiveness of the organisation and its ability to adapt to changing environmental conditions. Teams differentiated by gender and age are the base of all knowledge and skills and should be used not only when environments are changing but also within the daily activities of companies.

We can postulate that the spread of cooperation between generations can not only be a recipe for contemporary demographic problems but will also have a positive impact on the quality of functioning of companies.

#### References

Booth, A. L., Nolen, P. (2012). Gender differences in risk behaviour: does nurture matter? *The Economic Journal*, vol.122. pp. F56-F78.

Croson, R., Gneezy, U. (2009). Gender differences in preferences. Journal of Economic Literature, vol. 47, iss. 2, pp. 1-27.

Edgar, F., Geare, A. (2004). Employee Demographics in Human Resource Management Research, *Research and Practice in Human Resource Management*, vol. 12, iss. 1, pp. 61-91.

Gorzeń-Mitka, I., (2015). Risk management in small and medium-sized enterprises: a gender-sensitive approach. *Problems of Management in the 21st Century*, vol. 10, iss. 2, pp. 77-87.

Lam, A. (2000). Tacit knowledge, organizational learning and societal institutions: an integrated framework. *Organization Studies*, vol. 21, iss. 3, pp. 487-513.

Lefer V., Bratinau C., Agapie A., Agoston S., Orzea I., (2011). Intergenerational Knowledge Transfer in the Academic Environment of Knowledge Based Economy. *The Amfiteatru Economic Journal*, vol. 13, iss. 30, pp. 392-403.

Lemańska-Majdzik, A., Okręglicka, M. (2015a). Business process management in an enterprise - determinants of the implementation and expected advantages. In *Proceedings of the 12th International Conference*, Liberec Economic Forum 2015, 16-17 September 2015, pp. 305-314.

Lemańska-Majdzik, A., Okręglicka M. (2015b). Identification of business processes in an enterprise management, *Procedia Economics and Finance*, vol. 27, pp. 394-403.

Lutz, W. (2010). Emerging Population Issues in Eastern Europe and Central Asia. Research Gapa on Demographic Trends. *Human Capital and Climate Change*. UNEPA. 2010.

Pfeffer, J. (1985). Organizational demography: Implications for management. *California Management Review*, vol. 28, iss. 1, pp. 67-81.

Powell, M., Ansic, D., (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of Economic Psychology*, vol. 18, iss. 6, November 1997, pp. 605-628. [online]. [cit.2016-01-07]. Available: http://www.sciencedirect.com/science/article/pii/S0167487097000263

Ritvo, R., Litvin, A. (1994). Managing in the Age of Change: Essential Skills to Manage Today's Diverse Workforce, Burr Ridge, Illinois: IRWIN Professional Publishing, 1994.

Shenhav, S., Haberfeld, Y.(1992). Paradigm uncertainty, gender composition and earning inequality in scientific disciplines: A longitudinal study 1972-1982. *Research in the Sociology of Organizations*, vol. 10, pp. 141-172.

Skibiński, A., Sipa, M., (2015). Labor Force of the Visegrad Group Countries in the Context of Demographic Changes-Selected Aspects. *Information Management and Business Review*, vol. 7, pp. 40-49.

Skibiński, A., Sipa, M. (2015). Sources of Innovation of Small Business: Polish Perspective, *Procedia Economics and Finance*, vol.27, pp. 429-437.

Wade-Benzoni, K.A. (2003). Intergenerational identification and cooperation in organizations and society. In Neale, M., Mannix, E., Tenbrunsel, A. (eds.), *Research on managing groups and teams*, vol. 5. Greenwich CT: JAI Press, pp. 257-277.

Shenhav, Y., Haberfeld, Y. (1992). Organizational demography and inequality. *Social Forces*, vol. 71, iss. 1, pp. 123-143.

Ziółkowska, B. (2013). Zarządzanie procesami tworzenia wartości w przedsiębiorstwie. Perspektywa wirtualizacji. Częstochowa: Wydawnictwo Politechniki Częstochowskiej, 2013.

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#### 56. INVESTMENT PROJECTS MANAGEMENT FOR DEVELOPMENT OF REAL ESTATE MARKET IN POLAND

Abstract: The focus of the study is on analysis of the process of management of investment projects in housing estate development. The analysis was based on the literature and annual reports by the Central Statistical Office of Poland and the Polish Banking Association using such research methodologies as descriptive method, presentation method and analysis of data. The initial part of the study presents the effects of housing estate development in Poland and importance of housing estate to developer's activities. A new developers' act was discussed in terms of efficient protection of rights of housing estate purchasers and the process of real estate creation was analysed. In light of the investigations, the study found that, after 1989, housing estate investments made by developers have been increasing dynamically and, similar to the escrow account, are expected to attract much interest in the case of a very dynamic development of the real estate market. Analysis of management of developer's investment processes showed that, apart from the project itself, the basic tool for management of investment implementation process is the contract between the investor and participants of this process. The paper is summarized with the conclusion of achievement of the study aim.

**Keywords:** developer, real estate, investment project, project management

JEL Classification: E22, E33, L1, L74, L85

#### 1. Introduction

In the period of planned economy in Poland, costs of financing investment projects in residential building were not taken into consideration. The situation changed after processes of transformation of Polish economy into the market economy were initiated.

Difficult housing situation after transitions opened up opportunities for creation of new forms of housing estate development, with one of the most popular investment activities in the area of housing being developer's activity (Łopiański, 2004, p. 9-11)<sup>2</sup>. Analysis of the mechanism of the developer market connected with other segments of the real estate market reveals that growing demand on new real estate, stimulated by current economic tendencies represents an impulse that stimulates the demand in the development market (Kucharska-Stasiak, 2006, p.73)<sup>3</sup>.

The focus of the study is on analysis of the principles of management of investment projects in housing estate development. Analysis of management of investment projects in housing estate development was supported with the literature, analysis of annual reports of the Central Statistical Office of Poland and reports concerning housing estate market in Poland (the Polish Banking Association), using the research methods such as descriptive method, presentation and data analysis.

#### 2. Methodology of Research

Housing resources in Poland are unsatisfactory in quantitative and qualitative terms with respect to the needs and expectations of citizens. The number of flats in 1991-1996 in Poland was decreasing whereas since 1997 it has been substantially rising.

The focus of the study is on analysis of the process of management of investment projects in housing estate development. The analysis was based on the surveys published by the Central Statistical Office of Poland for the period of 1991-2014, materials of Department of Production: Housing Development, materials published in the Statistical Yearbook of the Republic of Poland and periodicals of the Polish

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<sup>&</sup>lt;sup>2</sup> Early developer activities in Poland.

<sup>&</sup>lt;sup>3</sup> Development market exists in close correlation with the following real estate market segments: market of users and owners, market of financial assets and land.

Banking Association. Furthermore, the data cited in the literature and bank reports and acts that regulate the real estate market were also used. In order to achieve the goal, the following research methods were employed: descriptive method, data presentation method and data analysis.

The methodology used in the study allowed for analysis of the real estate market in Poland in the period of 1991-2014, which reflects the stages in evolution of this market after 1989 and analysis of the process of investment project management by developers in the real estate market.

#### 3. Effects of housing estate development sector in Poland

In the early nineties, developers started their businesses without substantial capitals and loans. Almost whole risk of investment in housing estate development was shifted to customers and subcontractors. A system was developed in the very beginning where housing estate investments were financed by customers, the State Treasury, contractors and subcontractors and banks.

Under conditions of developer-based housing estate development sector (the Act of 16 September 2011 on protecting the rights of purchasers of apartments and houses; Journal of Laws 2011, No 232, Item 1377), a model was established to finance this sector by future owners (customers), which substantially limited the number of people interested in this method of obtaining flats (Uchman, 2000, p. 143; Ziółkowska, 2010). Despite this fact, an increase in this form of obtaining flats was observed from 2004 to 2009<sup>4</sup>.

Table 1. Flats delivered in Poland in 1991-2014

Specification						1991	1992	1993	19	94	199	5	1996	1997	1998	1999	2000	
1	Tot	Total (in thousands)					136.8	133.0	94.4	76	.1	67.	1 (	62.1	73.7	75.3	82.0	87.7
	Pri			1				I		l .			<u> </u>					
2			flats deli-	vered in the	nousands		40.0	36.9	33.4	35	.5	31.	7 .	30.1	35.1	37.3	33.3	35.5
			their con	tribution i	in %		29.2	27.7	35.4	46	.6	47.2	2 4	48.5	47.6	49.5	40.6	40.5
	Fla	ts for sa	le/rent in	thousands	s, includir	ng:												
3	a)		flats for s	ale/rent ii	n thousan	d	0	0	0.5	1.5	5	2.8	2	2.7	5.1	9.0	14.0	20.7
	b)		dynamics	$s\left(r_{n+1}/r_{n}\right)$	(%)		-	-	-	30	-	221	9	96.4	188	176.4	157.7	145.7
	c)		their con	tribution	in %		-	-	0.5	2.0	)	4.0	4	4.3	7.0	12.0	17.3	23.6
4	Fla	ts with o	collective	rights to p	property		83.5	84.3	50.0	31	.7	26.8	3	24.6	28.1	28.0	27.5	24.4
5	Co	ıncil fla	ts				10.7	8.2	5.9	3.8	3	3.3		3.0	3.7	3.4	2.7	2.0
6	Co	Company flats		2.6	3.6	4.6	3.6	6	2.5		1.6	1.4	1.5	1.0	1.2			
7	Soc	Social/rent flats				0	0	0	0		0		0	0.3	1.4 3.3		4.0	
conti	nuation	of Tab	le 1			_												
	2001	2002	2003	2004	2005	2006	2007	2008	200	8	2010	0	2011	2	012	2013	2	014
1	106.0	99.1	162.6	108.1	114.1	115.2	133.8	165.2	160	0.0	135.	.8	131.1	1	52.9	145.4	1-	43.2
2	40.7	51.7	117.9	64.9	63.3	57.6	71.6	83.3	72.:		70.4		73.1	Ic	1.0	81.3	12	6.2
2	38.4	52.2	72.5	60.0	55.5	50.0	53.5	50.4	45.		51.9		55.7		3.0	56.0		3.2
3	30.4	34.2	12.3	00.0	33.3	30.0	33.3	30.4	43.	ı	31.9		33.1	-	3.0	30.0	13	3.2
a)	29.4	23.8	23.9	24.3	33.0	38.0	45.7	66.7	72.	1	53.5		49.6	16	3.6	56.6	5	9.1
b)	142.1	80.9	100.4	101.6	135.8	114.8	120.6	146.0	108	.1	74.2		92.7	1	28.2	89.0	1	04.4
c)	27.7	24.0	14.7	22.5	29.0	33.0	34.2	40.4	45.	)	39.4		37.8	4	1.6	39,	4	1.3
4	25.8	15,4	12.1	9.4	8.2	8.9	8.2	8.6	7.3		5.1		3.9	4	.2	3.5	3	.5
5	2.3		2.0	1.8	3.6	4.4	2.5	2.7	4.2		3.5		2.4	2	.4	2.2	2	.2
6	1.0	8.2	0.9	0.6	0.5	0.2	0.4	0.6	0.6		0.3		0.3	(	).5	0.4	0	.6
7	6.8		5.8	7.1	5.4	6.0	5.2	3.2	3.6		3.0		1.9	1	.1	1.3	1	.7

Source: Autor's own elaboration based on GUS, Budownictwo Mieszkaniowe i Roczniki Statystyczne 1993-2014

Table 1 presents all the forms of residential construction for buildings started to be used in Poland in 1991-2014, percentage of flats and growth dynamics indices. In Table 1, "flats for sale/rent" represent developers' activities. The analysis of the date reveals that in 1991-1996, the number of flats was decreasing and it was the year 1997 when a growing tendency started to be observed<sup>5</sup>.

<sup>&</sup>lt;sup>4</sup> See in: Table 1, line 3b and 3c (for the period of 2004-2009)

<sup>&</sup>lt;sup>5</sup> It should be observed that the number of flats built in 1991 was not exceeded until 2003.

The data indicate that, after the period of transformation, the number of flats built by cooperatives (including municipal and company-owned) was substantially reduced. Furthermore, the number of flats delivered by Social Housing Associations (social and rent flats), delivered for sale and rent an built by private investors using the economic methods of buildings for their own needs (Bąk, 2011) points to a substantial increase, particularly since 1997. This quite a dynamic increase in the number of privately owned flats was attributable to (Lis, 2008, p. 218-225):

- intensive privatization of public housing resources, particularly in 1993-2002;
- privately-owned developer housing construction sector;
- transformation of cooperative property rights.

Therefore, it was assumed in general that in 1991-2014, importance of developers was growing gradually.

#### 4. Importance of housing estate in developer activity

Since its beginnings, real estate development investments in Poland have concerned in particular housing estate investments. Table 1 (line 3a) presents the number of flats for sale and for rent in 1991-2014. It is remarkable that the number of flats delivered to the market rose in 1995 to 2,800 compared to 500 flats in 1993. In the first and second quarter of 2015, the number of flats delivered was 63.979, with 23.902 flats delivered by developers, which accounted for 37.5% of all flats. These data indicate that investments made by developers are expanding dynamically (Central Statistic Office, 2015; Czischke, Pittini, 2007).

Analysis of the data presented in the study shows an increase in the number of flats in total delivered to the market of 43.9 thousand, of which 61% of the increase caused by developer's investments. In 2001, developers delivered 29,000 flats to the market, which accounts for over 27% of all flats delivered. Furthermore, in 2009, developers delivered 72,100 flats to the market, that is, over 45.0% of all flats. With such a boom, one should expect intensification of the number of flats delivered by individual investors (Bryx, 2001, p. 91; Wadley, 2004)

Changes in percentage contribution of private investments and investments for sale and rent in 1991-2014 (Table 1, line 3c) reflect the stages of evolution in the housing estate market in Poland after 1989 according to Czerkas (2011), which is presented in Fig.1.

STAGE 1					S	STAGE 2				STAGE 3					ST	AG	≣ 4.	STAGE 5				
1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Structural changes							he p					dov	ase vntu gna		The phase of renewed revival					of d	ren	
	period of <b>1989-1993</b>						perio						od of - <b>200</b>				riod <b>14-2</b> (			downward tendencies period of 2009-2010		

Figure 1. Evolution of the housing estate market in Poland in 1989-2010

Source: Czerkas, 2011, p. 48

In light of evolution in the housing estate market in Poland, analysis of the data presented in Table 1 reveals that in 1991-2006, the structure of flats delivered was dominated by the flats build by individual investors in the economic system for the internal needs (Lis 2008, p. 225). In 2001, housing estate developers delivered over half of all flats, which equalled the cooperatives' activities (Central Statistical Office of Poland, 2002, Chapter 8).

In the phase of stagnation and downturn (2000-2002), the supply of flats was decreased. However, mortgages for private customers outweighed mortgages for institutional customers (Matkowski, 2006, p. 31; Ławińska, 2013, p. 122-137). Poland's accession to the EU in 2004 brought a rapid revival in the demand in the housing estate market. The prices of flats and land started to increase rapidly. The costs of contractors and prices of construction materials were also on the increase (Czerkas, 2011, p. 7).

In the period of 2004-2009, developers became attractive customers for banks. Flat developers started to operate in all housing estate market segments, from luxury projects of apartments in city centres (Psilander, 2002) to the segment of holiday flats with the service of flat management (Czerkas, 2011, p. 8).

The projects implemented by housing estate developers were connected in particular with sales of flats. Projects of building flats for rent played a minor role due to unfavourable regulations (Brzeski, 2011, p. 14-21). Therefore, at this stage, banks financed private flat projects oriented at sales and the projects oriented at rent while local government projects (public housing and social housing) played substantially minor role (Czerkas, 2011, p. 11). In light of the analysis of the stages in development of the Polish market of real estate after 1989, housing investments made by developers have been developing very dynamically.

Regardless of global situation in the housing estate market in the period of 1993-2014, the number of flats delivered by developers rose year by year becoming the second number (following private housing) in terms of flats delivered every year <sup>6</sup>. In order to protect the rights of purchasers of flats of houses (Journal of Laws of 16 September 2011, No 232, Item. 1377), a new housing estate development act started to be used at the end of 2012.

The new housing estate development act implements the mechanisms aimed at improving credibility of the primary housing market, its organization but it introduces new costs for developers.

However, if the conditions of the dynamic development occurred in the real estate market, the escrow account, as a measure that increases the safety of settlements between the parties of commercial transactions would, similarly to advance sale, become very popular.

#### 5. Management of the process of creation of the real estate (development projects)

Management of housing development investments is an ability to manage the investment process and creation of the system of fast response to the threats that occur (Marcinek, 2001; Logue, 2006).

The basic aims of management of processes can be presented through their basic features: primary (the scope of activities that form the process and their interrelations "S" and requirements that determine the expectations in terms of the results of the process "E") and secondary (time: period needed for implementation of the process "T" and costs necessary to implement the process "C"). Relationships between the basic features of the investment process are presented in Fig. 2 (Trocki, 2003), p.8).

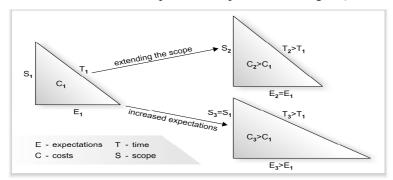


Figure 2. Relationships between the basic features of the process

Source: Trocki, 2003, p. 8

As results from Figure 2, extending the scope of activities that form the process and their interrelations ( $S_2 > S_1$ ) while maintaining constant expectations in term of the process outcome ( $E_2 =$  $E_1$ ) causes the increase in the costs necessary for process implementation ( $C_2 > C_1$ ) and time necessary for process implementation  $(T_2 > T_1)$ . The increase in expectations  $(E_3 > E_1)$  with the specific scope of activities that form the process  $(S_3 = S_1)$  causes that increase in the costs necessary to be incurred to implement the process  $(C_3 > C_1)$  and elongation of the time needed for implementation  $(T_3 > T_1)$ . This analysis shows that, in order to maintain the basic parameters of the project, prevention of threats that disturb basic parameters or implementation of regulatory measures are needed.

Management of the investment process concerns all the phases of the investment cycle with all the activities within this cycle (Hajduk,1993). This cycle starts from the initial phase where the most important activity is finding the location for the concrete investment project which is determined by the type of investment, availability to media and the infrastructure.

<sup>&</sup>lt;sup>6</sup> According to GUS (1991-2014), the number of flats delivered by developers are at the second place in terms of the number of flats delivered annually, following private housing.

Difficulty with choosing the location in economic terms is of essential importance to a particular method to use the real estate (Wolff, 2015, p. 1).

In this phase, the land should be acquired for implementation of the investment. Since 2005, the greatest developers, in proportion to the increase in revenues of the companies that build the flats create their own land banks to build new structures in several years.

Around 600 million were spent for investment lands from January to September 2013 (Kwiatkowska, 2013). The greatest developer in the stock exchange, measured with the number of flats sold a year, was Robyg (Wojtczuk, 2015), which spent over 200 million zlotys in 2015 for purchasing land for future projects. Dom Development, the second biggest company in the stock exchange spent around a quarter billion zlotys for purchasing new lands in 2015. The third player, Polnord from Gdynia, owns one of the biggest land banks. Another developer, Atal, plans to maintain the level of 160 million zlotys of expenditures for new land in 2016.

According to the consultants from the Bank Ziemi (Land Bank), housing developers are increasing their land reserves for future investments proportionally to their incomes. It should be concluded, that Land Bank in the biggest agent in selling land in Poland<sup>7</sup>. Developers purchase attractive lands at attractive and cheap prices (land prices have increased from 50 to 200% in recent years). Potential customers of developers purchase the real estate with the value of the land at current prices included.

Therefore, low price of land for real estate has a substantial effect on the developer's profit.

WGN experts and real estate appraisers agree that location is the strongest factor that stimulates real estate prices. Better location causes that the price of real estate is higher.<sup>8</sup>.

Developers-investors, who are also the managers in the process of real estate creation, coordinate, as early as in the phase of preparation of the whole investment cycle, the design process and the choice of a designer and they find the contractor to implement the project.

Once the project documentation is completed with all the obligatory permissions for construction and the funds are secured for the investment, the investor starts the third phase, with its aim being implementation of the investment projects. Beginning of this phase of the investment cycle means finding the entity to implement the building project and the necessary contract should be negotiated and signed.

The contracts with subcontractors represent a substantial challenge for managers of the investment cycle since they have to be formulated so that they prevent the investment from the investment risks (Logue, 2006). Therefore, it is important to formulate right contracts with designers and entrepreneurs so that the investment risk is distributed as much as possible over several partners (Grodzka, 2001, p. 7, Bryx, Matkowski, 2001, p. 183-201).

Currently the most important criterion for the people who plan to buy a flat is attractive price of the real estate and its good location. A solution can be also provided by advance sale of flats. Advance sale of flats shows benefits for both purchaser and developer. The advance sale as defined in the new act and using escrow account increases safety of purchasers, particularly in the case of developer's business failure. From the developer standpoint, advance sale limits the market and financial risks of the investment (Skoczeń, 2015).

Completion of the phases of the building means notification and participation in final commissioning of the building and delivering the building to be used. The basic activity during commissioning is to determine the formal consistency of the works performed with the documentation, building permission and Polish standards and to reveal the defects and problems Final commissioning of the building and notification about the fact of the building and notification about the fact of completion of the construction works is followed by the phase of the building use, termed real estate management, which involves all the activities connected with proper use of the newly created building. The management phase is completed with the investment completion. This phase closes the investment cycle.

<sup>&</sup>lt;sup>7</sup> On 26 January 2009, Bankier.pl published information that *Bank Ziemi started operation: offer for those interested in land investments*. Since the moment of establishment, Bank Ziemi is the biggest agent in selling land in Poland. Its mission is to offer land management services, counselling in terms of investments and maintaining the position of a leader in land management.

http://www.bankier.pl/wiadomosc/Ruszyl-Bank-Ziemi-oferta-dla-zainteresowanych-inwestycjami-w-grunty-897669.html; http://www.bankziemi.pl/Informacja o Banku Ziemi.pdf;

http://www.bankziemi.pl/Zostan inwestorem gruntowym.pdf; http://www.bankziemi.pl/wiadomosci.php?newsId=219

<sup>&</sup>lt;sup>8</sup> WGN Real Estate is the biggest real estate agency in Poland and one of the biggest in Europe. It has operated in Poland for 22 years.

Management of housing estate investments is an ability to manage the investment process, early identification of possible threats, creation of the system of quick response to the threats and transfer of the negative effects to other entities that take part in the investment cycle.

#### 6. Conclusion

Developers are involved in particular in construction of residential buildings for individual customers. Therefore, the focus of the study was on specific nature of developers in terms of housing estate.

The investigations presented in this study showed that, among many forms of housing estate development, the number of flats delivered by developers is on the increase. The focus of this study is on the analysis of housing estate development in Poland since 1991 and presentation of developer activities in the real estate market. Analysis of the housing resources revealed a strong effect of the economic tendencies on this level, both among private investors and developers. It was demonstrated that the increasing tendencies in private housing and developer housing depend heavily not only on the demand but also on mortgage availability. The study discusses the importance of housing estate in developer activities, emphasizing the role of the new real estate development act to protecting rights of flat purchasers.

It was demonstrated that the most important criterion for the choice of real estate is its attractive price and good location. The study also emphasizes the role of Land Bank and advance sale and that the basic tool for management of investment implementation process is, apart from the project itself, the contract between the investor and participants of this process. The contract should be prepared so that the investment is protected from the general investment risk. The paper is summarized with the conclusion of achievement of the study aim.

#### References

Brzeski, W.J. (2011). Komercyjny rynek najmu istotnym ogniwem finansowania mieszkalnictwa, *Finansowanie Nieruchomości*, vol.2, pp. 14-21.

Bryx, M. (2001). Financing of housing investments, Warsaw: Poltext, 2001.

Bryx, M (2006). Zarządzanie nieruchomością jako faza procesu inwestycyjnego. [online]. [cit. 2016-01-18]. Available: http://tnn.org.pl/tnn/publik/VOL 14 NR 1 2006.pdf

Bryx, M. Matkowski, R. (2001). Investments in real estate. Warsaw: Poltext, 2001.

Główny Urząd Statystyczny (2015). *Budownictwo mieszkaniowe – tablice przeglądowe od 1991 r.* [online]. [cit. 2016-02-05]. Available: http://stat.gov.pl/obszary-tematyczne/przemysl-budownictwo-srodki-trwale/budownictwo/budownictwo-mieszkaniowe-tablice-przegladowe-od-1991-r-,6,3.html

Central Statistical Office of Poland (2015), *Production Department, Housing Construction. Chapter 3,15* [online]. [cit.2016-01-20]. Available: http://ec.europa.eu/eurostat/cache/metadata/EN/sts cons per esms pl.htm

Czerkas, K. (2011). Akademia: Finansowanie projektów mieszkaniowych w Polsce po 1989 r. a ewolucja rynku mieszkaniowego - rys historyczny i spojrzenie w przyszłość (cz. 1), *Finansowanie Nieruchomości*, vol. 2, pp. 66-73.

Czischke, D, Pittini, A. (2007). *Housing Europe 2007. Review of social*, *co-operative and public housing in the 27 EU members states* [online]. [cit. 2016-02-05]. Available:

https://moodle.technion.ac.il/pluginfile.php/316720/mod\_resource/content/0/CECODHAS\_Housing\_Europe\_2007.pdf

Grodzka, I. (2001). Risk of developer activities. Obrót Nieruchomościami. vol.7, iss. 35, pp. 7.

GUS (1993-2014). Roczniki Statystyczne, [online]. [cit.2016-01-10]. Available: http://stat.gov.pl/

Kucharska-Stasiak, E. (2006). Nieruchomość w gospodarce rynkowej, Warszawa: PWN, 2006.

Kwiatkowska, M. (2013), *Nieruchomości: Deweloperzy poszukują gruntów pod mieszkania*, [online]. [cit. 2016-02-03]. Available: http://serwisy.gazetaprawna. pl/ nieruchomości/artykuly/738175, nieruchomości-deweloperzy-poszukuja-gruntow-pod-mieszkania.html.

Lis, P. (2008). Polityka państwa w zakresie finansowania inwestycji mieszkaniowych, Warszawa: C.H.Beck, 2008.

Logue, A. C. (2006). *Property Values, Real Property Yields, Real Returns for Endowments* [online]. [cit. 2016-02-10]. Available: http://www.universitybusiness.com/article/property-values

Ławińska, O. (2013). Inwestycje infrastrukturalne na rynku nieruchomości komunalnych w gminie Poraj w latach 2010-2012 In Ławińska, O., Sitek, M., (eds.). *Działalność inwestycyjna na rynku nieruchomości*. Częstochowa: Sekcja Wydawnicza Wydziału Zarządzania Politechniki Częstochowskiej, pp. 122-137.

Łopiański, R. (2004). Protection of purchasers in developer activities In: Milewska, K., Łopiński, R., Czerkas, K., Kuglarz, P., Protection of purchasers of future housing apartments in light of legal regulations in selected European countries and conclusions for Polish legal solutions, *Zeszyt Hipoteczny*, vol. 19, pp. 9-11.

Matkowski, R. (2006). Produkt bankowy na miarę dewelopera. In: Bryx, M., Krysiak, Z. (eds.). Finansowanie działalności deweloperskiej. Aspekty praktyczne, Warszawa: ZBP, pp. 31.

Marcinek, K. (2001). Ryzyko projektów inwestycyjnych, Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach, 2001

Psilander, K. (2002). Axiomatic Design in the Customizing Home Building Industry, *Construction and Architectural Management* vol. 9/4. pp. 318-324.

Skoczeń, J.M. (2015). *Przedsprzedaż mieszkań czyli sposób na tańsze "M"*, [online]. [cit 2016-01-22]. Available: http://strefynieruchomości. blog.pl/2015/06/17/przedsprzedaz-mieszkan-czyli-sposob

Ustawa z dnia 16 września 2011 r. o ochronie praw nabywcy lokalu mieszkalnego lub domu jednorodzinnego, Dz.U nr 232, poz. 1377 [online]. [cit. 2016-01-28]. Available: https://uokik.gov.pl/download.php?plik=11699

Trocki, M. (2003), Project management [online]. [cit. 201411-09-10]. Available: http://ftp.sgh.waw.pl/sknzp/zp.pdf;

Trocki, M. Grucza, B, Ogonek, K. (2003). Project management, Warsaw: PWE, 2003.

Uchman, R. (2000). Rola deweloperów w rozwoju rynku nieruchomości w Polsce. In Bryx.M. (eds.). *Uwarunkowania rozwoju rynku nieruchomości w Polsce*, Warszawa: IFGN SGH, pp. 143.

Wadley, D. (2004). Good Development, Better Planning: *The Nexus Revisited, Planning, Practice & Research*, vol. 19(2), pp. 173-193.

Wojtczuk, M. (2015), Robyg is one of the biggest developers in Poland [online]. [cit. 2016-02-02]. Available: http://wyborcza.biz/Gieldy/1,114507,1769987,Jeden z najwiekszych deweloperów w Polsce zmienia.html

Wolff, A.M. (2015). Success of investments depends on three factors: location, location [online], [cit. 2016-01-28]. Available: http://obsluga-nieruchomosci.com/powodzenie-inwestycji-zalezy-od-trzech-czynnikow-lokalizacji-lokalizacji-lokalizacji-czyli-o-ryzykach-deweloperskich/

Ziółkowska, B. (2010). Stan i sposoby niwelowania dysproporcji w zakresie poziomu zaspakajania potrzeb mieszkaniowych w Polsce i UE. *De Doctrina Europea. Roczniki Instytutu Europeistyki*, vol. 7, pp. 167-172.

Ziółkowska, B. (2010). Stan i sposoby niwelowania dysproporcji w zakresie poziomu zaspakajania potrzeb mieszkaniowych w Polsce i UE, In Świeca, J. (eds.). *De Doctrina Europea*. Sosnowiec: Roczniki Instytutu Europeistyki Rok VII/2010, Oficyna Wydawnicza "Humanitas", pp. 167-172.

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# 57. ETHICAL ENTREPRENEURSHIP FROM THE PERSPECTIVE OF CONSUMERS

Abstract: The paper focuses on the issue of ethical entrepreneurship and corporate social responsibility of small and medium enterprises in Slovakia. In theory it defines ethical entrepreneurship and corporate social responsibility, and consequently through a realized questionnaire survey explores the attitudes and opinions of respondents (inhabitants of SR) on ethical entrepreneurship of Slovak small and medium enterprises. The topic of ethical entrepreneurship and corporate social responsibility is currently actually not only for multinational, as well as for small and medium sized enterprises operating on a regional and local market. Also increases the awareness of consumers in this area. The aim of the paper is to point out to consumer understanding of ethical entrepreneurship in Slovakia and find out to what measure the factors of corporate social responsibility (environmental, charitable activities etc.) influence their buying behaviour. Pursuant to the survey we can say that Slovak consumers understand the concept of ethical entrepreneurship and have clear expectations of SMEs within this issue. Likewise, they can define what means unethical business.

Keywords: business ethics, corporate social responsibility, small and medium sized enterprises

**JEL Classification:** D01, D21, D22, D64, L26, M14

### 1. Introduction

Trades and small and medium enterprises (SMEs), except for the period of socialism, constituted the backbone of any economy and produced most of the country's economic output. But their daily existence was so axiomatic, that within teaching of business economics, the economic theory started to give care to SMEs only in the last third of the 20th century, later as large enterprises. The importance of this sector – the share in employment (Spence, Rutherfoord, 2003) as well as in participation in GDP growth (Staniewski, Ryziński, 2015b) nowadays is well-known.

Specialists list quite a number of benefits of SMEs and entrepreneurs not only for the economy, but also for the whole society. Among others, Ľubomíra Strážovská highlights their positive role in innovations, confidence in yourself and also toughness, interest in problem solving, their fight against routine, the ability to work with low costs, to obtain and coordinate economic resources and apply them in a practical and effective way at the market, to deal with customers in a correct way, etc. (Strážovská, Strážovská, Bažo 2010, p. 16). Alena Daňková adds, that SMEs are more flexible, have a simple organizational structure, decision-making is concentrated in the hands of the owner. Due to the fact that their employees are more universal, SMEs are able to promptly respond to aroused problems, so SMEs and trades find themselves in an increasingly close contact with customers and suppliers (Daňková et al. 2010, pp. 27-30). We would even add also society-wide benefits of SMEs, such as the fact that people employed in small enterprises expand the middle class of society and are the abutment of the whole country; at the local level are owners and managers of SMEs often supporters of public shares; SMEs are partners of large enterprises and transnational corporations and so they naturalize international know-how; a well-functioning sector of small and medium-sized enterprises contributes to improvement of the

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whole country image. Thus, we can conclude that SMEs play nowadays not only economic, but also a stabilizing role not only in the economy, but at the level of the whole society.

### 2. The fundamentals of economic and business ethics

The first abstract philosophical reflections in this issue we can observe by St. Thomas Aquinas. A fair price in commercial contracts was one of the main issues of the review of scholastics. The phenomenon of morality does not avoid also Adam Smith, the founder of modern economic science; primary announcer of a free market, formulated as the known abstraction of an invisible hand of the market. Specifically, he dealt with it in the book *Theory of Moral Sentiments*. Despite the fact, that he did not consider selfishness as unethical, Smith realized the importance of moral rules in maintaining of social order. Based on his ideas, everyone should have the same conditions for enrichment, and Smith denounced acquisition of wealth by unfair ways.

That business may have some ethical issues, among others, realized Bernard Mandeville. He first noticed the inherent contradiction of business conduct and ethics, while still stood on the side of entrepreneurial freedom. He wrote that "suppress or limit selfishness, vanity and all such passions that lead to an undermining of morality and situation worse industry and commerce, which is the engine of life and society."

The idea of a socially responsible company was born in the late 20<sup>th</sup> century. Among the pioneers of the idea belong Howard R. Bowen and Archie B. Carroll. The aim of the manufacturer is no longer making better customer satisfaction, but even across the globe. Sustainable development, global responsibility and the protection of nature have become generally accepted concepts. They also take into account such factors business that directly or not at all related to the management of the undertaking. Importance of externalities, positive or negative, is extremely increased. The so called corporate social responsibility can initially forced the customers, but very soon it has also become a global movement of companies.

Anna Putnová and Pavel Seknička characterize the principles of ethical behaviour in terms of three dimensions: 1. philosophical basis - effort to guarantee human dignity and the common good; 2. own principles of ethical behaviour and conduct of an enterprise; 3. negotiations between the participating groups (Putnová, Seknička 2007, p. 72). Jakub S. Trojan accesses to business ethics from other side. He argues that "one of the fundamental pillars of ethics in economic life constitutes reliability. This is available with a perseverant and gradual acquirement of confidence in own fruitfulness, which is, at least, obvious prospectively, on a long-term basis. In term of a short perspective also adventurers can achieve success. In the context of a long-term developing and stable economy, however, reliability wins." Further he notes that "the reputation of the company is the family silver. In a long-term perspective, it is incidental to its reliability. Reliability relates to what and how an enterprise produces or provides. However, it also relates with the moral integrity of its management and employees; that together form the image of the company" (Trojan 2012, pp. 100-101).

As well as the creation of universities (Štefančiková, 2014), also ethics in business has an important and irreplaceable role not only for the cultural identity of the country, but also an impact on the quality of life. At present, business ethics became a part of a system, which several authors designated as "business ethics infrastructure", i.e. "network of tools and methods for managing enterprises, including ethical principles." Ethical infrastructure consists of enterprise traditions, rituals of employees, organizational culture and ethical dialogue conducted by ethical committee. Ethical problems and dilemmas of the company are solved through the last of the mentioned items. (Putnová, Seknička 2007, pp. 102-103) As Vojtovič and Krajňáková emphasises "The main social element in the structure of business management become primarily ethical norms and rules of human behaviour in organizations and, in particular, standards and rules enforced in a given company or enterprise, in other words The corporate ethics" (Krajňáková, Vojtovič, 2011).

### 3. Corporate Social Responsibility of SMEs

In a long term, a view that to do business ethical is duty only of large companies prevails. This approach is gradually changing. It require both customers and as well as themselves the managers of small and medium businesses. Despite the fact that is a very new aspect, currently several experts are dealing with business ethics of SMEs. We can mention Spence and Rutherfoord (2003), who summarized the publications relating to business ethics in the level of SMEs. In the countries where

the sector has long tradition, resp. in the past could continually develop also published scientific papers quite early, for example in Germany and UK (Spence et al., 2003), China (Jun Li, 2008), Thailand and Honkong (Bevan, Wynne, 2010) or in hole Latin America (Mellado, 2009). There are also accessible articles from transferring economies such as Czech Republic (Jindrichovska, Meissner, 2012) and Latvia (Greblikaite, 2014)

As Spence and Rutherfoord (2003) state, the "key difference between small business and large is that the small firm is likely to be owner-managed. Ownership and management are not separated to the extent that they are in say a multinational firm. This provides greater scope for individual beliefs and moral decision making to affect the practices of the business as a whole". It also means than an ordinary tradesman is primarily striving to survive on the market. In the other hand, the small companies operate on the basis of socially responsible business, because they are in more intense contact with people and regions.

The problem of relationships of ethics and small and medium companies analyzed (Staniewski, Ryziński 2015a). The authors stated "that that it is indeed possible and even advisable to discuss professional ethics, especially entrepreneur or businessman's ethics, primarily because this area is growing dynamically and shaping our reality." We admit that SMEs cannot pay regard to all components ethical business. An ordinary tradesman is primarily striving to survive on the market. To form an opinion that ethics does not concern the micro-enterprises would be inept. Small businesses operate on the basis of socially responsible business, because they are in more intense contact with people and regions. In a well-functioning and coherent communities already the local entrepreneurs, farmers and artisans establish various voluntary organizations, are patrons of culture and organizers of charitable collections.

### 4. The survey of business ethics in Slovakia

Observance of customers' rights is already an absolute obviosity. Can we say the same also about business ethics? It is indisputable that a simple satisfaction of consumer interests is not sufficient, even in the case of small operating units. The phenomenon of business ethics increasingly gets into the centre of attention also in everyday purchases. Indeed it is extremely difficult to define the term, but, as we later show, customers are able to understand its essence and the vast majority of them can take their own opinion. Corporate social responsibility is also a very difficult term, so some of its parts; such as environmental conservation, business charity or respecting the rights of own employees; are extremely important and are suitable for a separate research.

### 4.1 Methodology of research

In 2013, we decided to realize a questionnaire survey aimed at ascertaining views of people about the level of social responsibility of entrepreneurs and traders in Slovakia. We wanted to find out, to what extent is the desired state in conformity with reality, and to what extent are ethical principles applied in performing ordinary (commercial) activities of SMEs. The basis of the survey was to determine the attitude of the population to entrepreneurs and traders across the country. This form of activity is in Slovakia allowed since 1990. Previously it was strictly forbidden. Our survey differs from other surveys in the fact, that in the centre of exploration are not business entities, but their customers, more particularly customers of SMEs and sole traders. Despite the fact that entrepreneurial freedom can we enjoy two and a half decades, the ethical side of business has not yet been investigated from the perspective of buyers, let alone at the level of SMEs.

The aim of the paper is to point out to consumer understanding of ethical entrepreneurship in Slovakia and find out to what measure the factors of corporate social responsibility (environmental, charitable activities etc.) influence their buying behaviour. From the number 450 distributed questionnaires we received back 269, what means 59.78 per cent return. 6 questionnaires were decommissioned. For exploratory purposes, we could effectively use 263 questionnaires (58.44%). In this paper we would like to present partial results of the survey.

In this survey, there participated 107 men (40.68%) and 156 women (59.32%). According to the activity, we have addressed 12 unemployed, 24 retired, 60 students, 72 employees in a private sphere, 56 employees in public sector and 36 entrepreneurs and sole traders. Regarding the education level of respondents, 8 had primary education, 34 had secondary education without leaving examination, 137 gained upper secondary school examination, and 82 had university education.

### 4.2 Results of research

For needs of this article we will deal only with selected questions of the questionnaire. The question "Which sides of enterprising are the most important? Determine the degree of priority." offered a choice of 7 possible answers. The preferred degree of priority is given in Table 1.

Table 1. The order of preferred business symbols by gender

Answer	Number of placements on the 1 st place	%	Gender	Total number	%
Offer of goods and services in the highest quality	107	40.84	M	46	42.99
Office of goods and services in the nighest quanty	107	40.04	F	61	39.35
Protection of health and consumer safety	81	30.92	M	26	24.30
1 Totection of health and consumer safety	01	30.92	F	55	35.48
Draviding the widest range of goods and services	37	14.12	M	15	14.02
Providing the widest range of goods and services		14.12	F	22	5.16
Offering the character goods and services	22	8.40	M	13	12.15
Offering the cheapest goods and services			F	9	14.19
Increased amphasis on the auxironment	13	4.96	M	5	4.67
Increased emphasis on the environment			F	8	5.81
Offer of additional services (packaging, transport,	2	0.76	M	2	1.87
etc.)		0.76	F	0	0.00
Offer of the more forms of distribution (various	0	0.00	M	0	0.00
forms of e-commerce, postal packets and other)	-		F	0	0.00

Source: Own work

Regardless of gender, most respondents prefer "offer of goods and services in the highest quality" (40.84% of respondents). At the first place labelled the answer 46 men (42.99% of the total number of men) and 61 women (39.35% women). In the answers of respondents, we can see some discrepancy with other surveys. According to each study, Slovak customer is price sensitive. In our survey, this answer indicated only 12.15% men and 14.19% women on the first place. By men, buying the cheapest goods most commonly figured on the third place (26.53%) and least frequently on sixth place (7.14%). Women preferred it most on the 7th place (16.67% women) and at least on the 6th place (11.81%). The most frequently [least frequently] occurred order of individual answers was as following:

### Men:

- offer of goods and services in the highest quality: 1st [6th] place;
- protection of health and consumer safety: 1st [7th] place;
- providing the widest range of goods and services: 2nd [7th] place;
- offering the cheapest goods and services: 3rd [6th] place;
- increased emphasis on the environment: 5th [1st] place;
- offer of additional services: 7th [1st] place;
- offer of the more forms of distribution: 6th [1st] place.

### - Women:

- offer of goods and services in the highest quality: 1st [6th 7th] place;
- protection of health and consumer safety: 1st [7th] place;
- providing the widest range of goods and services: 4th [7th ] place;
- offering the cheapest goods and services: 7th [6th] place;
- increased emphasis on the environment: 5th [1st] place;
- offer of additional services: 7th [1st] place;
- offer of the more forms of distribution: 6th [1st] place.

Note: Not each respondent exercised the option to assign a sequence number to each answer. If any answer has not received a sequence number, we assigned it 0.In finding the absolute order we did not take it into consideration.

The question "Should trades and entrepreneurs contribute to philanthropic activities?" brought results shown in Table 2 (absolute number). Only 67.89% of men and 72.61% of women answered the question affirmatively. In term of educational attainment, entrepreneurs should perform charity, especially according to respondents with the lowest (87.5%); as well as the highest level of education (78.05%). Only 65.47% of respondents with upper secondary school examination and 67.65% without the leaving examination answered affirmatively.

Table 2. Respondents' opinion on charitable activities of entrepreneurs

Answer	Gender (number)		Education (number)	
	MAN	74	primary	7
Yes	MAIN	/4	secondary without leaving examination	23
res	WOMAN	114	upper secondary	91
		114	university	64
	MAN	22	primary	1
NI.	MAN	32	secondary without leaving examination	11
No	WOMAN	39	upper secondary	55
			university	15
	MAN 3		primary	0
No answer	MAN	3	secondary without leaving examination	0
	WOMAN	4	upper secondary	4
	WOMAN	4	university	3

Source: Own work

The question "In your opinion, traders and entrepreneurs carry on their activities ethically?" focuses on finding consumers opinion about ethical business in Slovakia. The answers of respondents, with respect to gender, are shown in Table 3. Most of respondents think, that entrepreneurs carry on their activities ethically only sometimes. The reason can be constantly increasing consumer expectations in terms of ethical business.

Table 3. Respondents' opinion on ethical performance of business activities - gender, economic activity

Angruan	MEN	MEN		
Answer	Number	%	Number	%
Always	1	0.93	3	1.92
Often	29	27.10	37	23.72
Sometimes	59	55.14	86	55.13
Rarely	14	13.08	27	17.31
Never	4	3.74	2	1.28
No answer	0	0.00	1	0.64

Source: Own work

With the open question "What does mean the term business ethics?" we tried to find out, if consumers have an idea about the meaning of this term. We have received 380 different answers. From the total number of respondents only 14 men and 31 women did not answer.91 answers of respondents (customers) contained concepts such as to carry business with quality, seriously; follow the rules; correct dealing; decent and accommodating behaviour toward customers; preciseness; solidarity; willingness; fair-dealing; blamelessness; humane approach; responsibility of the entrepreneur; soundness; abidance. Less frequently appeared concepts such as environment and nature protection; a candid and honourable entrepreneur; reasonable prices; observance of laws and regulations; quality of goods, services and raw materials; behave ethically; adhere to ethical code; payment of duties and taxes. Only one man did not understand the question, and 5 men and 4 women have expressed that they don't know, or they are not interested.

In principle, between the responses of men and women haven't been large differences, they often respond likewise. 8 women even wrote concepts such as responsibility for the society, social situation.

### 5. Conclusion

Pursuant to the survey we can say that Slovak consumers understand the concept of ethical entrepreneurship and have clear expectations of SMEs within this issue. Likewise, they can define what means unethical business. Majority of the customers, however, believes that Slovak entrepreneurs behave ethically only sometimes, and they give only few resources for charity. As the most important side of business consumers consider in particular the quality of goods and services, on the second place protection of consumer health and safety.

Consumer protection is one of the fundamental postulates of economic life in an advanced world. For each interested party is clear that customer is disadvantaged against the business sector. His position is weaker. Therefore, it is necessary to brace up and even improve his position for equalizing chances toward producers through legislation. Customers should have perquisites toward manufacturers and service providers. At present, such situation is an essential basis of economic relations at the market, and each side accepts it. Consumer rights does not distort the market relations, on the contrary, they encourage producers to produce or provide newer, more varied and more perfectly goods and services. Such approach supports searching for new solutions on scientific and technical level, as well as more efficient production which destroys nature a lot fewer.

### References

Bevan, D., Wynne, R. A. (2010). Business Ethics and Corporate Social Responsibility in Small and Medium Enterprises: Sampling from Thailand and Hong Kong. In Spence, L., Painter J., Morland, M. (eds.), *Ethics in Small and Medium Sized Enterprises – A Global Community*. International Society of Business Economics and Ethics, Book Series vol. 2, pp. 255-274.

Daňková, A. et al. (2010). Malé a stredné podnikanie. Bratislava: crr.sk, VSEMvs, 2010.

Greblikaite, J. (2014). Ethical Codes in Lithuanian Small and Medium-Sized Enterprises: Problems and Solutions. In *International Scientific Conference on New Challenges of Economic and Business Development*, Riga, pp. 157-170.

Hančovská, E. (2014). Manager's personality versus stress management and workload. In *SGEM conference on psychology & psychiatry sociology & healthcare education*. Conference proceedings vol. I. Psychology & psychiatry education & educational research. Sofia: STEF92 Technology, pp. 233-240.

Jindrichovska, I., Meissner, G. (2012). Practical Approach to Ethics in Czech SMEs: Learning from Experience. Loster, T., Pavelka, T., (eds.), 6<sup>th</sup> International Day of Statistics and Economics, Prague, pp. 481-491.

Jun, Li (2008). SME's CSR Management China: Ethical Concern Among Global Competitions. In Zhang, Y. Khasawneh, R. Sun, L. (eds.) Symposium on International Technical Barriers to Trade and Standardization Location. Hangzhou. pp. 224-228.

Krajňáková, E., Vojtovič, S. (2011). Podniková etika ako nástroj sociálneho manažmentu. In Sborník z mezinárodní vědecké konference pořádané pod heslem Nová ekonomika, nové přístupy? Praha: VŠE, [CD-ROM].

Mellado, C. (2009). Corporate social responsibility in small and medium enterprises in Latin-America. *Revista de ciencias socials*, vol. 15, iss. 1, pp. 24-33.

Puntová, A., Seknička, P. (2007). Etické řízení ve firmě. Praha: Grada, 2007.

Spence, L. J., Rutherfoord, R. (2003). Small Business and Empirical Perspectives in Business Ethics: Editorial. *Journal of Business Ethics*, vol. 47, iss. 1, pp. 1-5.

Spence, L. J., Schmidpeter, R., Habisch, A. (2003). Assessing social capital: Small and medium sized enterprises in Germany and the UK. *Journal of Business Ethics*, vol. 47, iss. 1, pp. 17-29.

Staniewski, M., Ryziński, W. R. (2015a). Ethical Aspect of Entrepreneurship. Filosofija. Sociologija, vol. 26. iss. 1, pp. 37-35.

Staniewski, M., Ryziński, W. R. (2015b). Are Ethics in Entrepreneurship Possible at All? *Filosofija. Sociologija*, vol. 26. iss. 3, pp. 193-200.

Štefančiková, A. (2014). The mission and the importance of universities in regional development. In *SGEM conference on psychology & psychiatry sociology & healthcare education*. Conference proceedings vol. II. Sociology & healthcare. Sofia: STEF92 Technology, pp. 1009-1016.

Strážovská, H., Strážovská, L., Bažó, L. et al. (2013). Podnikanie malých a stredných podnikov. Bratislava: Sprint 2, 2013.

Trojan, J. S. (2012). Etické vztahy v ekonomice. Praha: OIKOYMENH, 2012.

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# 58. RECENT CHANGES IN REGULATORY FRAMEWORK FOR FINANCIAL REPORTING IN SERBIA - A STEP BACKWARD IN INTERNATIONALIZATION OF BUSINESS?

Abstract: Financial statements represent a key link in business communication, enabling investment decisions both within the country and at the international level. Harmonization of financial reporting is a prerequisite for any business cooperation and capital investment on a global level. Since 2002 Republic of Serbia has been adopting International Financial Reporting Standards in accounting practice through several accounting laws. Each of those laws requested different scope of reporting entities in applying IFRS. The main aim of this paper is to analyze the achieved level of harmonization of financial reporting in Serbia with IFRS as well as to point out shortcomings in the international comparability of financial statements of Serbian companies. The study shows that the last Serbian Law of Accounting (adopted in 2013) made a step backward in harmonization with IFRS and therefore in possibilities of internationalization of business. We found several key weaknesses of Serbian accounting regulation - for example, the scope of IFRS reporting entities, incomparability of financial statements, recognition of some financial statements items different to the generally accepted accounting principles.

Keywords: internationalization of business, IFRS, Serbian accounting legislation

JEL Classification: M41, M48

### 1. Introduction

In conditions of globalization, the economic development of a country depends largely on the possibility of attracting foreign direct investment. Bushman and Smith (2001) claim that strong country-level investor protection increases the quality of accounting information, and that the interaction of these two variables positively affects economic growth. Specifically, in addition to economic and regulatory conditions in particular, investors are also interested in financial information about potential business partners in whose business they invest their capital (in the case of strategic partnerships, M&A, joint arrangements, etc.).

The global financial reporting system is a response to the financial reporting requirements, arising from the formation of global financial markets. Accounting regulations at the global level include IFRS, which seek to harmonize various financial reporting frameworks among countries. In this regard, the harmonization of financial reporting, i.e. national accounting regulations, with the generally accepted international accounting principles, is a necessary condition in the business world information flows.

The Republic of Serbia started the process of adopting the generally accepted international accounting principles in the early nineteen-nineties. Since then, the national accounting regulations and practices have been developed in the direction of harmonization with EU directives and IFRS, with occasional deviations, primarily due to the specifics of the general regulatory and business environment in the country. We believe, however, that the latest Law on Accounting of 2013 has made a step backwards regarding the comparability of financial statements of Serbian companies at the international level.

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The objective of this paper is to examine the harmonization financial statements of Serbian companies with the requirements of the international GAAP as a prerequisite for internationalization of of business. Accordingly, I set up the following null hypotheses  $H_0$  for testing:

 $H_0$ : There is no full comparability of financial statements of Serbian companies with IFRS financial statements due to some shortcomings of the Serbian accounting regulation in force.

I shall put this hypotheses to examination on the basis of logical reasoning and deductive analysis of the relevant concepts, theoretical foundations and comparison of IFRS and Serbian accounting legislation in force.

The paper is structured as follows. After the introduction, Section 2 points to the need for harmonization of financial reporting, along with the review of literature dealing with this issue. Section 3 briefly focuses on the current state of convergence of different accounting systems at the global level, and the role of IFRS in that process. The main, fourth part of the paper gives a critical overview of some of the provisions in the latest Serbian Law on Accounting, regarding the comparability of financial statements. Section 5 concludes the paper.

### 2. The need for harmonization of financial reporting, as a prerequisite for international and intersectoral investment

End of the past and the beginning of the new century were marked by the trend of globalization of business, and, therefore, the requirements of international companies and groups for the creation of a specific business environment, adequate for their business. In this regard, globalization of business has significantly affected the development of accounting as the primary source of information in information and communication flows among various stakeholders. In this respect, high-quality financial reporting is a *condition sine qua non* in the development of a company, and beyond, in the development of some national economies, its regions, and international relations.

Discrepancy between the national accounting standards and practices leads to the emergence of significant information barriers to cross-border investment (Pagano et al., 2002). Some studies show a positive correlation between the investment efficiency and the quality of accounting (Biddle, Hilary, 2006). The adoption of universally accepted accounting standards that require high-quality, transparent, and comparable information has been welcomed by investors, creditors, financial analysts, and other users of financial statements (Ankarath et al., 2010). The increase in cross-border M&A has increased the interest of researchers and practitioners to analyze the impact of the quality of financial information on the effects of business combination. In their study, Rossi and Volpin (2004) indicate that the volume of international M&A is significantly higher in countries with higher quality of accounting standards. High-quality accounting standards reduce earnings management and improve the quality of reporting (Ewert, Wagenhofer, 2005). In the absence of value-relevant financial information in countries with a lower quality of accounting regulations, foreign acquirers pay a lower premium for the acquired domestic entity (Black et al., 2007).

In addition to differences in the quality of accounting standards, barriers to international investment may be due to information asymmetry. Financial reporting reduces information asymmetry through disclosure of relevant and timely information (Frankel, Le, 2004). There are studies that show that the main reasons why investors are reluctant to make cross-border investment lie in high costs of obtaining and processing information on the target foreign company (Chan et al., 2005; Covrig et al., 2007). In this sense, domestic investors are often in a more favorable position than foreign investors, not only because of the better understanding of business environment and better understanding of the performance of domestic companies, but also because of the possibility of better anticipation of future economic policies of the government.

### 3. Globally dominant accounting systems: some results of convergence and adoption of IFRS

Generally speaking, there are two dominant sets of accounting standards to be applied in the financial reporting practice of primarily listed companies – IFRS and US-GAAP. In their study, Ashbaugh and Davis-Friday (2002) conclude that companies that list on the LSE and report under IAS (now IFRS) or US GAAP produce more transparent financial information. The significance of IFRS in particular lies in the fact that an increasing number of countries in the world oblige or encourage their companies to use these internationally recognized standards. Out of the 138 world countries (IFRS Foundation has

no data available on the others), 114 countries require the application of the above standards for the listed companies, 14 countries allow the application or request the application regarding some companies, and 10 countries do not explicitly require nor allow the application of standards (IFRS Foundation, 2015).

By the signing of the so-called *Norwalk Agreement* in September 2002, IASB and FASB expressed the shared commitment to the development of high-quality, comparable accounting standards, which could be used both at the national and at the international levels.

Besides the differences between the two global accounting systems, it is evident that there are differences between the accounting systems that are based on the application of International Financial Reporting Standards. There are numerous studies that deal with this problem in the countries of Central, Eastern, and Southeast Europe (Borker, 2012), (Bogdan, Cristea, 2009), but also individually, such as, for example, in Poland (Grabinski et al., 2014), the Czech Republic (Jindrichovska et al., 2014), Lithuania (Mackevicius et al., 2008), Croatia (Plaats, Nagy, 2011), Slovakia (Pasekova, 2011), Lithuania (Cernius, 2011), Romania (Alba et al., 2011), Slovenia (Jerman, Novak, 2014), and others. Upon the analysis of the findings of these and other authors, it can be concluded that, although IFRS have existed for a relatively long period, their implementation at the national level often faces obstacles caused by the specifics of primarily legal and economic system. Nevertheless, the general conclusion is that the convergence of national accounting practice towards IFRS reporting has a positive trend.

Proponents of the convergence of accounting standards suggest that the global adoption of IFRS would facilitate cross-border investment by increasing comparability of financial results between countries (Tweedie, Seidenstein, 2005). Adoption of IFRS at the country level reduces information asymmetry between companies and foreign investors, because IFRS improve transparency of financial reporting (Bushman et al., 2004), comparability of companies and countries, which makes it easier to process financial information (Bae et al., 2008).

### 4. Problems of comparability of financial statements of Serbian companies with financial statements of foreign companies

A significant turning point in establishing a new regulatory framework and financial reporting practice in Serbia, aimed at the general adoption of internationally accepted principles and standards in the area, began in the nineteen-nineties. Already in 1993, the Law on Accounting and Auditing was adopted, which was largely harmonized with EU directives (fourth, seventh, and eighth directive). The next Law on Accounting and Auditing, adopted in 2002, provided for the mandatory application of IAS, thus starting the process of deregulation, i.e. adoption of professional standards in place of legislation. After that, two new laws were passed, which, among other things, changed the scope of companies that apply IFRS, as well as many other issues related to, for example: translation of standards, education and certification of professional accountants, and the like. In the meantime, academic and expert community produced a large number of scholarly articles, and organized discussions and meetings, dealing with the harmonization of financial reporting in Serbia with the achievements of the international professional regulations (See the list of publications in Serbian, for example, in the journal Računovodstvo (Accounting), Special edition, 2014).

Based on the analysis of articles dealing with this issue, it seems that there is a high degree of consensus that, over the period of more than two decades, considerable effort and resources have been invested to achieve a relatively high level of quality of financial reporting in the Republic of Serbia, but that administrative measures and solutions in the legislative framework have often represented a significant constraint. Thus, for example, in analyzing the consolidated financial statements prepared by the Serbian parent companies, it is evident that goodwill is rarely recognized, and even more rarely (or almost in negligibly small number of cases) the identifiable intangible assets acquired in business combinations, separate from goodwill (Spasić, 2012). At the level of individual financial statements, it is also evident that companies usually give up permissible alternative procedure in subsequent valuation of property, plant, and equipment, i.e. give up on the valuation of these assets at fair value, declaring it identical with the already recorded carrying amount of the related asset.

The latest stage in the development of regulations and financial reporting practices in Serbia started with the adoption of the Law on Accounting of 2013 and relevant by-laws, which came into force in 2014. The new legislative framework in the field of financial reporting has led to certain contradictions with international accounting regulations and EU directives.

### 4.1. A variety of reporting bases

Serbian Law on Accounting of 2013, as compared to the previous period, further increased the number of reporting bases, i.e. regulations (standards) that certain companies can or must use. In fact, the introduction of a new category of legal entities classified according to size – micro-entities, and the introduction of obligation of application of IFRS for small and medium-sized entities – IFRS for SME (in addition to the so-called "major" standards – IFRS), significantly reduced the number of companies to prepare and disclose financial statements under IFRS – Table 1.

Table 1. Regulatory framework for financial reporting in the Republic of Serbia

		Micro legal entities	Small legal entities	Medium- sized legal entities	Large legal entities
Number of le 31.12.2014*	_	83.396	8.812	1.225	336
ORK L	Primarily	Special rules adopted by Ministry of Finance	IFRS for SME		IFRS
AMEWORK R ANCIAL PORTING	Optional	Simple bookeeping	-	IFRS	-
FRAM FOR FINAN REPOI	Mandatory	IFRS for SME IFRS, if the legal entity i the size	s listed on cap	l ital market - reg	ardless of

Source: \*Serbian Business Agency Registers, 2015

The transition from IFRS to IFRS for SMEs is a logical solution and a positive step in terms of simplification of regulations for these, by their nature, financially and organizationally less powerful companies, which reduces direct and indirect costs of the preparation of financial statements, without jeopardizing the quality and comparability with companies of similar size in the EU. There are studies that point to the shortcomings and obstacles in the application of ("major") IFRS by SMEs, such as, for example: high costs (Ballas et al., 2010; Jones and Finley, 2011), complexity and difficulties in interpretation (Zeff, 2007; Chand et al., 2010), and the lack of trained accountants (Ballas et al., 2010; Jones, Finley, 2011).

There remains, however, a risk that the largest number of legal entities in Serbia, micro entities, can, in the realization of their aspirations to increase their activity and, thus, income, assets, and number of employees, slow down the process of reaching that goal if they relinquish the possibilities of application of IFRS for SMEs, but opt primarily for the respect of the Rulebook, or, in turn, use the system of simple bookkeeping. In this case, external growth through business, and, in general, strategic alliances with foreign partners, will be much more difficult, primarily due to the incomparability of financial statements.

### 4.2. Transparency and comparability of financial statements

Transparency of financial statements is based on the principles of clarity and consistency. The principle of clarity means sound breakdown of balance sheet items, marking the items so that names match the content, consistent grouping into groups and sub-groups. The principle of continuity requires immutability of balance sheet forms over time. Proponents of mandatory application of IFRS emphasize the importance of their use for improving the comparability of financial statements (McCreevy, 2005), thereby reducing the global investors' costs of obtaining information and increasing their investment in foreign companies (Kang, Stulz, 1997).

IAS 1 – *Presentation of financial statements* points to basic items to be included in the balance sheet and income statement (profit and loss account), leaving the possibility of their deeper breakdown. Of course, this does not mean that the breakdown is unlimited. The degree of item breakdown varies according to the EU Directives, the IFRS, as well as among countries.

An additional problem of communication with foreign partners lies in the newly established official financial statement forms. Thus, for example, the Horizontal layout of the balance sheet of all legal entities in the Republic of Serbia now has significantly larger number of items, i.e. 137, as opposed to IAS 1, which requires a minimum of 31 items, or the Directive 2013/34/EU, which provides for a minimum 53 items. Furthermore, the Layout of the profit and loss account of Serbian companies

(drawn up by the method of "nature of expense") now contains 71 items, while IAS 1 prescribes the minimum disclosure of 10 items, and Directive 2013/34/EU provides for a minimum of 17 items. In addition, these layouts have a greater presentation power than the old layouts, since the significant increase in items did not increase transparency or the analytical value of the financial statements, but achieved precisely the opposite effect: it resulted in the loss of conciseness and clarity. This confirms that going into detail is not always an advantage, but leads to non-transparency, incomparability, and costs higher than benefits (Milutinović, 2014, p. 52).

In addition to the situation at the international level, difficulties in the analysis of financial statements of Serbian companies have existed over time as well. In Serbia, between 1993 and 2013, five laws were passed, and five different forms of financial statements were prescribed (Table 2).

Table 2. Total number of items in balance sheet and in income statement according to five Serbian laws on accounting in the period 1993-2013

	Law on accounting - year of adopting				
	1993	1996	2002	2006	2013
Balance sheet	135	102	104	50	137
(Statement of financial position)	133	102	104	30	157
Income statement (including Statement of	79	82	75	34	71+28
other comprehensive income since 2013)	19	62	73	34	/1+26
<b>Total items</b>	214	190	179	84	236

Source: Malinić, 2015, p. 50

If the analyst wants to compare the business performance of a company in Serbia over a longer period of time, it is obvious that there are difficulties in preparing data for analysis.

### 4.3. Application of the "deformed" income statement by nature of expense method

In addition to the formal incomparability, the new forms of financial statements challenged the substantive comparability of financial statements, particularly the income statement. The problem that may occur in the analysis of, for example, the income statement, is the "moving" of two items, *Variation in stocks of finished goods and in work in progress* and *Work performed by the undertaking for its own purposes and capitalized*, from operating income to operating expenses.

Therefore, the implementation of the "deformed' total cost method does not have a good theoretical basis (Malinić, 2015, p. 40). The main objective of calculation of financial results through the total cost method is to compare the total expenses incurred during one period with a total value of outputs produced in that period. By moving the inventory value adjustments to the expenses side, total expenses are reduced to a level that they have using the cost of sales method (i.e. by function of expense). Having in mind the "moving" the item Work performed by the undertaking for its own purposes and capitalized from operating income to operating expenses as well, the present form, distorting the structure of expenses, completely broke connection with the previous income statements.

The above mentioned key issues of preparation and presentation of financial statements in Serbia are not the only ones that are considered controversial at the moment. Other issues, such as, for example, quality control of financial statements, the responsibility for their preparation, presentation, and disclosure, education, status of professional accountants, the role and status of the external audit, etc., have been discussed in papers written by other authors (Milutinović, 2014; Djukić, Pavlović, 2014). Given that some of these issues are not regulated or are regulated in different than in the comparative legislation, the reliability of financial statements may be brought into question.

### 5. Conclusion

Nowadays, at the global level there are no discussions on the form and content of the forms of official financial statements. They are prepared according to the key accounting principles - transparency, clarity, consistency, and comparability. In Serbia, accounting regulations are unstable, new solutions generally do not upgrade the past ones. It all affects the deviation of the form and content of financial statements from best world practices, reducing their quality and making a step back in creating the conditions for the internationalization of business.

With the strengthening of the process of globalization and the creation of a common market within the EU, new requirements have been set to the accounting profession, as regards national and international financial reporting. In Serbia, however, despite the significant efforts made in the last two

and a half decades, in conditions of frequent changes in the regulatory framework, regardless of the primarily declarative (1998), and then legal (since 2002) support to the application of IFRS, there are still unresolved issues in the sphere of preparation and presentation of financial statements, which can hinder more intense connecting in the region, and beyond, with companies from the EU and around the world.

Through the analysis IFRS and the current legal framework for financial reporting in Serbia, we found that there is incomparable of financial statements prepared by Serbian companies with IFRS financial statements. First, the variety of reporting basis and prevailing application of national regulations for micro-entities disables comparability with the reports of foreign companies. Second, the formal breakdown in financial statements. Also, there is inconsistency in the structure of official financial statements in Serbia over time. Third, the income statement according to the method of total costs is "deformed" relocating some items from income in the correction of expenditure, which makes difficult financial analysis. Above mentioned, confirms my hypotheses that there is no full comparability of financial statements of Serbian companies with IFRS financial statements due to some shortcomings of the Serbian accounting regulation in force. All this makes a step backward in the internationalization of businesses in Serbia.

Nevertheless, it is certainly necessary to continue monitoring and implementing the dynamic improvement of EU directives and IFRS. This will improve business communication and facilitate regional and wider international connection between individual companies, thus creating conditions for attracting foreign direct investment and increasing the competitiveness of companies.

### References

Albu, N., Albu, C. N., Bunea, S., Calu, D. A., Girbina, M. M. (2011). A story about IAS/IFRS implementation in Romania. *Journal of Accounting in Emerging Countries*, vol. 1, pp. 76-100.

Ankarath, N., Mehta, K.J., Ghosh, T.P., Alkafaji, Y.A. (2010). *Understanding IFRS fundamentals*, New Jersey: John Wiley & Sons Inc., 2007.

Ashbaugh, H. S., Davis-Friday, P. Y. (2002). *The role of non-U.S. firms' financial reporting in international mergers and acquisitions* [online]. [cit.2015-12-04]. Working Paper, Available: http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=34668.

Bae, K.-H., Tan, H., Welker, M. (2008). International GAAP differences: The impact on foreign analysts. *The Accounting Review*, vol. 83, iss. 3, pp. 593-628.

Ballas, A.A., Skoutela, D., Tzovas, C.A. (2010). The relevance of IFRS to an emerging market: evidence from Greece. *Managerial Finance*, vol. 36, iss. 11, pp. 931-948.

Biddle, G., Hilary, G. (2006). Accounting quality and firm-level capital investment. *The Accounting Review*, vol. 81, iss.5, pp. 963-982.

Black, E. L., Carnes, T. A., Jandik, T., Henderson, B. C. (2007). The relevance of target accounting quality to the long-term success of cross-border mergers. *Journal of Business Finance & Accounting*, vol. 34, iss. 1-2, pp. 139-168.

Bogdan, V., Cristea, S.M. (2009). Particularities of accounting regulatory process in several Eastern European former Soviet Union countries. *Oradea.ro*, pp. 973-982.

Borker, D.R. (2012). Accounting, Culture And Emerging Economies: IFRS In Central And Eastern Europe, *International Business & Economics Research Journal*, vol. 11, iss. 9. pp. 1003-1017.

Bushman, R. M., Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, vol. 32, iss. 1–3, pp. 273-333.

Bushman, R.M., Piotroski, J.D., Smith, A.J. (2004). What determines corporate transparency? *Journal of Accounting Research* vol. 42, iss. 2, pp. 207-252.

Cernius, G. (2011). Confusion of accounting terminology in Lithuanaia. *European Journal of Business and Economics*, vol. 3, pp. 12-16.

Chan, K., Covrig, V., Ng, L. (2005). What determines the domestic bias and foreign bias? Evidence from mutual fund equity allocations worldwide. *Journal of Finance*, vol. 60, pp. 1495-1534.

Chand, P., Patel, C., Patel, A. (2010). Interpretation and application of "new" and "complex" international financial reporting standards in Fiji: Implications for convergence of accounting standards. *Advances in Accounting, Incorporating Advances in International Accounting*, vol. 26, iss. 2, pp. 280-289.

Covrig, V., DeFond, M., Hung, M. (2007). Home bias, foreign mutual fund holdings, and the voluntary adoption of International Accounting Standards. *Journal of Accounting Research*, vol. 45, iss. 1, pp. 41-70.

Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directive 78/660/EEC and 83/349/EEC, Bruxelles, 2013.

Djukić, T., Pavlović, M. (2014). Kvalitet finansijskog izveštavanja u Republici Srbiji. *Ekonomske teme*, vol. 52, iss. 1, pp. 101-116.

Ewert, R., Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review*, vol. 80, iss. 4, pp. 1101-1124.

Frankel, R., Li, X. (2004). Characteristics of a firm's information environment and the information asymmetry between insiders and outsiders. *Journal of Accounting and Economics*, vol. 37, iss. 2, pp. 229-259.

Grabinski, K., Kedyior, M., Krasodomska, J. (2014). The Polish accounting system and IFRS implementation process in the view of empirical research. *Accounting and Management Information Systems*, vol. 13, iss. 2, pp. 281-310.

IFRS Foundation. (2015). *IFRS as global standards: a pocket guide 2015*, [online]. [cit.2015-11-24]. Available: http://www.ifrs.org/Use-around-the-world/Documents/IFRS-as-global-standards-Pocket-Guide-April-2015.PDF.

Jerman, M., Novak, A. (2014). IFRS application in Slovenia, *Accounting and Management Information Systems*, vol. 13, iss. 2, pp. 351-372.

Jindrichovska, I., Kubickova, D., Kocmanova, S. (2014). The development of accounting and application of IFRS in the Czech Republic, *Accounting and Management Information System*, vol. 13, iss. 2, pp. 198-235.

Jones, S., Finley, A. (2011). Have IFRS made a difference to intra-country financial reporting diversity?. *British Accounting Review*, vol. 43, iss. 1, pp. 22-38.

Mackevicius, J., Strouhal, J., Zverovich, S. (2008). Comparative analysis of national accounting standards of the Czech Republic and Lithuania. *European Financial and Accounting Journal*, vol. 3, iss. 4, pp. 22-44.

Malinić, D. (2015). Kritički ostvrt na strukturu i sadržinu zvaničnih finansijskih izveštaja. In *Aktuelni problemi i perspektive računovodstva i finansija*. Proceedings of the 46. Symposium of the Serbian Association of Accountants and Auditors. Zlatibor: Savez računovodja i revizora Srbije, pp. 30-59.

McCreevy, C. (2005). IFRS-No pain, no gain? Speech to the Federation de Experts Compatables Europeans, Brussels, October 18, 2005 [online]. [cit.2015-11-24]. Available: http://europa.eu/rapid/press-release\_SPEECH-05-621\_en.htm?locale=en.

Milutinović, S. (2014). Stepen konvergencije računovodstvene regulative u Srbiji sa međunarodnom regulativom, *Računovodstvo*, vol. 9-10/2014, pp. 40-55.

Pagano, M., Roell, A. A., Zechner, J. (2002). The geography of equity listing: Why do companies list abroad?. *Journal of Finance*, vol. 57, iss. 6, pp. 2651-2694.

Pasekova, M. (2011). Financial Reporting in Slovakia. In Strouhal, J. (Ed.). *Harmoniation of SME's financial reporting in emerging CEE countries*, WSEAS Press, pp. 263-306.

Plaats, E. v., Nagy, D. (2011). Croatia Report on the Observance of Standards and Codes (ROSC) - Accounting and Auditing [online]. [cit.2015-11-24]. Available: http://go.worldbank.org/8OMKB6S9A0

Računovodstvo (Accounting), Special edition. (2014). Harmonizacija i standardizacija finansijskog izveštavanja u Srbiji – materijal za okrugli sto 45. Simpozijum, *Računovodstvo*, *vanredni broj*, 2014, Beograd.

Rossi, S., Volpin, P. F. (2004). Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics*, vol. 74, pp. 277-304.

Serbian Business Registers Agency. (2015). 2014 Financial Statements Annual Bulletin. Preleminary data for statistical and other purposes [online]. [cit.2015-11-24]. Available:

www.apr.gov.rs/Portals/0/GFI/Makrosaopstenja/2014/Godisnji%20bilten%20FI%202014.pdf?ver=2015-10-30-142557-660.

Spasić, D. (2012). Nematerijalna imovina povezana sa kupcima - priznavanje i vrednovanje u poslovnoj kombinaciji odvojeno od gudvila. *Makreting*, vol. 43, pp. 141-156.

Tweedie, D., Seidenstein, T. (2005). Setting a global standard: the case for accounting convergence. *Northwestern Journal of International Law and Business*, vol. 25, iss. 3, pp. 589-608.

Zeff, S.A. (2007). Some obstacles to global financial reporting comparability and convergence at a high level of quality. *British Accounting Review*, vol. 39, iss. 4, pp. 290-302.

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# 59. TAX CHANGES AND THEIR IMPACT ON MANAGERIAL DECISION MAKING

Abstract: This study analyses tax changes implemented in the tax system of Slovak republic, and then it looks into the processes of managerial decision making that aims to eliminate possible impact of these changes on the companies' business results. The main goal of the study is to determine to what extent managerial decisions impact whether or not government's expectations for the tax changes are fulfilled, i.e. to determine whether or not these permanent tax changes bring intended results. In order to achieve this goal we have analyzed information about specific managerial decisions and measures that were adopted as a reaction to the changes concerning companies' tax burden. Results of this analysis indicate that managerial decisions adopted as a result of permanent changes in tax system predominantly aim to find a way how to avoid taxation and thus eliminate the impact of these changes on companies' economic results. That means that the management does not behave according to the expectations of state and society, and that adopted managerial decisions do not follow or fulfill the intended purpose of implemented tax changes. Considering the complexity of this issue this study attempts to offer only a few possible motives and explanations for such a behavior from the side of the management. Complete and adequate reasoning and understanding of this problem could be the task for further analysis.

Keywords: business results, managerial decision making, manufacturing companies, tax changes

JEL Classification: H32, H61, M11

### 1. Introduction

There is nothing illegitimate about trying to minimize one's tax obligations as much as possible. Everybody does it, regardless of the height if their income. Nobody has a public obligation to pay more than what is required by law. After all, taxes are enforced payments and not voluntary contributions. This is what the American judge Learned Hand had to say on the topic of tax optimization (Firservis, 2015). The taxpayers' attempts to minimize their tax payments are undeniable, since they stem from the human nature; this is simply another way how management seeks to improve the effectiveness of their business activities. Both managing the business' tax liability and identifying tax risks are offered as services by many tax advisors and renowned international companies (Firservis, 2015).

Avoiding the taxation is a worldwide phenomenon, and as such it is not illegal. The chairman of S&D Gianni Pittella (IT) suggests three possible measures regarding this issue: a clear definition of tax havens, harsh penalties for those breaking the rules, and, finally, tax returns in every country (EurActiv, 2014). There is a multitude of estimates and reports on the topic of tax avoidance, be it in general or in the specific cases, which were prepared by tax authorities, NGOs, and scholars and experts working within academia (Havierniková, Strunz, 2014). There is no final number when it comes to the extent to which legal entities avoid taxation, but it is generally acknowledged that it is very probably rather high. According to one of the higher estimates, the yearly value of tax evasion is approximately 860 billion EUR, and tax avoidance amounts to 150 billion a year (Europarl, 2015).

Most of the bigger companies have separate departments which conduct tax planning, create efficient tax strategies, and interpret and apply tax legislation. These departments aim to create an added value for

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the company in the form of tax optimization. Legislators stand on the other side of the equation. Changes in tax legislation have lately been both frequent and extensive, and not only in Slovakia (Ivanová, Koišová, 2014), but in other foreign countries as well (Kordoš, 2015). This creates an environment that is very demanding for taxpayers and tax authorities' workers alike. The more intricate, inapprehensible and complicated tax law is, the broader is the potential for either tax avoidance or tax evasion (Firservis, 2015). And exactly these issues will be the main focus point of this study.

### 2. Data and methodology

Changes in tax law usually result in companies and their management attempting to circumvent the rules of income taxation through tax optimization, and thus reduce their tax liability (Belás et al., 2015a). Their actions, in the end, impact the final overall economic performance and future development of the country, state of unemployment (Vojtovič, 2013), and even state's lacking support for the research, sciences, education, innovations and so on. The reason for such a behavior is that companies and their management do not perceive state's engagement in the process of creating a favorable business environment as sufficient (Belás et al., 2015b). As a result, the companies lack an incentive to strictly adhere to their tax obligations. Management values every euro, and therefore when it sees an inefficient public administration, it looks for ways how to avoid taxes. According to some analysts, better tax collection could be achieved not only through repression of tax evaders, but also through improving both state governance and public administration (Skýpala, 2015).

The tax burden placed upon businesses is currently quite high. However, this is not necessarily caused exclusively by the tax rates and levies, but also by other factors that influence management's decision making process regarding determining their tax base or calculating their tax obligations (Mura, Buleca, 2012). As an example could serve the amendment to the Income Tax Act No. 595/2003 Coll., specifically the introduction of tax licenses and changes in the depreciation categories. This amendment through gradual changes eliminates a broader group of expenses, which are not tax deductible, despite the fact that they were provably expended in order to achieve and secure profit, or them being recognized as tax deductible is conditioned by a prior payment (Poradca, 2015). Such legislative changes always have some impact on the financial results of businesses as well as increasing their administrative burden (Šúbertová, 2012).

Throughout 2014 we witnessed multiple modifications of lax law that were supposed to streamline tax administration and tax collection, and to reduce the administrative burden placed upon businesses. The changes affected mainly basic tax legislation, specifically following acts: Act No. 563/2009 Coll. on taxes (Tax Regulations) and amending and supplementing certain acts, as amended (further referred to as "Tax Regulations"); Income Tax Act No. 595/2003 Coll., as amended (further referred to as Income Tax Act); and Act No. 222/2004 Coll. on value-added tax, as amended (further referred to as Value-added Tax Act).

We provide an overview of relevant tax and administrative changes implemented since 2014, which significantly influenced management's decision making, and which have to be taken into account for the sake of companies' cost optimization. These changes included: introduction of tax licenses, increase of minimum wage, changing the corporate income tax from 23% to 22 %, introducing a new document that has to be submitted for VAT (value-added tax) purposes called "Control statement", mandatory electronic communication between VAT payers and Financial Directorate, using a bank account in its IBAN form when making a payment, reducing the term of depreciation for tax losses, and increasing the withholding tax for tax havens to 35 % from original 19 % (It news, 2014).

The number of legislative changes, which Slovak companies and their management have to ponder upon when preparing and compiling their financial statements for 2015, is higher than ever before. Amendments from October 2014 and September 2015 mean that companies have to take into consideration more than 30 legislative changes when determining their tax base and filling out tax returns. All these changes, starting with 1.1.2015, influence both managerial decision making on tax optimization and companies' final business results (Investujeme, 2015). Therefore the main goal of this article is to determine exactly what is the impact of these changes in tax law on companies' business results, how tolerant companies' management is towards constant legislative changes affecting their tax burden, to what extent are they trying to find legal ways to avoid their tax obligations (through cost optimization), and what is the impact of these efforts on companies' final tax liability. We have set out following tasks in order to achieve this goal:

- define tax changes that took effect in 2014 and 2015, and introduce a vision for 2016;
- characterize measures taken by companies' management in attempts to eliminate potential effects that these changes could have on their business results and tax liability;
- determine to what extent introduced tax changes bring intended benefits and fulfill the expectations that the state had for tax collection and government budget revenues.

To achieve the defined goal and fulfill given tasks we have analyzed and evaluated changes in law legislation and conducted structured interviews with companies' managers about the way Slovak government implements tax law and about the effect these changes have on their decisions concerning cost optimization. In addition, we have used methods of evaluating the economic efficiency and expediency of legislative changes, and their impact on companies, state budget and business environment in Slovakia.

### 3. Results and discussion

In the 1990 s, Slovakia was counted among the most successful European countries when it comes to tax collection in relation to the country's economic performance. Nowadays the analysis of the Institute for Financial Policy (institution within the Slovak Ministry of Finance) suggests that the situation is quite the opposite. A low tax to GDP ratio indicates that government places a lesser burden in the form of taxes and levies) on the productive part of economy (Skýpala, 2015).

Tax legislation as such also went through a lot of changes in the past few years. Amendment of the Income Tax Act increased the number of depreciation categories from four to six. The two new categories have the term of depreciation set to 8 and 40 years. Non-productive buildings and structures, such as hotels, administrative buildings, apartment buildings, and facilities for healthcare, culture and education are now depreciated over the 40-year period instead of previous 20 years. Accelerated depreciation method can now be used only on the assets belonging to the second and the third depreciation category. In case that tangible assets are not used to assure the taxable income during the tax period, the taxpayer has to suspend its depreciation for the duration of this period (for example in case of a production line that was not used for any production (Podnikajte, 2015). Expenses in the form of posted provisions for contingent liabilities for non-invoiced supplies and services, provisions for preparation, verification and publication of financial statement and annual report, and provisions for preparing tax return are no longer considered to be tax expenses. The rules of transfer pricing alongside with the duty to maintain records on the used method of transfer pricing will apply also to domestic related parties (previously it applied only to non-resident related parties (Podnikajte, 2015).

Another change in the rules causes an asymmetry between including a creditor's income and debtor's expenses (both of them are bound to receiving or making a payment) into the tax base. In addition, the group of costs considered to be tax expenses only upon payment is further expanded. So called "Thin Capitalization Rules" have been reintroduced. The amount of interest and related expenses from loans provided by related parties that exceeds 25 % EBITDA is not recognized as tax expenses (EBITDA is an indicator calculated as a sum of profit before tax and tax depreciation charges and interest expenses) (Podnikajte, 2015).

In case of the sale of certain types of tangible assets, such as cars or building and structures belonging to the depreciation category no. 6, the residual value of these assets which is included in the tax base cannot exceed the income generated upon the sale. As far as tangible assets for private use are concerned, costs relating to such assets (for example expenses for repairs or maintenance) can be included into taxpayers' tax base only up to 80 % of the total costs, unless a taxpayer can prove a higher proportion of business use of the asset on achieving the taxable income.

Recent legislative changes also introduce a new limit on the tax depreciation of luxury cars; more specifically, cars whose purchase price exceeds 48 000 EUR. If, as a result of depreciation charges of these luxury cars, the tax base is too low, the tax base has to be increased. A positive change for the companies is that now the companies undertaking research and development projects have a possibility to further decrease their tax base by a deduction amounting up to 25 % of the selected expenses spent on this activity (Podnikajte, 2015).

Entrepreneurs, businessmen, business associations, and investors are calling for the stable business and legislative environment. Politicians have been promising such stability for years, however, so far the reality does not reflect these promises (Podnikajte, 2015). Slovakia witnesses rising taxes, higher

levies, growing number of administrative obstacles, and frequent legislative changes. All in all, the worsening of the business environment is not purely subjective, but this opinion is also shared by different international findings and rankings.

We have selected 10 acts from 2015, which in our opinion influence business environment the most, and we have prepared an overview of the number of their amendments during the past three years (Podnikajte, 2015).

Table 1. Acts that significantly influence business and the number of their amendments in 2013, 2014 and 2015

Name of the legal act	2013	2014	2015
Commercial Code	3	1	3
Act on Value-Added Tax	3	2	2
Income Tax Act	3	3	6
Act on the use of electronic cash registers	2	2	3
Act on taxes (Tax Regulations)	2	4	4
Act on Accounting	0	1	2
Commercial Register Act	2	2	2
Act on Social Insurance	3	5	7
Act on Health Insurance	5	3	6
Labour Code	2	3	4
Total number of amendments in the given year	25	26	39
Average number of amendments per month	2.08	2.17	3.25

Source: Podnikajte, 2015

The number of amendments stems from the number of dates in the given year (from the 1<sup>st</sup> of January to the 31<sup>st</sup> of December including), as of which an amended act or multiple amended acts were effective. However, one has to consider that some acts have to be effective as of the 31<sup>st</sup> of December of the previous year in order to achieve pursued objective and that this can skew judgement on the number of amendments affecting business in the given year (formally they are counted into the previous year, but the real effect happens in the year that follows). The trend that we can observe both in the number of amendments per year and the average number of amendments per month contradicts the idea of a stable business environment. When we compare year 2015 with 2013, the number of amendments per year grew by more than 56 %. On average, every 9.36 days there has been a change in the law that in some way regulates business, even when taking into account only the 10 selected acts. In other words, roughly every 10 days managers and entrepreneurs had to dedicate their time to the study of new legislation and its impact on their business activities and tax liability instead of taking care of their businesses (Podnikajte, 2015).

Slovak republic in the past always used to have simple and clearly structured tax regulations. However, the motto "Keep it short and simple" ceases to apply to tax law in 2015. Serles notes that, unfortunately, Slovak republic seems to be taking over the complexity of tax laws in Austria and Germany (two countries that experts often criticize for the very same reason), and he expects that Slovakia will continue to fall in the "Paying Taxes" ranking published by The World Bank Group (Slovakia currently occupies 100. position out of 189 countries) (Investujeme, 2015). Consultants of the accounting and advisory organization Grant Thornton are particularly critical towards administrative obstacles created by four new legislative changes, especially changes in tax depreciation and the use of six depreciation categories instead of four (Investujeme, 2015).

Our findings, which are based on the information gained through structured interviews with managers, conclude that companies' management perceives new regulations not only as administratively complicated, but also as economically nonsensical. For instance, a company that provides a loan to its business partner will not be able to claim this partner's insolvency for tax purposes. On the other hand, banks are an exception from this rule, which managers see as discriminatory. In addition, above mentioned change will make it even more difficult to get a loan from business partners (Investujeme, 2015). New regulations also cancel the possibility to treat the so called "small receivables" with value under 332 EUR as tax deductible, which, according to the final financial statements, was a practice often used by companies' management (Investujeme, 2015).

The already mentioned introduction of limit for depreciation of luxury cars is yet another change whose effect management sees as questionable. Every passenger car whose purchase price is above 48 000 EUR results in reduction of depreciation charges to 12 000 EUR. However, this regulation applies only to businessmen, who achieve none or only a very small profit, which is why managers do not see this change as purposeful or relevant (Investujeme, 2015).

Also new is the duty to keep documentation on transfer pricing that applies to the domestic related party transactions. Previously, similarly as in many other countries, Slovak legislation required keeping transfer pricing documentation for international business transactions between foreign related companies (for example between a parent company and its subsidiary). Managers see the fact that this duty now also applies to domestic related party transactions as a source of quite high additional costs, in addition to such a regulation being rather unusual in international comparison (Investujeme, 2015).

All above mentioned changes result in the increase of companies' costs, and managers do not believe that they bring an increase in state revenues that would be sufficient to balance out the negative effects. That is why tax experts and advisors are appealing to the Slovak government for an urgent overall reform that would address concerns about discussed legislative changes (Investujeme, 2015). However, that does not mean that managers perceive all the changes negatively; to some of them they have a positive response and think that they support economic growth. For example they have a positive approach to the new rules concerning the private use of company's assets (such as passenger cars), which allow to account for a private use up to 20 %. Other changes that have been received well include state measures regarding research and development and the introduction of the so called "super deduction", and also tax advantages connected with dual education (Investujeme, 2015).

### 4. Conclusions

Managers are of an opinion that in Slovakia the new legislation is adopted far too quickly and without proper and thorough commenting procedure. These swift changes are especially trying and demanding for everybody within the business environment. When it comes to decreasing the legislative burden placed upon companies, the form of the measure is secondary; be it a new act proposal, a strategy or a decree, what matters the most is its implementation. Managers think that lawmaking process, and tax law being no exception, should be approached sensitively and after a great deliberation. Our analysis and findings suggest that in most cases management reacts to the introduced tax changes evasively and legally tries to optimize the costs though adopting various sophisticated measures. Unlike tax evasion, which is illegal, tax avoidance as such does not break the law. However, many methods of tax avoidance contradict the spirit of the law, and the managers try to broaden the interpretation of what is legal with the aim to minimize the overall tax liability of their company. In the case of big companies, management employs different methods of aggressive tax planning, which allows them to exploit loopholes in legal systems, and also to use the differences between national domestic rules so that, as a result, they end up not paying their just share on taxes. International companies often use this method to avoid their tax obligations, and small and family companies, which tend to value every euro, see this as a big injustice. This is often the cause for their (often justified) adversary feelings towards the government, since big companies receive stimuli from the government and small ones only higher taxes, which is yet another incentive for them to further lower their business results and try to legally circumvent their tax obligations.

In general, Slovak economy is doing well, it attracts new investors and production as such is growing, but state fails to adequately profit from this positive development. According to statistical data, Slovakia collects the smallest amount of taxes and levies among the Visegrad group countries, and it also lags behind European average. Slovakia had the lowest tax revenues in proportion to the size of economy in the European Union, despite the fact that it introduced new tax laws and measures. Our findings show that managers are used to and know how to react quickly to the changes in the tax system; the businesses are able to lower the tax base through cost optimization and thus they avoid tax obligations. Therefore tax law changes do not fulfill state's original expectations, and effectiveness of tax collection remains low, despite the state's measures against tax evasion.

### References

Belás, J., Demjan, V., Habánik, J., Hudáková, M., Sipko, J. (2015). The business environment of Small and medium-sized companies in selected regions of the Czech Republic and Slovakia. *E+M. Ekonomie a Management*, vol. 18, iss. 1, pp. 95-110.

Belás, J., Ključnikov, A., Vojtovič, S., Sobeková-Májková, M. (2015). Approach of the SME Entrepreneurs to Financial Risk Management in Relation to Gender and Level of Education, *Economics and Sociology*, vol. 8, no 4, pp. 32-42.

EurActiv (2014). *Juncker vysvetľoval daňové úniky pred Parlamentom*. [online]. [cit.2015-04-12]. Available: http://www.euractiv.sk/danova-politika/clanok/juncker-danove-uniky-pred-parlamentom-vysvetlovat-nebude-023099

Europarl (2015). Oznámenie komisie európskemu parlamentu a rade o daňovej transparentnosti v záujme boja proti daňovým únikom a vyhýbaniu sa daňovým povinnostiam, [online]. [cit.2015-12-01]. Available: http://www.europarl.europa.eu/meetdocs/2014 2019/documents/com/com com(2015) 0136 /com com(2015)0136 sk.pdf

Firservis (2015). Daňová optimalizácia. [online]. [cit.2015-11-02]. Available: http://www.firservis.sk/

Havierniková, K., Strunz, H. (2014). The comparison of selected methods used for identification of cluster potential in the regions of the Slovak Republic. In *Economic & tourism*. International Multidisciplinary Scientific Conferences on Social Sciences and Arts (SGEM), vol. IV, Sofia: STEF92 Technology, pp. 693-699.

Investujeme (2015). *Daňový systém Slovenska sa od nového roku opäť skomplikuje*. [online]. [cit.2015-12-24]. Available: http://www.investujeme.sk/danovy-system-slovenska-sa-od-noveho-roku-opat-skomplikuje/

It news (2014). *Dôležité zmeny pre podnikateľov v roku 2014*, [online]. [cit.2015-11-30]. Available: http://www.itnews.sk/spravy/tlacove-spravy/2014-02-14/c161550-dolezite-zmeny-pre-podnikatelov-v-roku-2014

Ivanová, E., Koišová E. (2014). Interregional disparities in the Slovak and Czech Republic. In *Economic & tourism*. identification of cluster potential in the regions of the Slovak Republic. In *Economic & tourism*. International Multidisciplinary Scientific Conferences on Social Sciences and Arts (SGEM). Volume IV. Sofia: STEF92 Technology, pp. 405-412.

Kordoš, M. (2015). Interaction effects and impact of the EU regional policy within the strategy 2020. In: *Political sciences, law, finance, economics & tourism*. 2nd international multidisciplinary scientific conference. Volume II, Book 2. Sofia: STEF92 Technology Ltd, pp. 755-762.

Mura, L., Buleca, J. (2012). Evaluation of Financing Possibilities of Small and Medium Industrial Enterprises. *Procedia Economics and Finance*, vol. 3, pp. 217-222.

Podnikajte (2015). 30 významných zmien pre podnikateľov od roku 2015, [online]. [cit.2015-11-15]. Available:https://www.podnikajte.sk/pravo-a-legislativa/c/1835/category/zakonne-povinnosti-podnikatela/article/30-zmien-podnikatelov-2015.xhtml

Podnikajte (2015). *Top 10 zákonov ovplyvňujúcich podnikanie sa mení čoraz častejšie*.[online]. [cit.2015-12-25]. Available: https://www.podnikajte.sk/pravo-a-legislativa/c/2454/category/ obchodne-pravo/article/top-10-zakonov-podnikanie.xhtml

Poradca, s.r.o. (2015) Acts 2015 – III. *Proceeding of of the Consolidated Act and related regulations to 1.1.2015 in the area of taxes and accounting.* The Income Tax Act No 595/2003, 563/2009, 222/2004. Coll., as amended afterwards regulations.

Skýpala, M. (2015). V daniach sme na chvoste regiónu. Hospodárske noviny, č. 216, p. 2. [online]. [cit. 2015-11-15]. Available: http://finweb.old.hnonline.sk/spravy-zo-sveta-financii-126/v-daniach-sme-na-chvoste-regionu-964545.

Šúbertová, E. (2012). Small and medium sized enterprises in Slovakia - the conditions and their assessment. *Acta oeconomica Universitatis Selye*, vol. 1, no 1, pp. 185-193.

Vojtovich, S. (2013). The impact of Emigration on Unemployment in Slovakia. *Engineering Economics*, vol. 24, no 3, pp. 207-216.

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### 60. APPLYING OF HRM TOOLS IN DIVERSITY MANAGEMENT WITH FOCUS ON LABOUR MOBILITY

Abstract: This paper critically reviews of the literature on managing diversity through human resource management (HRM). Diversity management is one of solutions for problems caused by demographic and social development in European Union. Diversity workforce gives space the human resource managers a series of unique challenges. The main objective this article is to discuss the major issues and objectives of managing diversity and examine the state of human resource diversity management practices in organizations, which are also under the influence of labor migration. I assume that inequality and discrimination still widely exist and HRM has focused mainly on compliance with equal employment opportunity (EEO) and affirmative action (AA) legislation. Result of the examination reveals limited literature examining how diversity is managed in organizations through effective human resource management. I developed a framework that presents strategies for HR diversity management at the strategic, tactical and operational levels. This review also discusses as it can be assume the implications for practice and further research.

Key words: affirmative action (AA), diversity management, labour migration, equal employment opportunity (EEO), human resource management

JEL Classification: J 71, M 54

### 1. Introduction

The globalizing economy and the increase in the number of multinational corporations make diversity management a necessity for companies that want not only to survive but thrive during this time of economic, social, and cultural changes. Work force diversity acknowledges the reality that people differ in many ways, visible or invisible, mainly age, gender, marital status, social status, disability, sexual orientation, religion, personality, ethnicity and culture, different attitudes, needs, desires, values and work behaviours.

Multiculturalism has always been the most important dimension of diversity in many countries, including the EU nations, where are a large number of international migrants with diverse cultural backgrounds, and racial equality appears to be the predominant issue (Adepoju et al., 2010). The gender inequality is the oldest and most common diversity issue worldwide, but also it's the diversity of religion, ethnicity separate people and bullying at the workplace and in society. However, the predominant diversity issues in each country are different. Although researchers have examined several aspects of diversity, no comprehensive model exists.

This article has a theoretical character. The object of this study is examining the issue of diversity management.

### 2. Major issues and objectives of HR diversity management

Effective diversity management has historically been used to provide a legally defensible position against charges of discrimination. Equal Employment Opportunity (EEO) and Affirmative Action (AA) are to a large extent, a product of the civil rights movement and the liberal political philosophy. Diversity Management is "a movement away from or an alternative model to traditional EEO policies and practices or the second generation of EEO" (Thompson, 1997, p. 195). In contrast to the negative

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perspective of discrimination against staff in EEO the emphasis of diversity management is on a positive perspective of differences among all individuals (Maxwell et al., 2001). Diversity management does not only recognize but also values and harnesses workforce differences, such as individual characteristics, backgrounds, orientations and religious beliefs (Zaušková et al., 2014), so that individual talents are being fully utilized and organizational goals are met. While EEO is primarily driven by legislation, diversity management is driven by the business case. Diversity management takes advantage of the growing cultural pluralism that results from the internationalization of business, development of world markets, growing workforce mobility, and the increasing awareness of individual differences (Lawler, 1996). Equal employment opportunity starts externally and is enforced through legislation, whereas diversity management starts internally, through the efforts to create an atmosphere of equality and a fully inclusive organizational culture at work. These discussions lead to a conclusion that while diversity management includes a commitment to EEO and AA, the actual scope of diversity management is a lot broader (Kossek et al., 2005). First, diversity management seeks to overcome labour market segregation through addressing inequalities based on individual differences, such as race, gender and class (Maxwell et al., 2001). Second, diversity management emphasizes valuing and taking advantage of individual differences, mainly cultural pluralism, in order for all people to maximize their potential, which is beyond legal compliance-oriented equal employment opportunity.

Through the strategic deployment of a diverse workforce, organizations seek to achieve competitive advantage. There are a range of objectives organizations wish to achieve through effective HR diversity management (Vojtovič, Krajňáková, 2014). At the top is compliance with legal EEO and AA requirements. Other objectives include mainly creativity, flexibility, employee attraction, employee retention and better marketing capabilities. Through effective diversity management, diverse teams aim at achieving greater innovation and creativity, enabling them to outperform homogenous teams (Cox, Blake, 1991; Richard, 2000). While there is evidence that short-term progress is affected by conflict and communication problems, by bringing a wider range of perspectives to problem solving, diverse teams foster speed and innovation and produce substantially higher quality solutions over whole development cycles. Moreover, by bringing equality to employment relations, organizations tend to attract and retain an adequate and qualified workforce. Cox and Blake (1991) argued that the benefits of effective diversity management include reducing turnover, absenteeism and attracting the best candidates as the labour market shrinks. Past research indicates that those individuals who belong to the 'dominant' group within an organization tend to have higher job satisfaction and commitment as they experience higher co-worker support, superior rewards, access to adequate resources, and greater autonomy (Kossek et al., 2005). For those outside the dominant group within an organization, job satisfaction can be lower, particularly where they do not have access to equal rewards or advancement opportunities. In addition, tendencies for people to form in-groups and out-groups can affect job satisfaction, and impinge on supervisor, subordinate and co-worker relations. Furthermore, by making use of workforce diversity, many organizations seek to improve marketing capabilities to reflect and to be more responsive to customer demographic change.

### 3. Methodology

The object of this study is examining the issue of diversity management. This article has a theoretical character. The methodology is based on an examination of scientific literature on diversity practices in human resource management (HRM). They were used general scientific method of induction, deduction, analysis, comparison, synthesis, discussion and scientific abstractions for generalization of the results. The result is to creating of a conceptual framework, which will help for organizations develop of HRM strategies and policies to manage diversity effectively. The proposed framework will also help for researchers identify key areas in future research and guide practitioners to formulate and implement diversity appropriately.

### 4. Developing a framework of HR diversity management

Many authors have suggested a range of techniques for improving diversity management through HRM. Strong emphasis has been put on management philosophy that is committed to EEO, AA and appreciating and making use of diversity at the strategic level. As Truss (1999) argued, leadership and administrative heritage influence the nature and form of careers offered to both men and women.

Effective diversity management requires a culture of inclusion that creates a work environment nurturing teamwork, participation and cohesiveness (Moran et al., 2011). Diversity culture should be emphasized in organizational vision, mission and business strategy and the HRM strategy. The formation of a diversity culture requires a significant commitment of resources and leadership. Formalization of HR diversity policies is also necessary as Thompson (2000) argued that organizations with written documents for hiring and firing had higher percentages of women in management.

Measuring diversity and diversity management practices is strongly regarded as the initial step of HR diversity management practice. Diversity capabilities in organizations could be undermined by the lack of attention to the documented polices and practices and proper record keeping. For example, according to research in Slovakia companies, most organizations did not keep information on ethnic background in the 2014s. Sixty per cent of the surveyed organizations had no data on language skills, and 35% did not collect data on employee age. A lack of systems for identifying diversity means that CEOs are not well placed to harvest the diversity embedded in their firm's human capital (Grenčíková, Soósová, 2015). Therefore, many scholars have suggested organizations measure the identity profile or demographics of defined work groups, the dominant organizational culture, and the perceptions of various employee groups in order to identify cultural barriers that may hinder the full and effective participation of all employees (Kossek et al., 2005). A critical analysis of the current HR diversity practices, such as recruitment and selection procedures, criteria for entry into jobs, selection tools, diversity training programmes, performance appraisal and compensation is also important. Such an analysis helps to overcome unfairness, remove the glass ceilings and eradicate tokenism and resistance. Periodic audits of diversity are necessary to identify the areas that require improvement to manage diversity effectively. Organizations can compare this data with benchmarking in an industry or a region in order to rate and increase the representation of women and minorities in the workforce or management. Our next sections focuses on the techniques for improving HR diversity at the tactical level.

### 4.1 Recruitment and selection

Managing growth in workforce diversity and increasing the representation of women and minorities is a critical HRM strategy of recruitment and selection for most organizations. Human resource managers usually tend to bring people into the organization and promote employees who fit or have values similar to the decision makers or gatekeepers. Therefore, the recruitment and selection should avoid what called "the A-S-A (attraction-selection-attrition) cycle" in order to develop multiple cultures in the organization (Truss, 1999). So I recommend that Human resource professionals and line managers who recruit and interview job seekers in a multicultural workforce need to be aware of the ways in which the interviewers' beliefs, attitudes, and stereotypes influence interview behaviour.

### 4.2 Training and development

High quality diversity awareness training is one HR function that enhances the effective integration of diverse group members. Awareness training builds a common under- standing of the value of diversity, assisting in building social cohesion so that it improves individual and organizational outcomes. Maxwell, Blair and McDougall (2001) found in their study that 75% of trainees who took diversity training, left the training with positive diversity attitudes, while only 9% of trainees actually entered with favourable attitudes. Sixty eight percent of employees were sceptical prior to training, whereas only 7% reported scepticism after training. Eger et al. (2009) recommended that companies must clarify training objectives and systematically conduct a training needs assessment. Participants should know whether the training programme seeks to raise diversity awareness or develop multicultural skills. Social psychological research on stereotyping and linkages to prejudice reduction must also be tightly incorporated into training design. A top down training strategy may be valuable providing awareness training to senior managers first and team-building training last. Education and training should be tailored to the specific needs of the organization, division, level, team or individuals. Critical to the success of education and training is the important step of linking training to the strategic objectives of the organization. Stahl et al. (2010) suggested that external facilitators involved in diversity training may help to achieve higher levels of productivity in a shorter time given work group diversity can lead to increased conflict among members in the short-term.

Professional development and career planning is another area where discrimination is visible and needs careful attention while designing diversity management policies (Kirk, 2016). If the HR practices concerning career progression do not effectively reflect diversity issues, diverse employees would have negative perceptions of the whole process. Organizations should ensure providing equal opportunities for promotion and personal development to all employees. Minorities should be regularly included on panels that evaluate, select and promote managers. The problem of assessing candidates for promotion who are "different" can be reduced if some of the decision makers are non-traditional managers. Direct intervention by top-level executives in the promotion process is sometimes necessary to ensure that diversity goals are not overlooked. The main point is that candidates must not only be recruited, but they must be adequately prepared to take on demanding managerial assignments (Hančovská, 2014). Scholars have suggested that mentoring is another strategy for managing diversity. A successful senior mentor is matched with more junior women or minority employees, with the objective of enabling under-represented demographic groups to move through the invisible barriers and advance in their careers.

### 4.3 Appraisal

Effective performance appraisal practices in the area of diversity management should be objective not subjective, relevant to the job and the company, and fair to all employees and offer no special treatment. Including non-traditional managers on the appraisal panels can help to create objective criteria and fair performance appraisal practices (Moran et al., 2011). When conducting appraisals, the language of appraisal should focus on the individual's performance and not on the personality or race. Hence, the aim should be to make the appraisal as culturally neutral as possible. Also, some scholars suggest that when assessing each manager's performance, actions taken by the manager to hire and promote minorities and women can be used as performance criteria in order to promote diversity.

### 4.4 Pay

Pay equality contributes to effective diversity management and organizational performance. Diversity management in remuneration requires complete application of the principle of equal pay and a performance-based pay system. Empirical evidence suggests that the compensation structure, the wage determinants and the benefit schemes should be designed not only on common principles but also considering individuals in terms of their ability, knowledge and skill.

An individual-driven remuneration system facilitates individual lifestyles and further promotes diversity. To implement HR diversity practices, scholars also placed strong emphases on educating employees to understand diversity principles and accept their responsibilities, developing identity-based networking groups and targeting communications to different affinity group members (Allen et al., 2004).

At the operational level, a major diversity management issue arises when an individual tries to balance work and family life. In this regard flexible employment has great advantages over the traditional employment system. Employment flexibility provides individuals with the freedom to choose the working schedule based on their personal capacity. The diverse workforce has different priorities for themselves as well their families and societies. Flexibility provides a reasonable balance and allows employees to address significant issues. Organizations must therefore provide support services to help mitigate certain issues that are associated with work – life balance. When providing such support services, managers and supervisors are critical players and can help to build a culture that values diversity across the organization.

Reflecting the discussions above, at the strategic level, what is required is a management philosophy that recognizes diversity is critical for organizational success. Top management commitment to diversity should be reflected in the organizational vision, mission and business strategy in order to remove psychological and operational barriers to managing diversity. If such commitment is inconsistent with the current organizational culture, then a significant culture change may be necessary in order to create an atmosphere of mutual respect of all employees (Masárová, 2013). At the tactical level, a range of HRM diversity policies can be formulated in order to support this management philosophy. Measuring the employees' perception of the existing HRM diversity practices and their expectations may be conducted to facilitate policy development. HRM diversity policies at the operational level are implemented at the workplace, involving mainly educating

employees, identity-based networking groups, targeting to different affinity group members, flexible employment and support for generating a work – life balance.

At all levels, line managers should play a more important role in diversity management. Devolution of responsibility for people management is a central theme of HRM and of diversity management as well found that line managers' iterations of organizational policy on racial equality are sometimes at odds with employees' views of organizational practice. Hence, line management should be involved more in the decision-making process in order to fully understand and effectively implement diversity management (Wilson, Iles, 2009).

Based on the above analysis and discussion, a conceptual framework of HR diversity management is proposed and shown in Figure 1. This model indicates that diversity management includes EEO/AA as well as appreciating and making use of diversity. Diversity management should occur at the strategic, tactical and operational levels through a range of different activities involving managers at all three levels. The model also highlights the ultimate objectives of diversity management. These objectives include benefits to organizations and individuals which can result from good diversity management.

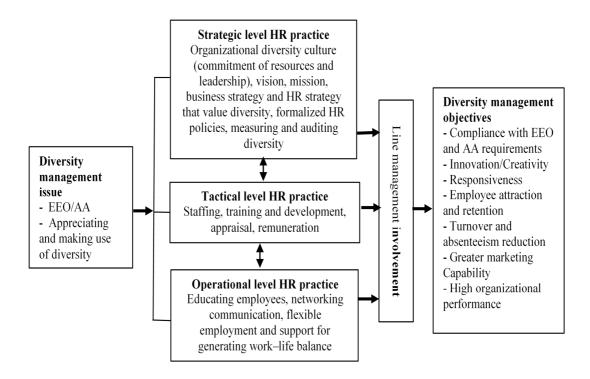


Figure 1. A framework of HR diversity

Source: Own work

In order to do so, as the proposed framework suggests, at the strategic level, top management is required to have a philosophy and foster organizational culture that recognizes diversity, and commits resources and leadership so as to implement diversity policies. At the tactical level, organizations should adopt a range of HRM policies incorporating EEO and AA and simultaneously making use of diversity. At the operational level, organizations should pay attention to educating employees, networking, communications and flexible employment. At all levels, line managers should be actively involved in HR diversity management.

Diversity management refers to the voluntary organizational actions that are designed to create through deliberate policies and programs greater inclusion of employees from various backgrounds into the formal and informal organizational structures. Diversity management, compared with its predecessors (equal opportunity legislation and affirmative action programs), is proactive and aimed at creating an organization in which all members can contribute and achieve to their full potential.

### 5. Discussion and conclusion

The findings of this study have significant practical implications. The review indicates that there is a continuing need for effective diversity management and for HRM to play an irreplaceable role in this regard. Effective diversity management through good HR practices and procedures leads to positive outcomes. Ineffective diversity management in HR is most likely to result in conflict, demotivation, higher employee turnover and low organizational performance. Therefore, diversity management must become a priority agenda in HRM practices for all organizations. Due to the fact that most organizations consider diversity mainly as an issue of compliance with legal requirements and recruiting ethnic minorities, there is a great need for improved HR diversity strategies focusing on appreciating and making use of diversity.

Diversity management strategies can help to create a link between the internal and external aspects of the work of an organisation. Whilst each organisation needs to work out its own priorities, the benefits can include wide spectrum as example: attracting, recruiting and retaining people from a wide; talent base, reducing the costs of labour turnover and absenteeism; contributing to employee flexibility and responsiveness; building employee commitment, morale and discretionary effort, enhancing creativity and innovation; improving knowledge of how to operate in different cultures; improving the understanding of the needs of current customers or clients; assisting in the development of new products, services and marketing strategies; creating opportunities for disadvantaged groups and building social cohesion (Kearney et al., 2009).

One of the most important benefits associated with diversity is increased potential of innovations. Innovation is a multidimensional term, displaying both "subjective" and "objective" traits. Subjective traits of innovation include the processes of creativity and original thinking, the communication of creative and original thinking to others, and the uptake of those ideas by others. Objective traits of innovation include the structures within which such ideas are thought about, transmitted to, and taken up by others, and the output and outcome in terms of definable benefits (Kearney et al., 2009).

Despite wide recognition of its significance, diversity management in HR has to date received surprisingly little attention in the diversity management literature. This study has identified several avenues for further research.

Future research should examine diversity management from multiple perspectives. Moreover, past studies are usually prescriptive in exploring the relationship between HR diversity practices and organizational performance. As a result, there is, so far, no study statistically examining the contribution of diversity management in HR to organizational performance from financial and non-financial perspectives. Further empirical research on this aspect would advance our understanding of the contributions of HR diversity management.

### Acknowledgements

Grant Affiliation: VEGA [1/0736/14] Trends in the Migration of Work Force into the EU Countries and Their Impacts on Economic and Social Development of the Slovak Republic.

### References

Adepoju, A., Van Noorloos, F., Zoomers, A. (2010). Europe's Migration Agreements with Migrant-Sending Countries in the Global South: A Critical Review. *Journal of International Migration*, vol. 48, iss. 3, pp. 42-75.

Allen, R.S., Dawson, G.A., Wheatley, K.K., White, C.S. (2004). Diversity Practices: Learning Responses for Modern Organizations. *Development and Learning in Organizations*, vol.18, iss. 6, pp. 13-15.

Cox, T., Blake, S. (1991). Managing Cultural Diversity: Implications for organizational Competitiveness. *Academy of Management Executive*, vol. 5, iss. 3, pp. 45-56.

Eger, L. et al. (2009). Diversity management. Plzeň: FEK ZČU in cooperation with Czech andragogy society, 2009.

Grenčíková, A., Soósová, V. (2015). Application of flexible forms of employment in Slovakia. In *Institutional framework for the functioning of the economy in the context of transformation: Collection of scientific articles*. Montreal: Publishing house BREEZE, 2015, pp. 6-12.

Hančovská, E. (2014). Manager's personality versus stress management and workload. In *SGEM conference on psychology & psychiatry, sociology & healthcare education*. Conference proceedings volume I Psychology & psychiatry education & educational research. Sofia: STEF92 Technology, 2014, pp. 233-240.

Kearney, E., Gebert, D., Voelpel, S. (2009). When and how diversity benefits teams: The importance of team members' need for cognition. *Academy of Management journal*, vol. 52, iss. 3, pp. 16-22.

Kirk, S. (2016) Caree capital in global Kaleidoscope Careers: the role HRM. *International Journal of Human Resource Management*, vol. 27, iss. 6, pp. 681-697.

Kossek, E.E., Lobel, S.A., Brown, A.J. (2005). Human Resource Strategies to Manage Workforce Diversity. In Konrad, A. M., Prasad, P., Pringle, J., Thousand Oaks, M. (eds.) *Handbook of Workplace Diversity*. CA: Sage, 2005, pp. 54-74.

Lawler, J. (1996). Managing Diversity at Work. In Molander, C. (ed.) *Human Resources at Work*. Lund: Studentlitteratur, 1996, pp. 159-185.

Masárová, T. (2013). Innovative changes in measuring the quality of life. In Strunz, H., Masárová, T. (eds.) *Innovation processes in organizations*. Wien/Berlin: Mercur Verlag, 2013, pp. 104-113.

Maxwell, G. A., Blair, S., McDougall, M. (2001). Edging Towards Managing Diversity in Practice. *Employee Relations*, vol. 23, iss.5, pp. 468-482.

Moran, R.T., Harris, P.R., Moran, S.V. (2011) Managing Cultural Differences: Global Leadership Strategies for Cross-Cultural Business Success. Oxford: Elsevier, 2011.

Richard, O.C. (2000). Racial Diversity, Business Strategy, and Firm Performance: A Resource- Based View. *Academy of Management Journal*, vol.43, iss. 2, pp. 164-177.

Stahl, G.K., Maznevski, M.L, Voigt, A., Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A metaanalysis of research on multicultural work groups. *Journal of International Business Studies*, vol. 41, iss. 4, pp. 9-16.

Thompson, N. (1997). Anti Discriminatory Practice. Basingstoke: Macmillan. 1997.

Truss, C. (1999). Human Resource Management: Gendered Terrain? *The International Journal of Human Resource Management*, vol. 10, iss. 2, pp. 180-200.

Vojtovič, S., Krajňáková, E. (2014). Enterprise management in the conditions of economic recession. In *SGEM conference on political sciences law, finance, economics & tourism*. Conference proceedings volume III Economics & Tourism. Sofia: STEF92 Technology, 2014, pp. 177-187.

Wilson, E.M., Iles, P.A. (2009). Managing Diversity – An Employment and Service Delivery Challenge. *The International Journal of Public Sector Management*, vol. 12, iss. 1, pp. 27-49.

Zaušková, A. Madleňák, A., Mendelová, D., Bezáková, Z. (2014) Problems of innovative thinking advocacy within the Christian doctrine. *Europea Journal of Science and Theology*, vol. 10, iss. 3, pp. 81-87.

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## 61. ASSESSMENT OF THE COMPETITIVENESS OF SMES THROUGH BEE MODEL IN THE MORAVIAN-SILESIAN REGION

**Abstract:** Small and medium sized enterprises (SMEs) are one of the most important attributes of competitiveness of the region, hence the national economy. The trend and popularity of small and medium sized enterprises in regions are considered as an important source of competitive advantage of given locality. This paper deals with evaluation of the competitiveness of selected SMEs groups in the Moravian-Silesian Region. On the basis of using international methodologies for assessing the performance of SMEs and linking this methodology with the basic principles of competitiveness evaluation will be applied Business Environment Evaluation model, the BEE model, which combines the principles of Porter's diamond with the EFQM model and with Cluster Management Excellence methodology. The research had been focused on 231 entrepreneurial entities in Moravian-Silesian region.

Key words: BEE model, competitiveness, environment, Moravia-Silesian region, SMEs

JEL Classification: M1, M14, M21, L62, F6, R10

### 1. Introduction

Small and medium-sized enterprises (next SMEs) play a key role in the national economy in terms of creating a healthy business environment and they are of utmost importance for the development of the national economy, regions, individual cities and municipalities. They help to create a healthy business environment and to increase market dynamics. Developments of SMEs are generally considered to be a major factor in economic development, regardless of the economic advancement of the country.

Utilization of corporate cooperation, joining into clusters and other network business can be achieved by SMEs synergies. SMEs can in this way overcome certain weaknesses and strategically use of so-called synergistic effect. There comes to multiplying the power of individual participating companies from the SME segment and mitigation, respectively elimination of some major negatives of their development. Many times it was stressed that SMEs are the foundation of any economy, but do not have the necessary economic force, high administrative burden acts on them and still persists difficult access to capital in many cases. Inalienable fact is the weak positions of SMEs in public tenders. These problems help remove specific form alliances - the cluster.

The competitiveness of regions, hence the entire national economy, goes hand in hand with support of SMEs organizations that are supported, among others, by public funds. Clusters are perceived as modern and well-defined type of groupings of entities from certain industry or field. The existence of SMEs opened the possibility of support for these sectors and increase their efficiency and competitiveness.

The aim of this paper is to evaluate the competitiveness of selected SMEs in the Moravian-Silesian Region. The partial aim is a generalization of international methodologies for assessing the performance of SMEs and linking this methodology with the basic principles of competitiveness

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evaluation. On the practical example will be applied Business Environment Evaluation model, the BEE model which combines the principles of Porter's diamond (more you can find in Porter, 1990; Kim, 2014; Mok, 2015; Marco-Lajara, 2014) with the EFQM model (more in Hakes, 2007; Kelemen, 2003) and Cluster Management Excellence methodology. The outcome of the paper is the evaluation of SMEs in the Moravian-Silesian Region on the basis of this assessment of its competitiveness according to the chosen methodology. For the selection of appropriate proposals will be use the multi-criteria decision analysis to identify those measures that are currently most advantageous in term of use of market opportunities and its economic benefits.

### 2. The role of SMEs

The small companies have been often presented as a hidden giant. And in this case it is not an exaggeration. Currently, in the European Union they employ nearly 60% of manpower and create 80% of all companies. It is not so much an absolute, static stress of these subjects in the European economy, as their dynamic function, especially as the sources of the creating of new jobs - this is in the difficult situation of high unemployment high significant. In the last five years participated the small and medium-sized enterprises (hereinafter SMEs) in the employment growth of 75 percent, only the quarter of new jobs offered large enterprises (Stverkova, 2013).

The small and medium-sized enterprises create job opportunities firstly in services, business and trade with forming a big group of entrepreneurs. They generate the competitive surroundings in the country economy and they contribute to purposeful structural changes of entrepreneurial subjects in dependence on the home and foreign market output etc. They play a significant role in the development of economy in Czech Republic. It is therefore important to create for viable and perspective SMEs and businessmen such conditions for their functioning, they could be the real motive power of economy development. Therefore it is necessary to create such legislative and economic surroundings; they do not need to in sequence sink on the ground of unsuitable formed implements. There with has been connected also the support in the sphere of counseling. (Stverkova, 2013; Stverkova, 2012)

To the functions of SMEs belongs also for example the fact that they have been the expression of the domestic capital, they have been the source of technical and technological innovations and they significantly contribute to the application of results in science and research into the practice, they positively affect the payment and business balance, especially when they have been exporting the goods or services. The small and medium-sized entrepreneurship has been also the town-element, which vitalizes the city centers; it provides the job opportunities and so on.

The SMEs ensure the social stability and the freedom. They give a chance to free finding of entrepreneurs, to a self-realization of citizens in the economic sphere. The employment has been together with the ensuring of economic growth, acceptable inflation and balanced payment balance the basic aim of the economic policy. The SMEs have been creating the available employment, especially for the group of job applicants, who have been entering firstly to the labor market, for women (part-time work), the freed manpower from the secondary sector etc. (Stverkova, 2013; Blecharz, 2011; Stverkova, 2012; Kim, 2014).

The importance of an existence of SMEs has been also given by their contributing to fulfillment of the main aims of economic and social policy (especially of labor policy), the price stability, the balance of the payment balance etc. The SMEs in the Czech Republic face for several years to a number of problems, which threat their existence and development. Although these enterprises have been the significant former of gross domestic production, they have been creating a number of job opportunities and with their activity they share in the forming of general and economic culture in the regions, their position in the Czech Republic has been still underestimated.

### 2.1. SMEs definition

The small and medium-sized enterprise has been defined in the legislation of Czech Republic and in the European Union for purpose of its support. In the Czech Republic has been this definition mentioned in the Act on Promotion of Small and medium-sized entrepreneurship No. 47/2002 Col., as amended. Since 1th January 2005 has been in force also the definition of SMEs for purposes of granting of aid from public funds in the sphere of European Union. Micro enterprises have less than 10 employees, the turnover is maxim 2 million EUR and the balance, it means assets also 2 million Eur.

Small category of the enterprise has to 50 employees, turnover and assets under 10 million EUR and medium-sized enterprises have under 250 employees, the turnover by 50 million EUR, and assets 43 million EUR maximally.

With the issue of small and medium-sized entrepreneurship deals a number of authors, who have been focused only on the quantitative classification, which has been from the aspect of an objective understanding of small and medium-sized entrepreneurship inadequate.

According to the author's research findings has been the other qualitative attribute that the basic reproductive mechanism has been the restoration of social work potential. In SMEs dominate social work substitution; the number of employees has been optimized to the social work needs and the substitution factor in this enterprise sector has been mostly the enterpriser. In the small enterprise has been the social work function as the superior to the technological-capital function. Here applies the motto of the owner: "I want to live decently, therefore I have to work, so I could work, I have to carry the business." The small enterpriser has not been the "capitalist", but the "worker" in his own company. The owner's motto in the big enterprise could be expressed as follows: "You live, so do your business, this is your mission in life, eventually you even do not need to work, only manage your people" (Stverkova, 2013).

If the company wants to be competitive, it must be perfectly oriented in the globalizing entrepreneurial surroundings. The competitiveness can be understood as the company's ability to battle with leading companies on the market, to compete and to ensure at least the medium-term prosperity. The essence of the competitiveness is so a conscious creating and a maintenance of competitive advantages. It is necessary that companies instead eliminating of disadvantages According to the materials of the European Union has been the competition defined as "the situation on the market, when the seller of the goods or services independently from each other try to obtain favor of the buyers and this with the aim to achieve the concrete entrepreneurial aim, e.g. the profit, the size of sale and (or) the market share. The competitive emulation among companies has been realized on the basis of price, quality, additional services or combination of these and other factors that the customer evaluates positive. The fair and undistorted competition has been the key pillar of the market economy," search ways, how to grow and build the advantages (Cichovsky, 2002).

### 2.2. Moravian-Silesian region

Moravia-Silesia belongs to three largest regions in the Czech Republic (CR) with more than 1.2m population. The region lies in the northeast of the CR and borders with Polish and Slovak regions. The region is the traditional industrial heart of the Czech Republic, specialized in metallurgy and other environmentally problematic industries. However, there has been a positive shift towards knowledge-intensive industrial activities in recent years (European Commission, 2015).

During the last 25 years, the regional economy has been changing significantly as a consequence of the post-communist economic transition. The positive location together with an industrial tradition significantly increased the attractiveness for foreign direct investment. The most important and largest factory owned and built by foreign company is Hyundai automobile factory in Nosovice. The inflow of FDI into manufacturing industries in the region caused the manufacturing sector to remain the most significant part of the regional economy. This sector generated 42.2% of GDP in 2012, 15.6% of sales of the whole Czech economy (the second highest value in the CR), and employed 43.6% of the employees. Excluding traditional industries, high-tech branches have been increasing in their importance in the local economy. Namely pharmaceuticals and IT services belong to the fast growing industries. The regional pharmaceutical industry generated 43% of sales in this sector in the whole CR. (European Commission, 2015)

The objective of the Regional Innovation Strategy for the Moravian-Silesian Region for 2010-2020 is to provide coordinated and systemic support to research, development and innovation activities in both traditional and new, promising developing industries. The chief spheres of activity under the RIS include support to research and development outcome transfer to the business sector, human resources development in research and development, and support to international cooperation. These spheres of activity are fulfilled by means of specific development projects (e.g., innovation vouchers, brokerage events, support to research activities in cluster organizations, funding support to improving qualifications of researchers, activities in technology foresight, etc.) (ARR, 2015).

The region's innovation infrastructure includes several major institutions: the VŠB-TU Ostrava Business Incubator (as part of the Innovation Support Centre), BIC Ostrava, the Steel IT Business Incubator, VTP Ostrava, and the VŠP Business Incubator. In addition, ten cluster organizations play an important role within the region: the National Mechanical Engineering Cluster, the Moravian-Silesian Automotive Cluster, the Moravian-Silesian Wood Processing Cluster, the Moravian-Silesian Energy Cluster, the IT Cluster, the Envicrack Cluster, the Moravian Foresty Cluster, the Safety Technology Cluster, the Tourism Cluster, and the Knowledge Management Cluster.

### 2.3. Research methodology

For practical application has been created new model Business Environment Evaluation model, socalled BEE model. The emergence of this model has been used widely applied methodology for the evaluation of the competitiveness and assessment of companies.

Porter's diamond is a model used as a part for the strategic analysis stage of the strategic planning process. In this model, we follow four basic factors, which are: the business strategy, the structure and rivalry, the terms of input factors, the demand conditions, and the supporting and related industries. The second model from which the model BEE has been created is based on the EFQM. The Cluster Management Excellence methodology is based on the EFQM model.

For the selection of appropriate proposals using multi-criteria decision analysis to identify those measures that are selected cluster initiative currently most advantageous use of market opportunities and economic benefits. For these purposes, is most often used the Saaty method of paired comparisons. In the design of the method is created the so-called Saaty matrix through which is subsequently pairwise comparison performed.

The simplified model called Business Environment Evaluation Model, BEE model based on the EFQM methodology, the Porter's diamond and the methodologies Cluster Management Excellence was created by the author and is captured in the following figure (Figure 1) (Stverkova, Humlova, 2015).

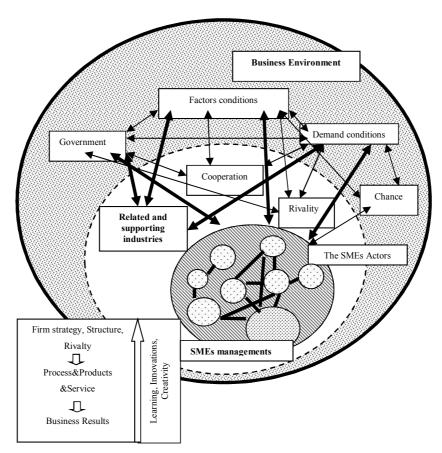


Figure 2. Business Environment Evaluation model, BEE model

Source: Own model BEE based on the Porter's diamond, the EFQM model and the Cluster Management Excellence

The strong SMEs can promote economic growth through leveraging the innovation and business potential of a region. New employment opportunities, new products and services, new companies, new R&D activities and new patents can be the result of activities within a network of SMEs.

### 2.4 Assessment of the competitiveness of SMEs in Moravian Silesian Region

Within the application of multi-criteria of a decision-making, as the *first step in the decision-making process*, there has been evaluated the establishment of the criteria and the weight of their importance. The method has been used for the pairwise comparisons using a nine-point scale. For the evaluation of the competitiveness of SMEs in Moravian-Silesian Region had been chosen by using the multi-criteria decision analysis those criteria that are currently most advantageous in term of use of market opportunities and its economics benefit. Thus, these criteria had been: rivalry, cooperation, support, strategy and business results.

The research had been focused on entrepreneurial entities in Moravian-Silesian region, had included 231 respondents, of which 158 pensions, 40 hotels, 33 cottages. Authors had addressed only respondents falling into the category of SMEs according to the Law legal code 47/2002, updated and are operated year-round.

The *first step* in the application of BEE model had been the analysis concerned the business environment. There have been analyzed internal factors as strategy and structure, processes and performance of the cluster, the next important step has been analyzed in the mezzo environment, including the related and supporting industries, demand conditions and rivalry, cooperation.

The research had been done it two lines. Firs had been focused on *each business entity*, to gain all the information about strategy, vision, mission, cooperation, institutional framework and management with aiming to knowledge and skills of the managers. In this sphere there has been carried out questionnaire research which dealt with the areas of strategic management based on the concept of the strategic success paradigm by Igor Ansoff, next to managerial skills, and ditto specific phenomena related to the synergy of business, as well to the impact of synergies on the organizational structure and ownership. The research results are shown below in the text and Tables. In terms of organizational structure were addressed field of the vision formulation, mission, strategy, its updates, its type and success. In Table 1 is shown if the entrepreneurial entities had their vision formulated and the same question had been focused on the mission of the entities.

Table 1. Formulation of the entrepreneurial philosophy

	done	generally	not
Formulation of the Visio	155	47	29
Formulation of the Visio	131	56	44

Source: Own work

In 67 percent of the cases the vision had been formulated, in this entities, we have done next interview focused on financing, identity and business integrity. In 20 percent of the cases we ask why the owner only have the idea and generally done the vision, in many cases they had answered: it is waste of the time or the managers didn't know how to prepare it exactly. On the same base had been done the questioning about the mission.

Authors had been asking about updating the strategy, if the management of the entity done it often, it means at lease every six month, this answer were in 60 percent of the cases, once a year answered 35 percent of the respondents and four percent done it once in two years and the rest didn't have strategy or didn't updated it. Additional the attention had been focused on the strategic objective of the entities. The result of these area could be seen in the Table 2.

Table 2. Strategic objective (own)

Strategic objective	Share in percent
Market share	59
Position in the industry	31
Lower cost than competitors	38
Quality of the services	60
Innovative leadership	15
Other	2

Source: Own work

Another area of research had been focused to assess the managerial knowledge and skills. In terms of strategy and internal environment of the enterprise is, based on research outputs, to place emphasis on research speed, shortening response times. It is necessary concentration to process orientation, thus delegation of authority and above all to identity and integrity of the company (to adapt to its vision, mission and corporate culture). The manager must be a leading personality with the ability to open communication. For basic worth must be considered benign organizational culture, a sense of belonging to a given team, creativity and innovativeness.

Based on the analysis of the institutional framework and exploring the synergetic effect had been found that there had been a distribution of the facility in 12 percent of cases, within three subjects, which is once percent of the cases, there had been done a merger, in 49 percent of the enterprises had been done outsourcing and networking, in 2 percent of the cases had matured to the conclusion of the franchise contract, acquisitions was in 1 percent and 45 percent of them demonstrated no significant change occurred. Within the framework of strategic alliances were had been mainly involved in networks within the cluster initiatives, combined with suppliers in 75 percent and reduce of the organizational structure in 55 percent.

The second line of research had been done on the business entities, cooperating based on outsourcing in the base as cluster and networking together, using BEE model as well as in first line and by chosen criteria had been the competitiveness evaluated. The managers were asking about increasing or being at a standstill or decreasing position after starting the outsourcing or networking cooperation.

It has been contacted all 113 enterprises, which use outsourcing and networking, but only 65 companies had been willing to involved in-depth analysis. Business results in this cases had been increasing to 3 percent in 24 percent of entities, it means 16 companies, to 5 percent increase had been in 33 percent of companies, to 10 percent rise in 22 percent and up to 10 percent it had been in 9 companies. In one company there had been diagnostic decreasing of the business results and in 4 companies the stagnation.

Almost the same had been with the number of the customers, increase was in 48 percent of the enterprises around 10 percent, and only 5 percent of all respondents had indicated no change. The next merit of the cooperation and networking had been the additional service which increase in 80 present of inquisitive companies.

With respect to support of the small and medium-sized enterprises by European Structural Fund or national support, only 10 companies had used some of the support program. This area appears to be desirable, but SMEs have big problem with the administrative burden and monitoring reports.

Thus, from this point of view, owing to research results, it seems that SMEs in Moravian-Silesian region are competitive because of the outsourcing and networking.

### 3. Conclusion

The competitiveness presents according to the dictionary of foreign words the rivalry, the emulation, or the economic competition. According to the materials of the European Union has been the competition define as the situation on the market, when the seller of the goods or services independently from each other try to obtain favor of the buyer and this with the aim to achieve the concrete entrepreneurial aim. The competitive emulation among companies has been realized on the basis of price, quality, additional service or combination of these of other factors that customer evaluates positive. The fair and undistorted competition has been the key pillar of the market economy (Stverkova, 2013).

The evaluation of the competitiveness of SMEs in Moravian-Silesian region based on the results of the research activities is almost positive in point of view of the synergic effect spring from the outsourcing and networking between the companies in the same branch line. Even the class of the competitiveness could rise, mostly the cooperation based on struggle to survival of the enterprises and on the economies of scale, is one of the competitive advantage for the SMEs enterprices. Hence, on the basic principles of the survival of the enterprises is indicated the support of growth of the region.

Due to cooperation and networking of SMEs, more that 60 percent of all researched enterprises have been achieving better business results, increase of customers, hence increase of the profit and this is the mark of the competitive ability based on synergic effect in the region.

### References

ARR. (2015). Regional Innovation Strategy for the Moravian-Silesian Region. [online]. [cit.2015-01-02] Available: http://arr.cz/cs/strategie

Blecharz, P., Stverkova, H. (2011). Product Quality and Customer Benefit. In Zhou, Q.Y. (eds.). *Applied Economics, Business And Development*. Dalian: SPRINGER-VERLAG BERLIN, pp. 382-388.

Cichovsky, L. (2002). Marketing konkurenceschopnosti (I). Praha: Radix, 2002.

European Commission (2015). *Moravian-Silesian Region* [online]. [cit.2015-01-02] Available: https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/moravia-silesia-region.

Hakes, Ch. (2007). The EFQM excellence model for Assessing Organizational Performance. Best Practice Series. Zaltbommel: Van Haren, 2007.

Jin Won, M.; 강동호; 이귀영; 정환. (2015). An Examination of Factors Associated with Competitive Advantage of Medical Tourism Enterpriser: Based on the Diamond Model Approach. *Journal of the Korean Entrepreneurship Society,* vol. 10, iss.1, pp. 112-136.

Jo, M. 김남현. (2015). Revisiting cluster theory for the application in tourism context: History, critiques and suggestions. *Journal of Tourism Management Research*, vol.19, iss. 5, pp. 267-291.

Kelemen, M. (2003). Managing Quality. London: SAGE, 2003.

Lang, H. (2007). Management: trendy a teorie. Praha: C.H.Beck, 2007.

Marco-Lajara, B., Ubeda-Garcia, M., Sabater-Sempere, V., Garcia-Lillo, F. (2014). Territory impact on the performance of Spanish vacation hotels. *Tourism Economics*, vol. 20, iss.4, pp. 779-796.

Okreglicka, M., Mynarzová, M., Kaňa, R. (2015). Business Process Maturity in Small and Medium Sized Enterprises. *Polish Journal of Management Studies*, vol. 12, no 1, pp. 121-131.

Porter, M.E. (1990). Competitive Advantage of Nations. New York: Free Press, 1990.

Stejskal, J. (2011). Prumyslove klastry a jejich vznik v regionech. Praha: Linde, 2011.

Stverkova, H. (2013). *The SMEs competitiveness&service quality evaluating not only in CZ.* Saarbrücken: LAP LAMBERT Academic Publishing, 2013.

Stverkova, H., Kribikova, P., Humlova, V. (2012). The impact of identity on organization efficiency. *Actual Problems of Economics*, iss. 137, pp. 515-521.

Young-Hun, K. (2014). A study on the factor of competitive about the competitive advantage of SMEs. *Journal of the Korean Entrepreneurship Society*, vol. 9, iss.1, pp. 15-38.

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### 62. THE METHODOLOGY OF RISK ASSESSMENT IN THE PLANNING OF CONSTRUCTION PROJECTS

**Abstract:** Any investment project bears some burden of risk. An investor who plans to carry out a building investment must be aware of the hazards that can be encountered while pursuing the project. Risk analysis can be supported by multi-criteria methods, which allow the user to assess the risk level while taking into account various risk-affecting factors. The aim of this article is to present and compare methods for estimating the level of risk. The article shows an example of risk assessment using methods Preliminary Hazard Assessment, Hazard Matrix and the method not used to this type of calculation Indicator method. Conducted in Article calculations show the possibility of using methods from the group of multi-criteria analysis and the results show the usefulness of the methodology developed by the author. This analysis involves a construction development designed for the tourism business. This is an interesting example due to the specific nature of the object and its location. The calculations take into account the difficult implementation conditions and the results show what you should pay attention to when planning investment.

Keywords: construction activities, management, risk estimation

JEL Classification: L7

### 1. Introduction

Investment undertakings in the construction business represent a wide range of activities: from developing the concept of a construction to the moment when it is made available to the end-user. The process manager is responsible for elaborating the concept, making a costs breakdown, hiring designers and developers, finding suppliers, supervising the construction works and, finally, handing over the building to the user. All these activities are extremely varied in character and they all involve a great number of people participating in the building process. On each occasion, the process of completing a new construction project is unique and irreproducible (Kapliński, 2013). These two characteristics mean that investments in the building industry are loaded with much higher risk than projects undertaken in other areas of business activity (Skorupka, 2008). The hazards possibly encountered during a building development project can be broadly divided into two groups: internal and external ones. The former group comprises all events and process occurring within a building company and are directly linked to this company's activity (Szafranko, 2001). Internal risk can be further subdivided into:

- local risk, comprising factors directly connected with a given development project, carried out at a specific construction site. These are the conditions created at the building site, the labour force (qualifications) and machines (reliability), dedication to completing the tasks, technologies and materials used (quality), contracted companies (reliability) hired for certain parts of the project.
- global risk, depending on the events arising from the construction and design solutions in line with the art of building and depending on the construction site. The global risk is also affected by the stipulations of the contracts drawn to complete the construction project, the legal environment, management systems, both within the building company and the ones created for the sake of a current development. The level of global risk is also affected by the contractors, the timely completion of construction works, and the sound financial standing of the prime contractor, subcontractors and the investor.

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External risk is inherent to any activity people undertake. However, the extent to which it affects investors engaged in various types of business activity will vary. The level of external risk depends on the geopolitical and economic circumstances, the climate and the country's economic stability. They are the factors that we cannot change but of which we should be aware. Construction projects are particularly sensitive to all types of hazards, mostly because they depend on many branches of the economy (transportation, power industry, chemical industry), but also because most of the investment process is executed outdoors (Zavadskas et al., 2010; Qadir et al., 2015).

### 2. Risk management

It seems pointless to explain why risk must be controlled and managed. Most investors prefer a situation where the potential hazards have been diagnosed and accounted for in a planned investment. Hence, attempts have long been made to foresee scenarios that raise the level of risk. Depending on the type of risk, there are various ways of controlling threats and lowering the risk. Among the events which affect the risk level, some appear more frequently and others which are rarer; some have graver consequences and some are less dangerous. Finally, there are such hazards that are easier to control or eliminate and there are ones which are unpredictable and whose strength cannot be reduced (Kuchta, Skorupka, 2012). Over the many years of research, different risk management strategies have been developed, depending on the specific nature of investment projects and the category of hazards involved. Literature provides numerous methods applicable to controlling the risk level or diminishing adverse consequences of risk situations. But whichever method is proposed, the most essential step is to identify the event which raises the risk level and to determine the degree to which that event will influence the undertaken project (Dziadosz et al., 2015).

Prior to the commencement of any building investment project it is therefore necessary to investigate thoroughly all the circumstances affecting its performance in order to identify all possible factors that may threaten its successful execution. Such analysis ought to include the investor's experience to date, gained from similar projects or projects performed in similar conditions executed previously. The subsequent step will be to select a method for assessment of the risk level inherent to the current project (Tervonen et al., 2015; Akintoye, MacLeod, 1997).

### 3. Methods for risk level assessment

Methods applied to analyzing risk are broadly discussed in literature (Słomka, 2005; Szafranko 2014). Most of them rely on qualitative assessment of both the extent of damage and the consequences of negative scenarios. The assessment is based on matrices, from which an analyst can read values of the relevant parameters, estimated on a previously adopted descriptive scale. In a risk analysis conducted according to the Preliminary Hazard Assessment (PHA), the graveness of a potential hazard is evaluated by evaluating the severity of damage (S) and the probability at which the damage may occur (P) (table 1). The evaluation of a hazard is expressed with the hazard index (H<sub>I</sub>), which is defined by the equation:

$$H_{I} = S * P \tag{1}$$

where: S - severity of damage, P - probability of the occurrence of a given hazard

Table 1. Assessment of the severity of a damaging effect caused by a hazard (S) and the probability of the occurrence of the damage caused by the hazard (P)

Level	Description of the severity of damage S	Description of the probability of the damaging event P
1	Light injuries. Light damage	Highly unlikely
2	Minor injuries. Measurable damage	Unlikely, happens once (a few times) every 10 years
3	Major injuries. Considerable damage	Sporadic events, happen once (a few times) a year
4	Single fatal accidents. Large-scale damage	Quite frequent events, happen once (a few times) a month
5	Multiple fatal accidents. Very large-scale damage at the plant's premises.	Frequent and regular events, happen once (and even more often) a month
6	Mass fatal accidents. Very large-scale damage outside the plant's premises.	Highly likely (may happen even every day)

Source: Słomka, 2005; Szafranko, 2014

Having assessed the parameters, the risk is evaluated according to a hazard matrix (Table 2).

Table 2. Hazard matrix

			P – probability					
)t	Level	1	2	3	4	5	6	
<u> </u>	1	1	2	3	4	5	6	
erity 1age	2	2	4	6	8	10	12	
seve	3	3	6	9	12	15	18	
- ع ا	4	4	8	12	16	20	24	
SO.	5	5	10	15	20	25	30	
	6	6	12	18	24	30	36	

Source: Słomka, 2005; Szafranko, 2014

The hazard is evaluated on three levels:

1-3 – acceptable hazard, 4-9 – allowable hazard after the risk assessment,

10 – 25 (36) – unacceptable hazard – the risk level must be lowered.

Another method often used in risk analysis is the Hazard Matrix. It is also a matrix-based method, designed to perform a descriptive analysis of adverse scenarios, but without determination of values of parameters. The characteristics of consequences are presented in Table 3, while Table 4 describes the probability of occurrence of the scenarios.

Table 3. Estimation of the severity of consequences

Consequences	Descriptive characteristics
	Events of low severity, causing small delays and damage up to 10% of the value,
Low severity	e.g. damage to building materials, breakdown of a machine, unfavorable weather
	conditions, etc.
	Events of more severe consequences, lasting longer or repeated, causing delays and
Medium severity	damage between 10-50% of the value, e.g. damage of a whole load of materials, a
Medium severity	breakdown of a machine causing a long stoppage or a need to replace the machine,
	unfavorable weather conditions lasting for more than a month, etc.
	Events of high severity, persistent or repeated, causing the stoppage of construction
High severity	works and damage above 50% of the value, e.g. damage of construction elements
	or materials, a construction catastrophy, natural disasters, etc.

Source: Słomka, 2005; Szafranko, 2014

Table 4. Estimation of the probability of consequences

Probability	Descriptive characteristics
Quite improbable	Consequences of the hazards which should not occur during the whole professional career of a worker. They should not occur during the whole active life of a
Improvavic	contractor's and investor's company.
	Consequences of the hazards which may occur no more than a few times during the
Probable	whole professional career of a worker. They may occur no more than a few times
	during the whole active life of a contractor's and investor's company.
Highly probable	Consequences of the hazards which may occur many times during the whole
Ingmy probable	professional career of a worker. They are frequent in building practice.

Source: Słomka, 2005; Szafranko, 2014

Once the parameters are assessed, the risk is evaluated according to a hazard matrix on a three-grade (Table 5) or five-grade scale.

Table 5. Evaluating the risk on a three-grade scale

Probability	Severity of consequences					
	Low		Medium		High	
Low	Low	1	Low	1	Medium	2
Medium	Low	1	Medium	2	High	3
High	Medium	2	High	3	High	3

Source: Słomka, 2005; Szafranko, 2014

The norm recommends certain measures to prevent the risk from occurring, depending on the achieved value. It is suggested that the results of an assessment should be accompanied by the recommendations which lower the risk level.

Indicator method. An approach which can be proposed as an alternative solution to hazard assessment is the multi-criteria analysis method. It allows the user to take into consideration various factors which influence the final outcome of a planned investment (Szafranko, 2015; Linkov, 2016). One specific characteristic of the multi-criteria analysis method is that it can take into account negative effects of given factors on the execution of the investment, both locally (i.e. at a construction site) and more globally (e.g. the surroundings of the building site).

The indicator method uses matrices (constructed in the form of tables), in which individual events connected with the construction project are described, and each subsequent factor is assigned a weight that signifies its importance. The tables may contain a comparison of several investments, which can help an investor choose which contract to sign (the one where the risk level is lower). Table 6 illustrates the principle for constructing a matrix.

Table 6. The matrix for indicator method

No	Analyzed factor		Object	1	(	Object 1	2	(	Object	3	Weight of the factor
1	A1	P <sub>11</sub>	Q <sub>11</sub>	R <sub>11</sub>	P <sub>12</sub>	Q <sub>12</sub>	R <sub>12</sub>	P <sub>13</sub>	Q <sub>13</sub>	R <sub>13</sub>	$W_1$
2	A2	P <sub>21</sub>	Q <sub>21</sub>	R <sub>21</sub>	P <sub>22</sub>	Q <sub>22</sub>	R <sub>22</sub>	P <sub>23</sub>	Q <sub>23</sub>	R <sub>23</sub>	W <sub>2</sub>

Source: Szafranko, 2015

The number in the upper, left-hand corner of each cell denotes the direct effect, while the one in the lower, right-hand corner signifies an indirect effect of a given factor on the investment. In the middle of a cell, there is the sum of effects multiplied by the weight. The sum of individual consequences yields an assessment of the influence of a given factor on the general level of risk associated with the completion of the analyzed investment (Szafranko, 2015).

The partial evaluation of the risk for i<sup>th</sup> factor of j<sup>th</sup> event:

$$Q_{ij} = (P_{ij} + R_{ij}) * W_{I}$$
 (2)

where:  $P_{ij}$  - direct effect of i factor connected with j event

 $R_{ij}$  - indirect effect of *i* factor connected with *j*  $W_i$  - weight of the analyzed factor (Szafranko, 2015).

# 4. Identification and assessment of investment hazards

In this case study, an investor is planning to build a holiday resort on a lake shore, near a highly valuable, protected nature area. The chosen site lies in a very attractive landscape and offers many opportunities to pursue a wide range of activities by tourists and holidaymakers. An analysis of similar investment projects has generated the following observations:

- 1. When a holiday resort is to be created in an exceptionally attractive location, it is likely to cause protests on behalf of groups engaged in nature conservation. The investor has learnt from his own experience that such a reaction is possible. He has previously built similar developments and has been challenged by protesters. The consequences were delays of construction works and measurable losses. The description of the risk – three out of the ten examined cases involved social protests. It was necessary to run an information campaign to explain that the planned development would not harm the natural environment but could bring profits to the local community (risk of social protests).
- 2. When planning to construct buildings on a lakeshore in a forest, it is necessary to explore well the surroundings. The soil conditions, if not recognized thoroughly (and especially when they are unsuitable for building), may lead to serious complications, including a construction catastrophy. In his ten-year practice as a developer, the investor has been faced with such a situation once. In two other cases, problems appeared during construction works due to the difficult and erroneously assessed soil and water conditions. The consequence was delays and changes in the design (risk of bad soil conditions).

- 3. The planned resort lies far from public roads and the passage of heavy vehicles through forest and field dirt roads will be extremely difficult. An analysis of similar cases showed that this was a cause of delays and damage of transported materials. Also, lorries used for transport are damaged. Such problems occurred at least once a month and caused measurable losses. Due to the location of the building sites, the problem of transporting supplies was raised in all the analyzed cases (risk of delayed and damaged supplies)
- 4. Changes in the scope of works, due to mistakes in the design or misunderstandings between the designer and investor, are commonplace. In seven out of the ten analyzed cases, there were such alterations, which led to delays. In most cases, the investor had to go through the red tape to make such changes legal. This happened 3 times a year but did not cause any serious complications (risk of changes in the design).

# 4.1. Calculation of the risk level with the Preliminary Hazard Assessment (PHA) method.

The Hazard Index is derived from formula (1), for which we determine S – the severity of damage, based on Table 1, and P – the probability of the occurrence of damage due to a hazard, and the Hazard Index  $H_I$  – from Table 2.

The results presented in Table 7 enable us to analyze the hazards which occurred when similar investments were executed. For the events which were more likely to appear, the hazard index is higher. This is a warning signal for the investor and contractors that they should constantly monitor the level of risk caused by event number 3.

Table 7. Specification of the calculations performed with the PHA method

Example	severity of damage S	probability <i>P</i>	Hazard Index $H_I$
1	2	3	6
2	3	2	6
3	2	4	8
4	1	3	3

Source: Own work

# 4.2. Risk assessment – the Risk Matrix method according to PN-N-18002.

The procedure was applied to the cases described above. The method relies on a descriptive analysis and evaluation of certain events, presented in Tables 3-6. Table 8 contains the risk assessment results and some prophylactic measures.

Table 8. Risk assessment according to the Risk Matrix method

Example	Severity of consequences	Probability of consequences	Level of risk (Tables 5)	Preventing measures
1	low severity – small delays	probable – has happened several times over the past 3 years	Low (1) acceptable	A campaign to make the community aware of benefits derived from the project. Dispelling worries about the adverse impact on nature
2	high severity – a building catastrophy	quite improbable – one such case over the past 10 years	high (3) unacceptable	Recommendation to make early and complex examination of the soil conditions at a site chosen for the construction.
3	medium severity – damage of transport vehicle/load	highly probable – happens as often as several times a month	high (3) unacceptable	Prepare transportation routes, repair road surfaces, choose lighter vehicles for transport
4	low severity	probable – has happened a few times a year previously	Low (1) acceptable	While developing the design, maintain constant contact and run consultations between the investor and designers

Source: Own work

# 4.3. Analysis performed according to the proposed indicator method

This approach to the analyzed risk level is slightly different. First, we need to estimate the importance (weight) of individual factors that can cause danger. They are determined on a scale from 0 to 9, and the sum equal to 100% is 1. The second step is to assess the potential impact on the immediate and further surroundings in which a hazardous event might occur. An important characteristic of this method is that it enables one to assess negative effects of the analyzed factors. Regarding hazards, each hazardous event has a potential, negative effect on the planned investment. The assessment was made on a scale from -5 to 5. The calculations are contained in Table 9.

Table 9. The calculations with the multi-criteria method

No	Analyzed factor	Analyzed investment			Weight of the factor
1	1	-2	-0.5	-3	0.1
2	2	-5	-3.2	-3	0.4
3	3	-3	-1.8	-3	0.3
4	4	-2	-0.6	-1	0.2
	Total		-6.1		

Source: Own work

The results found in table 9 suggest that the gravest threat to the investment may be posed by the difficult and incompletely investigated ground conditions.

# 5. Analysis and discussion of the results

All the calculations and estimations, carried out with the three methods, are set in Table 10. The results obtained with the first method suggest that the gravest threat stems from the difficulty in assuring timely supplies. In this case, the high risk level is mostly due to the high likelihood and frequency of the occurrence of a problem. The second method implicates that factors 2 and 3 pose the highest risk. The second factor – the hazard due to poor soil conditions – scored high because of the extreme severity of the problem if it should occur. This method, based on descriptive analysis, allows the user to obtain a detailed description of the hazards and recommendations on how to avoid them and lower the risk.

Table 10. Comparison of the results yielded by the three methods

No	Type of hazards	Result of the Preliminary Hazard Assessment PHA method -Level of risk	Results of the Matrix method (descriptive)	Results of the indicator method
1	Risk of social protests	6 – acceptable after assessment	Low(1) acceptable	-0.5
2	Risk of bad soil conditions	6 – acceptable after assessment	High (3) unacceptable	-3.2
3	Risk of delayed and damaged deliveries	8- acceptable after assessment	High (3) unacceptable	-1.8
4	Risk of changes in the design	2 – acceptable	Low(1) acceptable	-0.6

Source: Own work

The third method comprises an analysis that accounts for negative effects of the analyzed events. The results produced with this method implicate that the most dangerous threat to the planned investment arises from the second factor. As previously, this outcome is due to the high score assigned to this factor both in terms of direct and indirect effects.

The graphic representation of the results obtained with the two former methods (Figure 1) shows that the risk to the investment posed by the first and fourth factor is lower than that caused by the second and third groups of hazards. This can be read from the position of the circles corresponding to the factors.

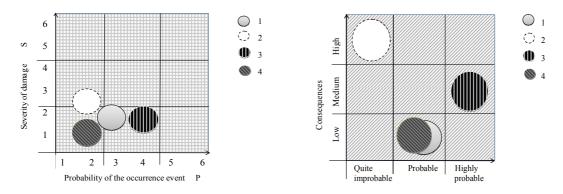
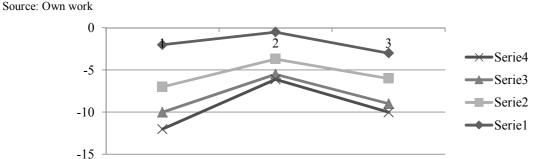


Figure 1. Graphic representation of the results of risk assessment achieved according to the PHA and Matrix-Descriptive methods



 $Figure\ 2.\ Graphic\ representation\ of\ the\ results\ of\ risk\ assessment\ achieved\ with\ the\ indicator\ method$ 

Source: Own work

The graphic representation of the results yielded with the third method shows an accumulated impact of the effects, including weights of the analyzed factors. The distance between the line representing factors 2 and 3 indicates the highest total risk to the investment.

# 6. Conclusions

An adequate appraisal of the risk associated with the execution of construction development projects is an extremely important component of risk management systems. The whole procedure is based on the identification of factors which pose a threat to an investment project and their subsequent evaluation. The examples discussed in this article illustrate how we can apply the principal methods for risk assessment recommended by legal regulations (norms like PN-N-18002) and literature. The first method is the simplest to use, but the results are more like approximations. The second method, based on matrices and descriptions, is more exact but must be preceded by a detailed analysis of the researched scenarios and involves a specific description of the severity of hazards and probability of their occurrence. The indicator method, which is a multi-criteria analysis, offers other options, for example negative effects of events can be accounted for. An application of this method also allows for a simultaneous evaluation and comparison of several investment projects, which may help contractors to choose a project loaded with a lesser risk.

## References

Akintoye A. S., MacLeod M. J. (1997). Risk analysis and management in construction, *International Journal of Project Management*, vol. 15, iss. 1, pp. 31-38.

Dziadosz A., Tomczyk A., Kapliński O. (2015). Financial risk estimation in construction contracts, *Procedia Engineering*, vol. 122, pp. 120-128.

Kapliński O. (2013). Risk Management of Construction Works by Means of the Utility Theory: a Case Study. *Procedia Engineering*, vol. 57, pp. 533-539.

Kuchta D., Skorupka D. (2012). Project risk management taking into consideration the influence of various risk levels based on linguistic approach. In: *World Scientific Proc. Series on Computer Engineering and Information Science* 7; Uncertainty

Modeling in Knowledge Engineering and Decision Making - Proceedings of the 10th International FLINS Conf 7, pp. 1093-1098.

Skorupka D. (2008). Identification and initial risk assessment of construction projects in Poland, *Journal of Management in Engineering*, vol. 24, iss. 3, pp. 120-127.

Słomka A. (2005), *Ryzyko zawodowe w budownictwie*. Państwowa Inspekcja Pracy, Główny Inspektorat Pracy, Warszawa, 2005.

Szafranko, E. (2001). Risk management decision in the construction industry. In: *International Conference: Modern building materials, structures and techniques, Vilnius* '2001, Conference Proceedings, pp. 175-177.

Szafranko E. (2014). Analiza porównawcza metod szacowania poziomu ryzyka w budownictwie, *Logistyka*, vol. 5, pp. 1498- 1507.

Szafranko, E. (2015). Applicability of the indicator method to evaluation of road building projects. *News in Engineering*, vol.1, pp. 1-7.

Zavadskas E.K., Turskis Z., Tamošaitiene J. (2010). Risk assessment of construction projects, *Journal of Civil Engineering and Management*, vol. 16, iss. 1, pp. 33-46.

Linkov, I., Satterstrom, F. K., Kiker, G., Batchelor, C., Bridges, T., Ferguson, E. (2006). From comparative risk assessment to multi-criteria decision analysis and adaptive management: Recent developments and applications. *Environment International*, vol. 32(8), pp.1072-1093.

Qadir, M., Mateo-Sagasta, J., Jiménez, B., Siebe, C., Siemens, J., Hanjra, M. A. (2015). Environmental risks and cost-effective risk management in wastewater use systems. In: Wastewater. London. Springer, 2015.

Tervonen, T., Naci, H., van Valkenhoef, G., Ades, A. E., Angelis, A., Hillege, H. L., Postmus, D. (2015). Applying Multiple Criteria Decision Analysis to Comparative Benefit-Risk Assessment Choosing among Statins in Primary Prevention. *Medical Decision Making*, vol. 35, iss.7, pp. 859-871.

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# 63. NEW VENTURE CREATION AND THE SOCIAL NETWORKS OF THE ENTREPRENEUR

**Abstract:** Since the beginning of the 21st century researchers have shown a great interest in the problem of personal networks in enterprise management and specifically the problem of personal networks of the entrepreneur. On the basis of the theory of organization and management, the problem of network connections can be regarded at the level of clusters of enterprises, at the level of relationships between people in the specific group or the organizational unit and at the personal level. In the latter context, at the personal level, the subject to the analysis is the specific person and relationships linking them to the surrounding world. In the case of the entrepreneur, entrepreneur personal network or entrepreneurial network can be discussed. The aim of the paper is to present the role of entrepreneurial networks in the process of setting a new business activity. The object of the research is small enterprises operating in Poland. 129 randomly selected enterprises took part in the survey. The study was conducted using the author's own research tool – the questionnaire.

Keywords: social network, entrepreneurship, small business, positive organization scholarship

**JEL Classification:** L26

# 1. Introduction

Since the beginning of the 21st century researchers have shown a great interest in the problem of personal networks in enterprise management and specifically the problem of personal networks of the entrepreneur. On the basis of the theory of organization and management, the problem of network connections can be regarded at the level of clusters of enterprises, at the level of relationships between people in the specific group or the organizational unit and at the personal level. In the latter context, at the personal level, the subject to the analysis is the specific person and relationships linking them to the surrounding world. In the case of the entrepreneur, entrepreneur personal network or entrepreneurial network can be discussed. A personal network can be defined as a set of direct and indirect relationships between the entrepreneur and different persons in his or her socioeconomic and family environment, providing various types of exchange. Personal networks of the entrepreneur generate different effects, exerting positive impact on the functioning of the enterprise at different stages of its lifecycle or at different stages of entrepreneurial process. Their significance is also crucial for a nascent entrepreneur, who aims at starting a new business venture. The present paper is entirely devoted to this particular kind of influence. The aim of the paper is to present the role of entrepreneurial networks in the process of setting a business activity – establishing a new venture.

# 2. Theoretical background

The entrepreneur, when seeking to achieve own personal and career goals, is in permanent interaction with the environment. Therefore, the entrepreneur cannot be treated in isolation from others. Daily, the entrepreneur contacts his or her family members, friends, employees, business partners, advisers, etc. These persons form the entrepreneur's personal network, which is considered to be one of the most important sources for the entrepreneur's firm (Bratkovic et al., 2009). Recent entrepreneurship literature has changed from viewing entrepreneurs as autonomous and rational decision makers toward viewing entrepreneurs as embedded in social networks (Aldrich, Zimmer, 1986; Hoang, Antoncic, 2003; O'Donnell, 2001). The role of networks in the activities of individuals and organizations has its

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foundation in the idea of embeddedness (Granovetter, 1992). Social networks have the ability to facilitate or constrain the activities of persons who are embedded in the network. As Klyver and Schøtt (2011) state, entrepreneurship research shows that social networks, among others, affect opportunity recognition (Singh, 2000), entrepreneurial orientation (Ripolles, Blesa, 2005) the vocational decision to become an entrepreneur (Davidsson, Honig, 2003) and growth (Lee, Tsang, 2001).

Network theory has been included in the study of entrepreneurship, and it contends that interdependent relationships, comprising proactive social actors, are the appropriate organizational system for the entrepreneurial process (Jackson, Oliver, 2003). In the area of entrepreneurship, social network analysis turns attention to relationships between entrepreneurs and others that provide the resources that are important in establishing new businesses (Johannisson, 1988; Larson, 1991). Network perspective can be important for entrepreneurs (individual level) and their firms (organizational level) (Antoncic 1999; Hoang, Antoncic 2003; Ruzzier, Antoncic 2007).

Social networks consist of persons with whom an entrepreneur has direct relations (Dubini, Aldrich 1991), and who are considered to be more than the sum of individual connections that form the network (Aldrich, Zimmer 1986). The concept of social networks is a complex, multi-faceted phenomenon. It has been described and operationalized in many different ways but a useful approach is to view social networks as consisting of three key dimensions: structural, relational (Granovetter, 1992) and cognitive (Nahapiet, Ghoshal, 1998). Each dimension itself is a composite of many variables. The structural dimension focuses on the overall pattern of connections between actors, e.g. presence or absence of tie, network configuration, and morphology (e.g. size, density, connectivity or hierarchy). The relational dimension focuses on the kinds of relationships people have developed with each other through a history of interaction. The cognitive dimension focuses on shared representations, interpretations and system of meaning among actors within the network (Klyver, Hindle, 2006).

Different sub-networks can represent the overall social network based on the content of ties (Brass 1992). According to Witt et al. (2008), the term 'entrepreneurial network' refers to the personal network of information contacts and exchange relationships that the entrepreneur can utilize for the purpose of creating and nurturing the business. Entrepreneurial networking can be described as an active process of establishing and sustaining mutually rewarding and cooperative relationships with other persons or businesses that offer important support for the development and growth of an entrepreneurial venture.

Entrepreneurs possess some ideas, knowledge and competence to run the business, but additionally they always need complementary resources to produce and deliver their goods or services (Teece, 1987). Entrepreneurs require information, capital, skills, and labor to start new business ventures. They obtain support, knowledge, and access to distribution channels through their social networks.

Entrepreneurs are also linked to people and organizations that interact among themselves, and these contacts can widen the availability of resources that sustain a new business (Hansen, 1995). While they hold some of the necessary resources themselves, they often complement their resources by accessing their contacts (Aldrich, Zimmer, 1986; Aldrich et al., 1991; Cooper et al., 1995; Hansen, 1995). The contacts that lead to successful outcomes are their social capital and they are a key component of entrepreneurial networks (Burt, 1992).

Also new organizations are seen as socially constructed (Granovetter, 1992); they result from the actions of entrepreneurs who are themselves embedded in continuing networks of personal relationships. Relationships between entrepreneurs and their network members, and among the entrepreneurs' network members themselves can be described as social structures. Their interactions can be described as social processes (Hansen, 1995). Additionally, taking into consideration the exploitation of networks described above, one may state that to establish a firm, potential entrepreneurs look for relations on the basis of common interest or experience in establishing and running a business (Nohria, 1992). Discussing their new enterprise with a number of persons gives them leads to where to obtain resources. Among the most important resources that networks can provide are: information, access to finance, access to skills, knowledge and advice and social legitimacy (Burt, 1992; Christensen, Klyver, 2006; Shane, Cable, 2002). Once they start preparing for the new venture and acquiring information, new skills, resources, and business relations, entrepreneurs need to mobilize a larger social network. During the enterprise planning phase, entrepreneurs may not know who can help them; they contact a large set of people that they may need in the future. Most of this network is likely to figure in the establishment phase (Greve, Salaf, 2003). In this context it is

important to state that entrepreneurs use their social capital to access resources in each phase of the firm establishment process. Social relations play an important role in establishing a firm as they provide entrepreneurs with a wide range of valuable resources not already in their possession and help them achieve their goals (e.g. Hansen, 1995; Jenssen, 2001; Jensen, Greve, 2002; Jenssen, Koenig, 2002; Singh, 2000; Kuraś 2014).

In the light of the above facts and the significance of social networks for running business, recognized in literature, it becomes justified to recognize the impact of the social network of the entrepreneur on starting a business activity and also the indication of the members of the network (sub-networks), whose impact is the most important for the decision of a nascent entrepreneur to start a business.

## 3. Materials and methods

The research, whose results have been depicted in the present paper, was based on the method of conducting empirical studies by means of managerial perception (Miller, Friesen, 1978), in which data are obtained using the questionnaire. The conducted research is exploratory in nature, directed to the identification of the impact of social networks of Polish entrepreneurs on starting a business activity and indication of the most important sub-networks, particularly affecting the establishment of new ventures.

The respondents of the research were the owners-managers of the analyzed enterprises. The research tool was spread among the randomly selected organizations – due to easy access – from the areas of the provinces: Kuyavia-Pomerania, Lublin, Łódź, Mazovia, Podlachia, Silesia and Holy Cross. In May 2015 143 copies of the completed questionnaires were received, out of which 14 were rejected due to incomplete data. In these circumstances, the research sample amounted to 129 small enterprises.

The majority are the companies running their business activity in cities. These enterprises amount to 84.5%, whereas the companies operating in the country constitute 15.5%. The enterprise operating on the market for the shortest period of time is eight months old. The oldest one has been operating on the market for 26 years. The enterprises under consideration are both the companies characterized by self-employment, the ones not employing workers and the ones employing even 46 people. On average, the level of employment in the analyzed companies amounts to 4 employees (an entrepreneur + 4 employees).

For most of the surveyed companies, the basic activity is production (30.2%). The activity associated with trade was identified as the domain of 33.3% of the surveyed companies. In the sector of services there operate 24% of the surveyed entities. The other 12.5% of the companies run their business activity in the field of the following sectors: construction, hotels and restaurants, transport, storage and communication, education and agriculture, hunting and forestry.

The vast majority and simultaneously nearly half of the entrepreneurs declared their age range as 36-45 (46.5%). The people aged 46-55 amount to 20.9% of those questioned whereas the people aged 26-36 amount to 15.5%. The people aged 56 and more as well as the ones aged 25 and less respectively amount to 14% and 3.1%.

## 4. Empirical findings

For the analyzed enterprises, there were identified the groups of members of individual sub-networks of entrepreneur personal networks and there was analyzed their impact on starting a business activity conducted by them.

The respondents were requested to respond to the question concerning to what extent individual groups of people affected starting the business activity currently conducted by them. The question set in the questionnaire was the following: *Please, indicate to what extent the specific group affected starting your business activity.* The responses were given on the seven-point Likert scale (1-none, 2-small, 3-rather small, 4-average, 5-rather big, 6-big, 7-very big). The response - 0-does not apply – indicating no interaction with people belonging to such a group, was also possible. It was identified as the contrast to the response "1", indicating the existence of interactions with the members of such a sub-network, however, simultaneously, to show the lack of their impact on starting a business activity. The applied coding is adequate to the adopted identification codes of the impact of social networks (Impact ID). The research results for individual groups – members of individual sub-networks are presented in Table 1. The sub-networks are coded with A to M marking.

Table 1. The overall (average) impact of entrepreneur's social networks members on the establishment of new business ventures

Sub-network ID	Sub-network	Impact on establishing new businesses	Rank
A	Spouse or partner	5.02	1
В	Parents	3.43	5
С	Other family members and relatives	3.14	7
D	Friends	3.84	2
Е	Acquaintances from former school, courses, present and former place of residence	2.58	13
F	Customers,	3.53	4
G	Suppliers, service providers	2.96	10
Н	Acquaintances - entrepreneurs, owners and people related to other companies that are not competitors	3.31	6
I	Acquaintances - entrepreneurs, owners and people related to other companies being competitors	3.09	8
J	Acquaintances connected with administration, authorities and public sector etc.	2.78	12
K	Acquaintances connected with business support organizations (investors, consultants, bankers, accountants, lawyers etc.)	2.95	11
L	Former co-workers (colleagues), former boss, current co- workers (colleagues), current boss (in the case of simultaneous employment and running a business activity)	3.02	9
M	Acquaintances having significant experience in starting new businesses and running a business activity, scientists, inventors	3.60	3

Source: Own work

Generally, it should be concluded that life partners had the largest impact on starting a business activity by entrepreneurs subjected to the research. This impact was specified as rather big (scale mean: 5.02). The second position is occupied by the sub-network consisting of the entrepreneur's friends. However, the influence of these people is significantly smaller and can be specified as average (scale mean: 3.82). The third important sub-network is the group consisting of acquaintances possessing significant experience in staring new businesses and running a business activity as well as scientists and inventors. The impact of these people can also be defined as average, though closer to small (scale mean: 3.60). The significant contribution of partners to the decision on starting a new business can be considered as natural, resulting from closeness, common expectations and plans. Friends are also the people with whom close relationship is maintained, and also there are a lot of discussions and interactions, in which there may appear the issue of running a business activity, whereas people with big experience seem to be a valuable source of information and knowledge concerning running a business activity. They may transfer their experiences and knowledge essential for conducting a business. Moreover, if they have significant experience it is probable that they are simultaneously successful people whose suggestions as for starting a business activity may be considered as crucial.

While analyzing the impact of entrepreneur network on starting a business activity, it is worth paying attention to the cumulated data, concerning the general perception of the influence of entrepreneur personal network. The general impact of social networks of entrepreneurs on starting a business activity is presented in Table 2.

Table 2. The total impact of entrepreneurial networks on the establishment of new business ventures

Impact ID	Description of the impact of social networks	% of the answers
1	none	32
2	small	9
3	rather small	8
4	average	14
5	rather big	13
6	big	13
7	very big	8
0	n/a	2%

Source: Own work

The average results of the respondents' replies indicate that only in 32% of the indications, social networks had no impact on starting a business activity. As much as in 66% of the cases these networks had influence, although it should be emphasized that it was at different levels (ranging from small to very big).

## 5. Conclusions

The main conclusions coming from the study constitute both the contribution to the development of management discipline and some practical guidelines for future entrepreneurs since it should be underlined that the recognition of sub-networks which most significantly affect the beginning of a new business activity may direct nascent entrepreneurs towards maintaining contacts and holding discussions concerning topic related to business.

As for decades, sociologists have been interested in how people's social networks influence their status attainment (Granovetter, 1973), this study proves that social networks (entrepreneur personal networks) influence the process of establishing new businesses. Both literature studies and empirical evidence confirm that such networks are of crucial importance for the new venture creation process. According to the study, the most important groups of persons having impact on establishing new ventures are: (1) spouse, (2) friends and (3) acquaintances having significant experience in starting new businesses and running a business activity as well as scientists and inventors.

Cooperation in networks is of key importance, especially for small and medium enterprises in Poland (Ziółkowska, 2010; Kościelniak et al., 2015). It is also clear that networks within the start-up business are extremely important, if not the most important factor in sustaining an entrepreneurial venture (Maniukiewicz et al., 1999). Networks also constitute an important factor having influence on the activation of the start-up phase – the activation of the new venture establishing process. It is also possible to state that the entrepreneur's personal success and the success (Lemańska-Majdzik, Tomski, 2013; Okręglicka 2015) of their firms are often attributed to personal relationships or social networks.

Through their personal network, the entrepreneur has access to many valuable resources, information, advice and emotional support. In the light of the present study it is necessary to pinpoint the importance of the spouse. Also, according to the literature, particularly the entrepreneur's relatives are considered to be the most trustworthy network members (Bratkovic et al., 2009), which has been confirmed by the present study. Especially, the crucial role of the spouse is to be pinpointed as the spouse is the most important person as far as the impact on the decision of starting a new business venture is concerned. Family involvement in a firm has a strong influence on the firm's performance, organizational behavior and culture (Cromie, O'Sullivan, 1999; Sipa 2015; Lemańska-Majdzik 2014). Hall (1992) affirms that through their spouse the entrepreneur can expand his or her personal and business contacts, and therefore has access to a greater amount of information. Quite obviously, having family members in the personal network brings some advantages to the entrepreneur and his or her firm.

This is also consistent with the concept of Rosenblatt et al. (1985), that to fit their enterprise needs, entrepreneurs bring both those that are closer and distant to them into their business decisions. Family members can play a critical part. As they entertain, plan for, and actually set up a firm, entrepreneurs call on their family and others in their networks for different kinds of help and support. Additionally, as Rose (1995) states, relatives play a key role in business life, and therefore are often present in the entrepreneur's personal network. By having family members in the personal network the risk of doing business is reduced, and also the transaction costs are reduced. Further, family members are trustworthy, and they usually share the same culture and ethic at work.

Although the present research partially fills in the gap concerning the lack of studies on the impact of social networks on entrepreneurial intentions and creating new ventures, it does not fully cover the formulated problem since it is necessary to conduct further studies in this area, including, among others, the analysis of the relationship of the characteristics of the entrepreneur and the sector, using social networks.

## References

Aldrich, H., Birley, S., Dubini, P., Greve, A., Johannisson, B., Reese, P.R., Sakano, T. (1991). *The generic entrepreneur? Insights from a multinational research project.* Paper presented at the Babson Conference on Entrepreneurship.

Aldrich, H., Zimmer, C. (1986). Entrepreneurship through social networks. In Sexton, D., Smiler, R., (eds.), *The Art and Science of Entrepreneurship*: New York: Ballinger, pp. 3-23.

Antoncic, B. 1999. Entrepreneurship networks: a review and future research directions. *Slovenian Economic Review*, vol. 50, iss. 3, pp. 195–221.

Araujo, L., Easton, G. (1996). Networks in Socioeconomics Systems. In Iacobucci, D. (eds), *Networks in Marketing*. *Thousand Oaks*: SAGE Publications Ltd, pp. 63-107.

Brass, D.J. (1992). Power in organizations: A social network perspective. *Research in Politics and Society*, vol. 4, pp. 295-323.

Bratkovic, T., Antoncic, B., Ruzzier, M. (2009). The personal network of the owner-manager of a small family firm: The crucial role of the spouse. *Managing Global Transitions*, vol. 7, iss. 2, pp. 171-190.

Burt, R.S. (1992). Structural Holes: The Social Structure of Competition. Cambridge, MA: Harvard University Press, 1992.

Christensen, P.R., Klyver, K. (2006). Management consultancy in small firms – how does interaction work? *Journal of Small Business and Enterprise Development*, vol.13, pp. 299-313.

Cooper, A.C., Folta, T.B., Woo, C. (1995). Entrepreneurial information search. *Journal of Business Venturing*, vol. 10, iss.2, pp. 107-120.

Cromie, S., O'Sullivan, S. (1999). Women as managers in family firms. Women in Management Review, vol.14, iss. 3, pp. 76–88.

Davidsson, P., Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, vol. 18, pp. 301-331.

Dubini, P., Aldrich H. (1991). Personal and extended networks are central to the entrepreneurial process. *Journal of Business Venturing*, vol. 6, iss. 5, pp. 305–313.

Granovetter, M.S. (1973). The strength of weak ties. American Journal of Sociology, vol. 78, pp. 1360-1380.

Granovetter, M.S. (1992). Problems of explanation in economic sociology. In Nohria, N., Eccles, R. G. (eds.), Networks and organizations: Structure, form and action. Boston: Harvard Business School Press, pp. 25-56.

Greve, A., Salaff, J.W. (2003). Social networks and entrepreneurship. *Entrepreneurship theory and practice*, vol. 28, iss. 1, pp. 1-22.

Hall, C. (1992). White, male and middle class. Cambridge and Oxford: Polity, 1992.

Hanneman, R. (2006). Introduction to social network methods. Riverside: University of California, 2006.

Hansen, E.L. (1995). Entrepreneurial network and new organization growth. *Entrepreneurship: Theory & Practice*, vol. 19, iss. 4, pp. 7-19.

Hansen, E.L. (1995). Entrepreneurial networks and new organization growth. *Entrepreneurship: theory and practice*, vol. 19, iss. 4, pp. 7-20.

Hoang, H., Antoncic, B. (2003). Network-based research in entrepreneurship - A critical review. *Journal of Business Venturing*, vol. 18, iss. 2, pp 165-187.

Jackson, J., Oliver, T. (2003). Personal networks theory and the arts: A literature review with special reference to entrepreneurial popular musicians. *Journal of Arts Management, Law, and Society*, vol. 33, iss. 3, pp. 240-256.

Jenssen, J.I. (2001). Social networks, resources and entrepreneurship. *International Journal of Entrepreneurship and Innnovation*, vol. 2, iss. 2, pp. 103-109.

Jenssen, J.I., Greve, A. (2002). Does the degree of redundancy in social networks influence the success of business start-ups? *International Journal of Entrepreneurial Behavior & Research*, vol. 8, iss. 5, pp. 254-267.

Jenssen, J.I., Koenig, H.F. (2002). The effect of social networks on resource access and business start-ups. *European Planning Studies*, vol. 10, iss. 8, pp. 1039-1046.

Johannisson, B. (1988). Business formation: A network approach. *Scandinavian Journal of Management*, vol. 4, iss. 3-4, pp. 83-99.

Klyver, K., Hindle, K. (2006). Do social networks affect entrepreneurship? A test of the fundamental assumption using large sample, longitudinal data. *Australian and New Zealand Academy of Management, Yeppoon, Australia, December*, pp. 6-9.

Klyver, K., Schött, T. (2011). How social network structure shapes entrepreneurial intentions. *Journal of Global Entrepreneurship Research*, vol. 1, iss 1, pp. 3-19.

Kościelniak, H., Puto, A., Łukasik, K., Brendzel-Skowera, K. (2015). Cooperation Networks of Small and Medium Enterprises in Poland, Management, *Enterprise and Benchmarking in the 21th Century*, Obuda University, Budapest 2015, pp. 49-58.

Kuraś, P. (2014). Resources as a Source of Enterprise Competitiveness. In Managing Organizations in Changing Environment. Models - Concepts – Mechanisms, Foundation of the Cracow University of Economics, Kraków, pp. 79-87.

Larson, A. (1991). Partner networks: Leveraging external ties to improve entrepreneurial performance. *Journal of Business Venturing*, vol. 6, iss. 3, pp. 173–188.

Lee, D.Y., Tsang, E.W.K. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. *Journal of Management Studies*, vol. 38, pp. 583-602.

Lemańska-Majdzik A., Tomski P., (2013), O sukcesie przedsiębiorstwa, Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach. Administracja i Zarządzanie, No 98, pp. 203-214.

Lemańska-Majdzik, A. (2014), Firmy rodzinne na rynku nieruchomości – studium przypadku, Przedsiębiorczość i Zarządzanie, vol. 15, iss. 7, part II, pp. 9-19.

Maniukiewicz, C., Williams, S., Keogh, W. (1999). Partnerships and networks: Lessons from facilitating entrepreneurship. *Journal of Small Business and Enterprise Development*, vol. 6, iss. 1, pp. 68-79.

Miller D., Friesen, P.H. (1978). Archetypes of strategy formation. Management Science 24, 1978, pp. 921-933.

Nahapiet, J., Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, vol. 23(2), pp. 242-266

Nohria, N. (1992). Information and search in the creation of new business ventures: The case of the 128 venture group. In Nohria, N., Eccles, R. (eds.), *Networks and Organizations: Structure, Form, and Action*: Harvard Business School Press, Boston: MA, pp. 240-261.

O'Donnell, A., Gilmore, A. et al. (2001). The network construct in entrepreneurship research: A review and critique. Management Decision, vol. 39(9), pp. 749-760.

Okręglicka, M. (2015). Key Factors of Small Business Success: Literature Review. 6th International Conference on Management, Finance & Entrepreneurship (ICMFE-2015), Istanbul, Turkey, pp. 83-89.

Ripolles, M., Blesa, A. (2005). Personal networks as fosterers of entrepreneurial orientation in new ventures. *International Journal of Entrepreneurship and Innovation*, vol. 6, iss.4, pp. 239-248.

Rose, M.B. (ed.) (1995). Family business. Aldershot: Elgar, 1995.

Rosenblatt, P.C., de Mik, L., Anderson, R.M., Johnson, P.A. (1985). *The Family in Business*. San Francisco: Jossey-Bass, 1985.

Ruzzier, M., Antoncic, B. (2007). Social capital and SME internationalization: An empirical examination. *Transformations in Business & Economics*, vol. 6, iss. 1, pp. 122–38.

Shane, S., Cable, D. (2002). Network ties, reputation, and financing of new ventures. *Management Science*, vol. 48, pp. 364-381.

Singh, R.P. (2000). Entrepreneurial opportunity recognition through social networks. London: Garland Publiching, Inc., 2000.

Sipa, M. (2015). Postrzeganie kultury organizacji przez pracowników przedsiębiorstw rodzinnych i nierodzinnych - wybrane aspekty. *Przedsiębiorczość i Zarządzanie*, vol. 6, part 3, no 7, pp. 103-117.

Teece, D.J. (1987). Profiting from technological innovation: Implications for integration, collaboration, licensing, and public policy. In Teece, D.J. (ed.), *The Competitive Challenge*: Cambridge, MA: Ballinger Publishing, pp. 185-219.

Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, vol. 5, pp. 171-180.

Witt, P., Schroeter, A., Merz, C. (2008). Entrepreneurial resource acquisition via personal networks: An empirical study of German start-ups. *The Service Industries Journal*, vol. 28, iss. 7, pp. 953-971.

Ziółkowska, B. (2010). Kreowanie wartości w sieci relacji wirtualnych przedsiębiorstwa. In Barcik, R., Howaniec H. (eds.) *Zarządzanie zasobami organizacji - wybrane problemy*. Bielsko-Biała: Wydawnictwo Naukowe Akademii Techniczno-Humanistycznej w Bielsku-Białej, pp. 33-47.

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# 64. CONSEQUENCES OF LABOUR MIGRATION AND MIGRATION MANAGEMENT FOR EXAMPLE OF SLOVAK REPUBLIC

Abstract: The given study deals with the issue of consequences of labour migration and its management on the side of a country which aims to maximize its benefits and minimize its losses due to labour migration. Based on the statistical data (EUROSTAT, WTO, Statistical Office of the Slovak Republic, Ministry of Labour, Social Affairs and Family of the Slovak Republic and World Bank) on the volume of labour migration and its calculations, the study identifies variables influencing the economy of the source country and provides its model calculation which represents the basis for its migration management. Evaluation is provided from economic, social and demographic point of view. Conclusion of the work proposes a system of suggestions on migration management of the source country which would positively support and minimize negative effects of labour migration.

Keywords: emigration, migration management, labour migration, work force, source country

**JEL Classification:** F22

## 1. Introduction

Due to globalization processes, the issue of labour migration is becoming more and more actual. Its influence can be seen in all spheres of social life of all parties. From the Slovak Republic's point of view, which represents the source country, we may talk about positive consequences such as remittances increasing consumption and savings (Divnský, 2000). Economic activity of a country and its overall development is even increasing due to the multiplier effect. If the unemployment rate of the labour market is high, emigration solves the tension between offers and demands of work force. What it actually means is that the costs on providing for an unemployed person while out of work are decreasing as well as the country's costs related to seeking a new workplace (Adepoju et al., 2010; Kazlauskienė, Rinkevičius, 2006). In case of re-emigration, one is a benefit from the point of view of the increase of work productivity, import of know-how from abroad, business contacts and the technological and information level of economics (innovations) is increasing.

On the other hand, negative effect of labour migration is represented by the loss of highly qualified work force, the so-called brain drain (Kazlauskienė, Rinkevičius, 2006; Daugėlienė, 2007) which produces the highest added value and is a pull factor for foreign investors whose home country loses its attractiveness. Furthermore, the leaving educated work force represents a loss of extensive investments into education. Gaining work experience abroad while working on lower positions than workers' qualification leads to the devaluation of human capital (Vojtovič, 2012). At this point we may talk about loses of world product while comparing the potential added value of a highly qualified workplace in the source country with a low qualified workplace in the target country as well as the country's losses of investment into education (Vojtovič et al., 2015). From the demographic point of view emigration represents a business of the most valued human potential in reproductive years creating the future increase of natural population.

From the sociological point of view, separation from families leads to the increase of numbers of split families, people living double lives, absence of behavioural models of parents and many more (Masárová, 2014; Hančovská, 2014). On the contrary, the social benefit is present in the development of a new culture and habits which are created due to new social bonds and relationships, mixed partnerships, families and friendships. Tolerance is increasing, on the one hand; however, intolerance, discrimination, xenophobia and racism are increasing on the other hand as well.

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Given consequences are introduced on the theoretical level. Professionals, policy makers, state institutions and mass media lack relevant information; more or less it is all about their presumptions and expectations. National statistics in the EU countries do not have common pillars; it is important a common basis be created within the migration management which would make investigation of labour migration from wider perspective possible. This is the only managing labour migration with maximizing its benefits and minimizing its negatives will be made possible.

The given study introduces calculations of migration benefits and losses for the Slovak Republic playing the role of the source country. It works with the data from the database of WTO, World Bank, Eurostat, Statistical Office of the Slovak Republic and Ministry of Labour, Social Affairs and Family of the Slovak Republic. Results may be used as the basis for creating migration politics of the Slovak Republic leading to effective management of labour migration.

The methodology is based on general scientific methods, induction, deduction, scientific abstraction and comparison, analyses of synthesis and analyses whereas mathematical and statistical methods are used in calculations.

# 2. Bases of Evaluation of Consequences of Labour Migration

Enumeration of Slovaks working abroad represents subjective estimations which more or less stand for the real state of labour emigration. Free estimations talk about the interval from 170 thousand to 400 thousand. Official sources have information only about short-term labour migration (up to 12 months) which in 2009 was represented by 130 thousand people and their number was decreasing year by year due to the world recession which influenced every European economy. In 2014 it increased again to the number of 136.2 thousand emigrants. The overall number of Slovak citizens working abroad, legally or illegally, towards the end of 2006 was between 220 thousand and 230 thousand people (Divinský, 2007), whereas by the end of 2008 it was more than 270 thousand people. During the world economic crises these numbers slightly decreased, however, the latest estimations of the Slovak Academy of Sciences say that in 2013 more than 242 thousand Slovaks worked abroad. Rate of working migrants of the overall number of the employed in Slovakia is between 9,4 % and 9,9 %.

# 2.1. Consequences of labour migration for example of Slovak Republic

According to the Statistical Office of the Slovak Republic, in average 15% of people in prereproductive, 83% in reproductive and 2% in post reproductive years migrate for work.

According to the European network of European Services of Employment – EURES – the age range of Slovak migrants varies from 18 to 34.

In terms of sex, a slight increase in behalf of men was statistically significant, range from 35.8% in 2004 to 40.4% in 2008, whereas women still dominate in emigration flows – 64.2% in 2004 and 59.6% in 2008. In 2014 it was still women who prevailed over men. This development is influenced by the demand for some specific workplaces on the labour marked of target countries which are typical for women – for instance, care takers and nurses in Austria, Germany or Great Britain.

Table 1. Losses from labour migration for Slovakia as the source country

	2012	2013	2014
Potential GDP in common prices/created by migrants in million EUR	8347,06	9839,92	9831,90
Potential added value created by migrants in million EUR	3259,40	3886,00	3906,59
Average costs on educating a high-school educated migrant in million EUR	3713,64	-	-
Average costs on educating a university educated migrant in million EUR	1559,38	-	-
Indirect taxes (VAT, consumption taxes) in million EUR potentially paid by migrants	102,11	119,77	123,56
Direct taxes (Income tax of individuals) in million EUR potentially paid by migrants	101,98	123,08	132,31
Potential payments into the social and health insurance agency per all employees in million EUR	147,17	177,81	187,91
Potential payments into the social and health insurance agency for employers in million EUR	386,62	467,09	493,61
Potential consumption of migrants in million EUR	510,54	598,84	617,79
Potential savings of migrants in million EUR	569,64	638,35	

Source: Eurostat, Slovsat, OECD, own calculations

Slovakia's GDP represented 172,592.5 million EUR in 2014, whereas 2390.9 thousand people worked in economy; it means the GDP per one worker reached 72 187.25 EUR.

Calculation of lost GDP which would be produced by emigrants, if they worked at home, would be in the amount of 9831.90 million EUR. In case of calculations of the number of migrants estimated by professionals – 242 thousand Slovaks whereas 83% of them in productive years – lost GDP would represent 14 499.53 million EUR. The produced added value in Slovakia in 2014 was 68 577.63 mill. EUR, while one worker produced added value in the amount o 28 682.77 EUR. The lost added value on migrants within a year would be 3906.59 million EUR (6625.72 million EUR on the estimated number of migrants). We may talk about significant losses of the world GDP when university educated migrants working on places appropriate to their education create a higher added value than the value created abroad on positions which are not adequate for their education. Moreover, length of migration and work on lower qualified work places lead to a bigger devaluation of human capital, investments into education and so on.

In 2009 average costs on a secondary educated person represented 66 751.00 EUR (1 year of preschool education – 4433.00 EUR, 9 years of primary education – 5099.00/lower primary education per year and 4658.00 EUR/higher primary education per year, 4 years of secondary education – 4658.00 EUR per year). Costs on a university educated person represented 93 783.00 EUR (6758.00 EUR per year). While calculating the overall loss on educating migrants it is important to consider the average age of migrants (18 – 35 years of age), costs on education during the years of their studies, division of emigrants according to their education - 61% of high school students and 18% of university students and calculation on emigrants who permanently wish to stay abroad – 40% (University of Exeter and Royal Economic Society, 2003, Slovak Academy of Sciences, 2006). The final loss is then in the amount of approximately 3138 million EUR (2 218.32 million EUR for secondary educated migrants and 919.67 million EUR for university educated migrants). The average salary in 2014 represented 858.00 EUR whereas employees paid taxes in the amount of 13.4% and after the deduction of the deductible item they got the tax base to the calculation of 19 of the income tax.

Payroll taxes for an employee per year and emigrated Slovak citizen working abroad for less than a year in case he/she worked at home make up to 187.91 million EUR and taxes 132.31 million EUR. If we take 242,000 migrants into consideration payments into funds would make up 333.87 million EUR and taxes 23.09 mill EUR.

Expenses of households in 2014 were 377.88 EUR per person and month; if we calculate with migrants, the possible consumption could be 617.79 million EUR per year. If we talk about one family member and year, expenses on alcohol and tobacco would represent 156.00 EUR out of which every consumer has to pay consumption tax; other taxes come from mineral oils and fuel.

If we take 136.2 thousand people working abroad for less than a year into account, national budget loses on taxes at least 123.56 million EUR; in terms of 242 thousand emigrants the VAT without consumption taxes makes up to 219.54 million EUR per year.

Consumption taxes and value added tax return to the national budget more or less together with remittances and consumption of migrants arising from them.

Table 2. Profits from labour migration for Slovakia as the source country

	2012	2013	2014
Remittances sent by migrants in million EUR	1500,00	1560,00	1596,00
Costs on creating new work places in million EUR	9,40	70,20	-
Saved costs on the unemployed in 6 months in million EUR – unemployment payment	214,90	267,33	297,46
Saved costs on the unemployed per year in million EUR – indirect costs	515,69	540,25	572,04
Potential fertility of women – migrant in thousands	42,75	41,04	36,54

Source: Eurostat, Slovsat, OECD, own calculations

Remittances paid back to Slovakia in 2006 represented 32 billion Sk (Slovak crowns) and in 2008 42 billion Sk. In times of the world financial and economic crisis, in 2009, it was 1.2 billion EUR. According to the data from the World Bank, it may be stated that it was almost 2 billion EUR which represents 2.1% of GDP. The Czech Republic, Great Britain, Germany, Ireland and French are the most significant senders of remittances.

Creation of new workplaces created within direct foreign investments till 2008 increased to 60 thousand from the beginning of forming free economy in Slovakia. New investors and their suppliers created new workplaces. In 2012 only 4000 new workplaces were created (within 45 projects) which represented a year decline by more than 22%. In 2013 it was expected to create more than 13 thousand workplaces but with the financial support of 450.00 EUR (every single workplace) and for 18 month with the possibility of prolongation by 6 months. Experience shows that workplaces created on the base of the state's support are highly subsidized and in long term unsustainable. Employers are entitled to ask for a subsidy from the state if they create a workplace for workers younger than 25 or 29 years of age; the age depends on the region where the workplace was created (from 30% to 80% of the overall labour cost) and for the period of 12 months.

The unemployed are paid unemployment payments and during that time they may seek work either at home or abroad. If they find work earlier, state saves some financial resources. In 2014 the maximum unemployment payment per month represented 839.9 EUR, the average amount was 332.99 EUR, together with payments into the health insurance agency direct costs per 1 unemployed represented 364.00 EUR. In 6 months, during which the unemployment payment is paid, the state loses 2184.00 EUR per 1 unemployed; other costs are in the form of requalification courses and trainings, subsidy for setting up a business or subsidy for commuting to work. In terms of other costs – costs of public sphere per 1 unemployed – declared by the Ministry of Labour, Social Affairs and Family of the Slovak Republic, we talk about almost 350.00 EUR.

The country did not spend financial resources in the amount of 47,75 million EUR on migrants within a year – if we talk about the migration of free work force.

Furthermore, we may talk about increased costs, for instance more administrative workers working in labour offices, offices of social affairs and family.

In 2014, 136.2 thousand Slovaks worked abroad for less than a year; according to the statistics 60% of women migrate which means 81.72 thousand Slovak women left for work. Further data say that 58% of migrants are between 15 and 34 years of age which is actually the most productive age and as it has already been mentioned earlier 40% of migrants is willing to migrate permanently, which is 18.96 thousand women. If we think about the index of the overall fertility of Slovak index (69.3%), we may potentially talk about 13 thousand fertile migrants and 17.47 thousand children born outside the borders of the Slovak Republic. From a number of 242 thousand estimated migrants it is 23 thousand children of Slovak women living abroad.

Broadly speaking, we talk about savings in terms of maternity allowance and child support as well as savings in terms of health care, costs on education and many more. However, from a long term perspective they represent losses of a country – demographic (low bulge in population), economical (economic activity), social (social activity) and other. One of the negative points with a wide influence is the increase of population in post productive years and a significant decrease of population in pre-reproductive years who help and will help to cover economic costs of the retirement systems, other social systems and health care.

# 3. Conclusion

Based on the results from the analysis it may be stated that well organized migration has in its short-term horizon mainly positive influence on the economic situation of the source country. Emigrants would increase the unemployment level, country would have direct costs with the unemployed (unemployment payments, health insurance, refund of requalification courses, subsidy for businesses, subsidy for commuting to work etc.) and indirect costs (mainly costs of apparatus of public sphere on unemployed, subsidizing the creation of new workplaces from public sources, loss of work habits and many others). Inflow of remittances from working migrants increases the gross domestic product as well as the amount of financial resources in circulation and are a source of increasing consumption, however, in 2013 these represented around 2.1% of GDP whereas if migrants were employed at home, the GDP would increase by almost 10%.

Further positive aspects of migration cannot be mentioned due to the lack of data which would deal with re-emigration and subsequent employment or running a business. Limited sources of data show that the "back comers" who worked abroad for less than a year can more quickly find work on the labour market. Neither is it possible to calculate the brought know-how, business contacts etc.

However, from a long-term point of view even a well managed migration has usually negative influence on the source country. The most significant negative aspect is the loss of GDP with regards to the costs on educating a migrant in the source country. A worker can create an added value of 30 526.4 EUR per year. Costs on education and emigrant with secondary education represent 66 751.00 EUR and with university education 93 783.00 EUR. Based on these facts it may be stated that the backflow of costs on education is 2.2 years in case of a migrant with secondary education and 3.1 years in case of a migrant with university education. The country pays health and social insurance for the juveniles whereas these payments are also regarded as losses.

In case of emigration one does not pay income taxes or consumption taxes in the amount of 255.87 million EUR. Funds into the social and health insurance agency for an employee and employer represent 681.82 mill EUR.

Emigration of university educated work forces may in the source country lead to the lack of qualified work force leading to the slow-down and decay of economy (less foreign investments, lower added value per workplace, slower development etc.).

The most significant loss is mainly the departure of migrants in reproductive year which represents the decrease of potential bulge in population by almost 17,5-thousand children per year; their future economic activity could mean an important source of public finances.

Dealing with and researching migration reveals the importance of consequences; therefore, it is inevitable professionals, policy makers, mass media and institutions deal with the given issue and at the same time work on databases gaining basic characteristics of migration.

# Acknowledgements

Grant Affiliation: VEGA [1/0736/14] Trends in the Migration of Work Force into the EU Countries and Their Impacts on Economic and Social Development of the Slovak Republic.

### References

Divinský, B. (2000). Zahraničná migrácia v Slovenskej republike. Vývojové trendy od roku 2000. Bratislava: Výskumné centrum Slovenskej spoločnosti pre zahraničnú politiku, 2000.

Divinský, B.(2007). *Labor market – migration nexus in Slovakia: time to act in a comprehensive way*. Bratislava: International Organization for Migration, 2007.

Vojtovič, S. (2008). Koncepce personálního řízení a řízení lidských zdrojů. Praha: Grada, 2008.

Adepoju, A., Van Noorloos, F., Zoomers, A. (2010). Europe's Migration Agreements with Migrant-Sending Countries in the Global South: A Critical Review. *Journal of International Migration*, vol. 48, iss.3, pp. 42-75.

Baláž, V. (2010). Migrácia študentov v Európe: súťaž o ľudský kapitál. In Sociológia - Slovak Sociological Review. Bratislava: *Sociologický ústav SAV*, vol. 42, no. 4, p. 356-382.

Dagiliene, L., Leitoniene, S., Grenčíková, A. (2014). Increasing business transparency by corporate social reporting: development and problems in Lithuania. *Engineering economics*. vol. 25, iss.1, pp. 54-61.

Daugeliene, R. (2007). The position of knowledge workers in knowledge-based economy: migration aspect. *European Integration Studies*, 1, pp. 103-112.

Kazlauskienė, A., Rinkevičius L. (2006). The Role of Social Capital in the Highly-Skilled Migration from Lithuania. *Engineering Economics*, vol.4, pp. 69-75.

Masárová, T. (2014). Niekoľko poznámok k objektívnemu meraniu kvality života migrantov. In *ociálno-ekonomické aspekty rozvoja ľudského kapitálu 2014*. Zborník z medzinárodnej vedeckej e-konferencie. Trenčín: TnUAD, pp.272-278.

Hančovská, E. (2014). Manager's personality versus stress management and workload. In *GEM conference on psychology & psychiatry sociology & healthcare education 2014*. Conference proceedings volume I Psychology & psychiatry Education & educational research. Sofia: STEF92 Technology, pp. 233-240.

OECD (2008). A profile of Immigrant Populations in the 21st Century (Data from OECD countries), [online]. [cit.2015-10-11]. Available: http://www.oecd.org/els/mig/databaseonimmigrantsinoecdcountriesdioc.htm

Eurostat (2001). Strategies for developing statistics on the international migration of workers, [online]. [cit.2015-11-15]. Available: http://www.unece.org/stats/documents/2001.05.migration.htm

Eurostat (2012). Statistics [online]. [cit.2015-06-15]. Available:

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes.

Európska komisia (2012). *Statistics*, [online]. [cit.2015-04-05]. Available:

http://ec.europa.eu/employment\_social/free\_movement/enlargement\_en.htm

IOM (2010). Statistics, [online]. [cit.2015-04-05]. Available:

 $http:/\!\!\!/iom.ch/jahia/webdav/site/myjahiasite/shared/shared/mainsite/published\_docs/books/International\_Migration\_Development.pdf.$ 

Štatistický úrad SR (2013). Štatistická ročenka 2013, [online]. [cit.2015-04-05]. Available: http://www.susr.sk/

Štatistický úrad (2014). Statistics, [online]. [cit.2015-04-05]. Available: http://portal.statistics.sk/showdoc.do?docid=31412

World Bank (2014). Statistics, [online]. [cit.2015-04-05]. Available:

http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,

contentMDK:22759429~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html.

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# 65. MANAGEMENT OF RURAL YOUTH INTEGRATION TO LABOUR MARKET

Abstract: Changes in nowadays modern society raise many challenges for young people. Young people are considered to be an important social group in society, but they face many difficulties and restrictions during integration into normal society especially when discussing about rural youth situation in labour market. The issues in this context touch both youth and other related agents, integration into labour market management patterns, rural areas characteristics. Accordingly rural youth situation becomes confusing because each of the mentioned sides plays an important role in creating and forming possibilities to enter labour market. Following this the problem of this article considers different levels management implements which should guarantee the integration of rural youth into labour market. The main aim of this paper is to disclose management patterns of rural youth integration into labour market in Lithuania. Methods applied in this research are related to scientific literature, document analysis and synthesis, comparative analysis and graphic modeling. The results of the research reveal that management ways of rural youth integration into labour market are quite clear from different approaches, but still problems exist due to rural areas specificity, concerned agents in the labour market and young people intentions. The results of the research can be useful for both agents (persons, institutions, etc.) who work with young people and for young people who want to be active members of society.

Keywords: labour market, management, rural areas, youth

JEL Classification: J13, J64, M54

# 1. Introduction

Integration into society can be understood in several ways. On the one hand, it reveals features of different people (social risk/exclusion groups, etc.) integration into society in general becoming a part of normal society. It means that everybody should have an opportunity to use their human rights to exist and live normal life while satisfying both primary and higher human needs. On the other hand, integration process into society is very often discussed in the labour market context. This issue is a typical challenge for some social groups in society. In this article this issue is analysed following rural youth situation in the labour market in Lithuania. Many examples from different countries show (Stanef, 2012; Socialines, 2013; Working, 2014; Erasmus+, 2014) that integration of rural youth into labour market is a responsible step, self-determination for this group. Challenges to achieve positive and easy integration are mostly related to managerial solutions in different territorial levels on how to help young people to become a part of labour market. In the EU Youth Strategy (2010-2018) (Working, 2014) two overall objectives are seen: first, to provide more and equal opportunities for young people in education and in the labour market; second, to encourage young people to be active citizens and participate in society. Following these two objectives it should be emphasized that an active role of rural young people can be the best solution, if they want to find a proper working place satisfying their needs.

Within the context of sustainable development in the rural areas the aspect of generation change, inequality becomes more and more relevant. Although in Lithuanian rural areas as in general in the society the aging processes is obvious, the young generation plays an equally major role. Rural area is the place of residence of young people as well, although due to migration processes the number of

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young people in the rural decreases. According to report "Statistical Portrait of Young People" (Jaunimo, 2013) in the cities and towns the number of residents aged 14-29 was twice bigger than in the rural: in the cities and towns 422 thous. of young people and in the rural – 209 thous. of young people lived. However, in 2012 19.8 thous. of young country residents (aged 14-29) emigrated and they made nearly a half (48 percent) of all the emigrants. Accordingly in this way the problem of this research can be described. Both the inner and the outer emigration of young people due to the search of a working place is already perceived as a signal of danger for present society. Search for the most effective managerial decisions and implements for encouraging the integration of young people into society become a rather big challenge for both the institutions forming labour market, for the employers searching for the best specialists and for young people as well.

The object of this research: features of rural youth integration into labour market management in Lithuania

The aim of this research: to reveal the features of rural youth integration into labour market management in Lithuania.

The research tasks: 1) to disclose rural youth situation in labour market; 2) to identify the management features and possibilities of integrating young people into labour market.

# 2. Methodology of research

This research is based on scientific literature, document analysis and synthesis, logic analysis, abstraction method, secondary data analysis. Accordingly revealing the research results most attention is paid to local level situation – to rural youth opportunities to enter labour market. As the data from statistics from local (rural areas or eldership) level are very often limited, somewhere general data about youth were used. In addition to the mentioned above the specificity and different statistical indicators of youth economic activity differ according to periods. It should be mentioned that the data difference about youth integration and participation in labour market between Lithuanian Labour Exchange and Statistics Lithuania is seen. This means that while evaluating such statistical data there can be a misunderstanding in numbers, because the mentioned institutions provide different information. Mostly it is related to methodological background.

### 3. Results of research

## 3.1. Rural youth and their situation in labour market

The Lithuanian young people of nowadays are persons most of whom were born in a free state based on democratic ideas where human rights and versatile alternative choice values are emphasized. So quite a big part of young people are brave, striving towards leadership, aware of their rights, actively acting, striving to be individualities, knowing their value. These are praiseworthy traits reflecting the perception of their public spirit and aspirations to be normally members of the society. As in most societies there exists a part of young people who either due to endogenous or exogenous factors are more weakly integrated both in general into society and into the labour market – environment which can grant to a young person social economic stability. Accordingly for rural youth age and location become key challenging characteristics in the competitive struggle with more gifted other young people.

The longer the period of disengagement from the labour market and education, the higher is the risk of social exclusion. Especially this can be said about the youth of rural areas where young people experience multiple disadvantages such as disability, being from social risk family, migration background, low educational level and that may put a strain in transition to the labour market. In addition to that Ribašauskienė and Šalengaitė (2010) while evaluating the role of young people participation in the processes of rural development note that aiming to preserve viable Lithuanian rural areas the implements of rural policy (especially those related with the problems of occupation and labour market) should be more orientated towards the demands of young people. These potential risks can encourage the youth need to look for a job, study, volunteering and other forms of participation. For those groups social inclusion also means tackling and dealing with specific and additional barriers, so that they can fulfill their full potential (Shucksmith, 2010; Coburn, 2011; Jaunimo,2012; Working, 2014; Eurofound, 2015).

During the analysis of the situation of young people in the society it is important to specify the age which is one of the most important criteria in the labour market as well. According to the Republic of Lithuania Law on Youth Policy Framework (Lietuvos, 2003) a young person is defined as an individual aged 14 – 29 years. As Brazienė and Mikutavičienė (2013) stated in Eurostat Statistical Platform young age is 15 to 29 years. The Department of Statistics of the Government of the Republic of Lithuania relates young people with the limit of 16 years when every citizen of the Republic of Lithuania must have a Card of Personal Identity. Although in the context of labour market the Statistics Lithuania taking into consideration the Directives of the European Union most often employs the age phase of 15-29 (changes of rural youth are shown in Table 1). When we speak about rural youth we keep in mind young people who according to RL Law on Agriculture, Food Farm and Rural Development (2008) (Žemės, 2008) live in a rural area, district or town the number of the residents of which does not exceed six thousand.

Table 1. Young people (aged 15-29) in rural areas of Lithuania in the period 2012-2015 year

Year	In whole	Young men	Young women	Comparing young women with young men
2012	199223	107385	91838	-14,48
2013	196624	106243	90381	-14,93
2014	194513	105538	88975	-15,69
2015	193373	105253	88120	-16,28
Changes comparing 2015 with 2012	-2,94	-1,99	-4,05	*

Source: Own work using the data of Lithuanian Department of Statistics

According to the Statistics Lithuania (2015) data, at the beginning of 2015 in Lithuania 521 thous. young people (19.9 per cent) lived, whereas a decade before, i.e. in 2005, were 806 thous. young people. In 2015 young people in the rural made one fifth (i.e. 20.2 percent) of all the rural residents. Young men of the rural made 22.5 percent and women 18 percent of all the rural residents. The number of young people during the period from 2012 to 2015 in rural areas had decreased by 3 percent. The tendency of reduction of young people and aging of society is typical to both Lithuania and all the European Union as well mostly due to reducing birthrate and migration processes.

Indicators of occupation and unemployment are the primary sources for insights into the threats related with the youth integration into the labour market (Table 2). Taking into consideration the data of the Lithuanian Labour Exchange (Jaunimo, 2015) it should be noted that Lithuanian Labour Exchange during the analysis of youth situation in labour market devotes the biggest attention for the recording of persons aged up to 25. Due to that comparisons with the data of the Statistics Lithuania becomes a challenge. It appeared that during the 1<sup>st</sup> half year of 2015 27.9 thous. unemployed people up to 29 years were employed (these are 65.2 percent from the registered unemployed young people), at the beginning of 2014 22.8 thous. young unemployed people aged up to 25 were registered. According to the employment programs implemented by Lithuanian Labour Exchange according to profiled unemployed service model on 1 January 2014 39 percent motivated young unemployed were prepared for labour market, 5 percent of unmotivated were prepared, 30 percent of motivated were unprepared, 26 percent of unmotivated were unprepared. At the beginning of 2014 according to the data of young people professional preparation and labour experience 49.3 percent of young unemployed did not have professional qualification, so they could not compete in the labour market, also 40.7 percent of young unemployed were starting labour activity for the first time.

However, according to the data of the beginning of 2015 every third unemployed was younger or aged 29 and the number of youth aged 16 - 25 addressing the labour exchange decreased. It is interesting to note that during the first half year of 2015 5.1 thous. graduates addressed the labour exchange regarding the search of a working place and in the beginning of 2014 6.3 thous. of graduates had been registered (Jaunimo, 2015).

Table 2. Changes of young people economic activity indicators in the year 2011 and 2013

Indicators	In whole		Young men		Young women		Change 2013 comparing with 2011		
indicators	2011	2013	2011	2013	2011	2013	In whole	Men	Women
			1	15-19 yea	rs				
The unemployed, thousands	4,6	2,6	3	1,9	1,7	0,7	-43,5	-36,7	-58,8
Labour force, thousands	9,1	9,3	5,8	6,3	3,3	3	2,2	8,6	-9,1
Unemployment rate, %	51,4	28	51,4	29,7	51,4	24,2	-23,4	-21,7	-27,2
Employed persons, thousands	4,4	6,7	2,8	4,4	1,6	2,3	52,3	57,1	43,8
Employment rate, %	2,1	3,7	2,6	4,7	1,5	2,5	1,6	2,1	1
20-24 years									
The unemployed, thousands	34,5	24,8	21,5	14,9	13,1	9,9	-28,1	-30,7	-24,4
Labour force, thousands	111,3	116,1	64,3	66,8	47	49,3	4,3	3,9	4,9
Unemployment rate, %	31	21,4	33,4	22,4	27,8	20,1	-9,6	-11	-7,7
Employed persons, thousands	76,7	91,2	42,8	51,8	33,9	39,4	18,9	21,0	16,2
Employment rate, %	35,4	42,5	38,6	47	32	37,8	7,1	8,4	5,8
			2	25-29 yea	rs				
The unemployed, thousands	23,6	21,6	14,9	11,5	8,7	10,1	-8,5	-22,8	16,1
Labour force, thousands	150	161,4	80	85,5	70	75,9	7,6	6,9	8,4
Unemployment rate, %	15,7	13,4	18,7	13,4	12,4	13,3	-2,3	-5,3	0,9
Employed persons, thousands	126,4	139,8	65	74	61,3	65,8	10,6	13,8	7,3
Employment rate, %	73,5	77,3	73,5	80,2	73,4	74,3	3,8	6,7	0,9

Source: Own work using the data of Lithuanian Department of Statistics

Such differences enable to suppose that some of the graduates find a work place during their studies, others after graduation are able to find a work place themselves quickly, still others migrate to other countries – to study, work, etc. According to Lithuanian Labour Exchange it appears that the youth groups distinguished above are assisted in various ways with the aim to integrate into the labour market. Part of young people tried to start their private business and that is a brave step for a young man. As the data indicate, in the first half year of 2015 3.7 thous. of young unemployed up to 29 yrs.

started private activity after acquiring Business Licences, among them 2.4 thous. of young people aged till 25. However, it should be emphasized that part of the young people makes use of the opportunities of employment according to the implements of policy of active labour market. Often these are rural residents of fewer skills, having less education. For example, in 2013 12.6 thous. of young unemployed aged till 25 were sent to acquire labour experience to the implements of policy of active labour market. The most often implemented measures of the policy of active labour market (Adamonienė, Čiutienė, 2010; Socialinės, 2013; Integruotos, 2015) are: professional training, acquiring labour skills in support implement, public work, the employment of youth by subsidizing, in the implements of territorial mobility.

During the analysis of occupation and unemployment situation of young people difficulties when it is aimed to evaluate their state according to the age groups appear. Certain occupation, unemployment indicators according to statistical methods in certain periods (e.g. in 2011-2013) are distinguished separately for ages 15-19, 20-24 and 25-29. Watching the groups of the unemployed, employed residents according to the age distinguished during the latter years it is obvious that separately the group of 15-29 yrs. is not distinguished (age groups of 15-24, 15-64, 15-74, 20-64, 25-64, 55-64, 65+ are distinguished). That encumbers the direct evaluations of young people occupation and unemployment situation and that can be considered as one of the limitations of the municipalities, eldership employees, organizations separately for borough or rural communities which are interested in the situation and problems of youth integration into the labour exchange.

It is doubtless that young people are an important part of future rural society. The needs of rural youth are not always evaluated adequately in comparison with other social groups. So the opinion of rural young people is important in several aspects (Coburn, 2011; Chisholm et al., 2011; Atkočiūnienė et al., 2015):

- increasing number of young people in the rural areas could promote the social economic vitality of those localities;
- partnership of young people and local institutions, communities and other local agents in solving the problems of youth integration into the labour market could create the conditions for promoting the social integration of the young people;
- hearing of the opinion of the young encourages their self-confidence;
- participation of youth in needs research reveals their cognitive activity, motivation, initiative striving towards changes in the rural is encouraged;
- the position of the youth in evaluating the problems of labour market and integration processes can create the prerequisites for the creation of new organizations, managerial positions a part of which the young people can become.

It is important to perceive that the voice of young people as the agents of rural development can be important, especially if their opinion is correct, attitude innovative in the reorganization of the mechanisms of involvement in the labour market aiming to adapt and survive in the changing rural environment.

## 3.2. Management features and possibilities integrating rural young people to labour market

In scientific literature (Chisholm, 2011; Stanef, 2012; Lietuvos, 2015; Jaunimo, 2015) young people in the context of labour market can be distributed in various ways. Mostly attention is focused on their professional preparation and the work experience (what is relevant for the employers, but not always is evaluated in the positive way in the educational institutions as an inability to combine studies with work appears). Youth who seeks higher education always looks for the employers more attractive than those satisfying with less education. As Braziene and Mikutavičiene (2013) note, those who do not strive towards higher education seem to have less abilities, maybe will be less motivated persons coming from social risk families and that can influence their efficiency in implementing the set tasks. It is natural that the discrepancy between the aspirations of the young people during the integration into the labour market and expectations of the employers provokes a big conflict which obliges to look for managerial implements to solve this situation. According to mentioned, a more attractive labour market mechanism for young people integration, their involvement in the labour market is related with a systemic evaluation of very specific youth characteristics (present and potential examples in Table 3).

Table 3. The variety of young people characteristics within the context of the labour market.

Approximation according to learning and working	Approximation according to preparation and motivation for labour market	Professional preparation and work experience	<b>Education levels</b>
<ul> <li>Work</li> <li>Learning at school</li> <li>Learning at school and work</li> <li>Study</li> <li>Study and work</li> <li>Not learning, not studying</li> </ul>	<ul> <li>Ready and motivated</li> <li>Ready and not motivated</li> <li>Not ready but motivated</li> <li>Not ready nor motivated</li> </ul>	<ul> <li>With no profession</li> <li>Has profession</li> <li>Has work experience</li> <li>Has no work experience</li> </ul>	<ul> <li>With no primary education</li> <li>Primary education</li> <li>Lower secondary</li> <li>Secondary</li> <li>Post-secondary tertiary</li> <li>Higher education</li> </ul>
Features of living area	Exogenous and endogenous facto	Specifity of age group	
<ul><li>Steading</li><li>Rural area</li><li>Town</li></ul>	Exogenous:  - Demographic  - Social  - Economical  - Geographic/territorial  - Political  Endogenous:  - Psychological  - Physical (health status)		<ul><li>15-19 years</li><li>20-24 years</li><li>25-29 years</li></ul>

Source: Own work

The latter distribution could rather significantly add to the implementation of more effective and attractive managerial decisions, ways, implements for finding working places for young people. Such attitude could serve especially for both retaining the present young rural residents and attracting new ones and in such way ensuring Lithuania's rural development.

During the analysis of success and failures of rural young people in the labour market it should be noted that Lithuania implements quite a big number of implements of labour and employment market policy aimed for the creation of prerequisites for young people transition from the educational system and their consolidation in the labour market as well. Various state institutions, as the Ministry of Social Security and Labour, Lithuanian Labour Exchange and its territorial divisions, Council of Youth Affairs, Coordinator of Youth Affairs, employees of the municipalities (employees of various departments: education, culture, social affairs, children right protection and others), employees of municipal institutions are responsible for their implementation and supervision. However, the latter realize more "top-bottom" political and managerial implements for promoting integration into the labour market. The author concentrates more attention to the initiative "bottom-up", the most important representatives of which are and should be in the future the regional youth organization councils, youth organizations and organizations working with young people, organizations acting in the eldership level, elders, representatives of the communities, other agents of local level (Jaunimo, 2012).

As various documents related with the evaluation of youth problems state (Nacionalinė, 2010; Socialinės, 2013; Integruotos, 2015), in the level of local self-government the fields of youth expression are related with many life spheres, but the presence of a working place is often named as a priority for successful further socialization. Naturally those who do not work do not have problems. So everybody who is engaged in only the smallest activity comes across problems. The search for problem solution is an especially frequent phenomenon in management and administration. Their solution in the context of labour market as well can be solved taking into consideration the following six stages:

- search and evaluation of the problem (perception of the present situation);
- search and collection of data;
- reformulation and specification (structurization) of the problem;
- search and generation of ideas;
- search (selection) of problem roots and solutions;
- implementation and realization of solutions.

According to the author's opinion aiming to improve the present ways and implements for the promotion of integration of rural young people into the labour market the following actions are offered (Shucksmith, 2010; Jaunimo, 2012; Stanef, 2012; Integruotos, 2015):

- to prepare the methods of identification of problems of youth integration into the labour market and to elucidate the demands of the target groups (in 15-19 year, 20-24 year, 25-29 year groups; also Table 3);
- to establish what young people are least of all worked with;
- to distinguish the institutions and persons of the local level (public authority (municipalities, elderships), NGOs, public institutions (e.g. youth centres), mass media, community, local residents, etc.) who would be responsible for the coordination, realization of youth integration into the labour market; i.e. it is expedient to strengthen the inter-sector cooperation;
- to identify what implements (e.g. meetings, introduction, teaching, discussions, consultations, spread of the examples of good practice or others) would be the best to choose for the realization of the solution of this problem;
- to perform the supervision and efficiency of the above mentioned processes.

As young people differ in solving the problems related with their work it is important to perceive the following issues: how the young people of rural localities could be involved, encouraged to get involved in the activities of various programs; what factors should be considered in gathering a group or communicating with the young people of rural localities; finally, how the results could be reached for the young people of rural localities to be able in the future to firstly take the initiative regarding more successful integration into the labour market, thereby ensuring their overall wellbeing.

## 4. Conclusions

In the context of sustainable development youth plays an important role supporting viability of rural areas. Data shows that their number decrease in rural areas, also youth face difficulties in integration process to society especially to labour market. These limitations often related to living in rural area. Young people from rural areas have lower opportunities to use the same alternatives which are normal for others from urban areas, so they are tended to feel social exclusion.

Results reveal that integration to labour market for rural youth is possible using quite big range of different levels (international, national, local) programs which can disclose their capabilities. Attitude should be focused on different age groups, because the management implements for integration to labour market which can be important for 15-19 yrs. groups can be quite different to the problems for 25-29 yrs. group. It shows that even integration/inclusion to labour market programs should be adopted specifically to particular group according to the objective (e.g. unemployment indicators) and subjective (facing the needs) evaluation.

The significant attention is paid on management methods (know-how) selection how to improve rural youth transition from learning/studying to work. There is no doubt that very important is institutional approach, where attention is given to local actors who teaching youth, working with youth, govern or just surrounding them.

This problem solution also depends an active role of youth. Their initiative, activity to be fully integrated to society should not be neglected by these who implement different solutions concerned to better wellbeing of this social group.

## References

Adamonienė, R., Čiutienė, R. (2010). Problems and possibilities of youth integration to labour market. *Economics and Management*. vol. 15, pp. 343-349.

Atkočiūnienė, V., Vaznonienė, G., Pakeltienė R. (2015). The aim of the development of rural social infrastructure – a sustainable community. *Transformations in Business & Economics*, vol. 14, iss. 2 (35A), pp. 42-59.

Brazienė, R., Mikutavičienė, I. (2013). Lietuvos jaunimo perėjimas iš švietimo sistemos į darbo rinką: švietimo, darbo ir užimtumo politikos aspektas. *Public Policy and Administration*, vol. 12, iss. 1, pp. 108-119.

Chisholm, L., Kovasheva, S., Merico, M., Devlin, M., Jenkins, D., Karsten, A. (2011). The Social Construction of Youth and the Triangle Between Youth Research, Youth Policy and Youth Work in Europe, *In European Youth Studies: Integrating Research, Policy and Practice, (eds.).* L. Chisholm, S. Kovacheva, M. Merico. Austria, pp. 11-44.

Coburn, A. (2011). Building social and cultural capital through learning about equality in youth work. *Journal of Youth Studies* vol. 14, iss. 4, pp. 475-491.

Eurofound (2015). *Social inclusion of young people*. [online].[cit. 2016-01-06]. Available: http://www.eurofound.europa.eu/social-inclusion-of-young-people.

*Erasmus + Inclusion and Diversity Strategy in the field of Youth.* (2014). European Commission Directorate General for Education and Culture. [online], [cit.2016-01-06]. Available: https://www.salto-youth.net/downloads/4-17-3103/InclusionAndDiversityStrategy.pdf.

Integruotos jaunimo politikos plėtra. (2015). JRD prie Socialinės apsaugos ir darbo ministerijos. [online]. [cit.2015 12 21]. Available: http://jtba.lt/wp-content/uploads/2015/09/7-IJPP-baigiamasis-leidinys 2015.pdf.

Jaunimo problemų sprendimo planų rengimas vietos ir nacionaliniu lygmeniu. (2012). Metinis pranešimas. JRD prie SADM įgyvendinamas projektas. [online]. [cit 2016 01 07]. Available: http://www.jrd.lt/uploads/Metodiniai%20leidiniai/2013%20m.%20II%20metinis%20pranesimas.pdf

Jaunimo situacija darbo rinkoje. (2015). Lietuvos darbo birža prie socialinės apsaugos ir darbo ministerijos. [online]. [cit 2016 01 06]. Available: https://www.ldb.lt/jaunimui/naudinga/Documents/Jaunimo%20situacija\_2015-07-01%20NAUJIENLAISKIS.pdf.

*Jaunimo statistinis portretas*. (2013). Lietuvos statistikos departamentas. [online], [cit.2015-12-20]. Available: http://osp.stat.gov.lt/documents/10180/2246109/Lietuvos jaunimo statistinis portretas.pdf.

Lietuvos Respublikos Jaunimo politikos pagrindų įstatymas 2003 m. gruodžio 4 d. Nr IX-1871, Vilnius. Pakeistas 2005-11-22, Žin., 2005, No 144-5238. [online]. [cit. 2016 01 04]. Available: https://www.e-tar.lt/portal/lt/legalAct/TAR.92E111F705DD/TAIS 267613

LR Žemės ūkio, maisto ūkio ir kaimo plėtros įstatymas. 2008 m. gruodžio 31d. Nr X-1663. *Valstybės žinios*, 2002, No 72-3009. [online]. [cit. 2016 01 04]. Available: https://www.e-tar.lt/portal/en/legalAct/TAR.8B8ACD8B99A1

Nacionalinė jaunimo politikos 2011–2019 m. plėtros programa. (2010). Lietuvos Respublikos Vyriausybės. Patvirtinta 2010 m. gruodžio 1 d. nutarimu Nr 1715. [online]. [cit. 2016 01 06]. Available: file https://www.etar.lt/acc/legalAct.html?documentId=TAR.10A2087E3527

Ribašauskienė, E., Šalengaitė, D. (2010). Evaluation of youth involvement in the processes of rural development. *Management theory and studies for rural business and infrastructure development.* vol. 5, iss.24, pp. 147-154.

Shucksmith, M. (2010). How to promote the role of youth in rural areas of Europe? *Directorate general for internal policies policy department: structural and cohesion policies*. Brussels, European Parliament. [online], [cit.2016 01 07]. Available: http://www.europarl.europa.eu/RegData/etudes/note/join/2010/438620/IPOL- AGRI NT(2010)438620 EN.pdf.

Stanef, M.R. (2012). Increasing Labor Market Participation and Reducing Structural Unemployment in Rural and Urban Areas of Europe. Case Study – Romania. *Theoretical and Applied Economics*. vol. 19, no 3(568), pp. 149-157.

Working with young people: the value of youth work in the European Union. (2014). European Commission [online]. [cit. 2015-12-28]. Available: http://ec.europa.eu/youth/library/study/youth-work-report en.pdf.

Socialinės įtraukties didinimo 2014–2020 m. veiksmų planas. (2013). Lietuvos Respublikos socialinės apsaugos ir darbo ministro 2013 m. spalio 22 d. įsakymas Nr. A1-588, [online]. [cit. 2016 01 06]. Available: file:///D:/Dokumentai/Downloads/socialines-itraukties-veiksmu-planas-2014-2020-redakcija2015.pdf.

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# 66. MANAGERIAL DECISION MAKING PROCESS IN THE TIMES OF ECONOMIC VOLATILITY

Abstract: This study analyses volatility in economic development, defines the nature of this volatility and looks into the impact it had on economic results of manufacturing companies and the decision making process on the managerial level. Timewise the analysis covers two distinct periods of economic development in the last decade: the period of economic recession and then the period of subsequent moderate economic growth. The main goal of this study is to define the fundamental basis for managerial decision making in manufacturing companies during the studied period, i.e. to determine if these decisions were primarily driven by the already existing long term business strategies or by the current external economic conditions, and also what was the extend of these factors' role in the decision making process. The corresponding research works with the data collected through the empirical research aiming to determine the behavioral strategies of manufacturing companies in the conditions of economic volatility. The conducted analysis and our findings suggest that in the studied period the management of manufacturing companies made decisions based predominantly on the current situational context and economic conditions, and that preexisting long term business strategies do not influence operational decisions of management.

Keywords: economic recession, economic growth, economic volatility, management, business strategy

JEL Classification: M11, M12, M21, E3

## 1. Introduction

Strategic management is an essential part of the successful development of any company, and as such it plays an irreplaceable role in maintaining sustainable growth. Companies' concepts of strategic management usually center on the most important factors for the company's growth and prosperity. That is why, as a rule, the goals of strategic management are not only revenue and profit, but also new or innovated products, new technologies, competitive advantages, adequate investments and so on. In other words, the factors that lead and contribute to higher revenues and thus improve business results are considered to be a priority in the managerial decision making.

Of course, in case a company is going through economic problems, such as declining sales, loss of production's profitability or loss of competitive advantages, the situation and the management's approach changes accordingly. Above mentioned problems can be caused by internal factors such as inefficiencies either in process of managing or in the production, high debt burden, financial difficulties or by changes in the external business environment caused by new state regulations, tax and administrative burdens, and so on. Other external factors that could cause business problems include global recession, trade restrictions, political decisions and war conflicts.

When a company experiences economic fluctuations, drop in production or its stagnation, it adjusts its strategies and behavior according to the changing internal factors and external economic, social, legislative and political conditions. Strategic management, whose goal is a successful development and prosperity, loses its importance in the crisis. Companies usually do not try to increase their production or significantly invest into production during the times of economic difficulties. In such situations, long term prosperity and sustainable growth are replaced as management's main goal, and their place is taken by preserving the production levels or perhaps even the company's survival. The management tries to preserve the optimal production levels, keep an adequate number of employees, adapt its internal organizational structure, rules and norms, preserve its image and reputation, and so on.

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How does the management's behavior change in the times of crisis and economic stagnation? What are the changes in the priorities of managerial decision making? These are the questions we try to answer and analyze in this article.

# 2. Theoretical background

The management's decisions, as a rule, stem from the previously agreed on and approved plans and strategies of development. These plans and strategies are also reflected in the development strategies of company's individual departments and activities - manufacturing, finances, marketing, human resources, etc. All these strategies are based on complex and in-depth analyses of company's previous development, business environment, trends in the development of company's market segment and estimates of future development. These strategies and their individual elements become a foundation for management's tactical and operational decisions, and thus it is ensured that the direction of company's development reflects previously set goals.

Such is the mechanism of strategic management of a company based on the assumption that internal and external conditions do not create unforeseeable barriers preventing sustainable development of the company. Academic analyses and surveys typically focus their attention on different aspects of strategic management in the conditions of planned and sustainable development of both the company and the overall economic system, which the company is a part of (Bowman, 1996; Thompson, Strickland, 2007; Slávik 2009; Fotr et al., 2012). Analyses and surveys also focus on the strategic management of company's individual departments and activities, such as competition management (Porter, 1994), contextual relations between strategic management, business policy and business environment (Wheelen, Hunger, 1989; Belás et al., 2014), strategic management of innovations (Rajnoha, Lorincová, 2015) and so on.

As a rule one does not discuss or writes about strategic management during the times when either the economy itself or the companies find themselves in adverse phases of economic development. Managing a company in the adverse economic conditions is not perceived as a part of strategic management. Even though it is acknowledged that companies in such situations adjust their strategies adequately to the changing economic, social, legislative and political conditions, it is not further specified what exactly it means. Neither scientific nor academic literature has a category that would cover strategic management of company in the conditions of economic recession or economic crisis.

The terms that are used and discussed when talking about a company in the crisis conditions are "crisis management" (Matulčíková, Srna, 2002), "management of risks" (Šimák, 2006), "crisis management of a company" (Krajnakova et al., 2015; Zuzák, Königová, 2009) or management of risks in the company's individual departments, such as finances (Napp, 2011; Havierniková, Srovnalíková, 2014) or investments (Hnilica, Fotr, 2009). That implies that one sees crisis management as planning, organizing, implementation and controlling of activities that aim to solve the problems that the company finds itself in, or which are supposed to prevent a crisis situation from happening. Perhaps even more fitting term is "the management of a company in crisis" (Mihok, Vidová, 2006). In other words, if a company finds itself in a crisis, it is managed using different methods and processes.

This understanding of crisis management does not include operational, tactical or strategic management, even though the above mentioned publications describe methods and processes which do not differ from the standard managing activities or strategic management. At the same time we lack an explanation what exactly happens with a company's management when it finds itself in a crisis. Why is it that previously perfectly valid and effective methods and processes of strategic management suddenly cease to be so in the conditions of crisis? Or, to put it differently, which priorities and factors of strategic management lose their importance, and what are they replaced with?

Above described process, when strategic management valid and applied in the conditions of planned and sustainable development is transformed into crisis management during an economic recession, is problematic considering both theoretical examinations and managing processes. In this study we focus on the empirical side – the practical reasoning and decisions that management has to make both in the favorable and adverse economic conditions. We also look into what the management focuses on and how their priorities and their importance change during different stages of economic cycle.

The main goal of this study is to analyze the decisions of companies' managers in different economic conditions during various stages of economic cycle, and, subsequently, to define factors and priorities which are in the center of their attention during these stages. At the same time we aim to determine and discuss causal dependency of these managerial decisions and relevant economic and organizational factors.

To clarify the time period that concerns us, it should be added that when we mention the period of economic growth we mean 2012-2015 and the period of economic recession refers to 2008-2010. In order to achieve above defined goal we have analyzed companies' management's decisions applying to the period of economic growth, and we have also looked into the priorities and factors that those decisions were based on. At the same time we have analyzed management's decisions and priorities in the times of economic stagnation and recession. Then we have compared starting points and factors that stood behind and shaped those decisions in the studied stages of economic cycle, defined how they differ, and determined causal dependency of managerial decisions on the economic and organizational aspects of companies' economic activities.

# 3. Research objective, methodology and data

In this study we use data collected through an empirical survey, where top managers employed by manufacturing companies answered questions about the measures that management focuses on during the period of economic development and growth, and then during the economic crisis and recession.

We have analyzed and evaluated managers' decisions, who themselves daily analyze and evaluate different proposals of managerial decisions, and who then apply them in practice. They usually have a long term experience stemming from these activities, they know they way around different aspects of managing processes, and they are able to predict and evaluate changes in company's processes that are influenced both by internal and external factors. They are also capable of evaluating and predicting the results of proposed and implemented measures and decisions. That is the reason why, instead of treating them merely as statistical units of a sample, we perceived them as expert research units. This implies that the nature of the conducted empirical research differs from that of a classical empirical survey of statistical units of a sample, and also that informational value of the gained data is not judged through statistical calculations.

We conducted this empirical expert survey in 2014, and the survey's primary goal was to examine the quality of managerial decisions made within manufacturing companies in different stages of economic cycle. The main method used was a structured interview, when our research team asked our question and noted the answers during personal conversations. Geographically, we focused on five regions of Western Slovakia – Zilina, Banska Bystrica, Trencin, Trnava and Bratislava.

We randomly selected a sample of 250 manufacturing companies from the commercial registries of these regions. In the end of the interviews, we had 236 valid responses, which we later examined and analyzed. We failed to conduct an interview with 14 potential respondents – 7 of whom rejected because of lack of time, 2 rejected without an explanation, and we did not manage to interview remaining 5 because of multiple rescheduling issues.

The selected respondents were all part of a top management in their respective companies; their directors or their representatives, and directors of individual departments, such as sales, production, finances, human resources, etc. In case of small and medium-sized enterprises, the respondents were usually their directors. In case of some of the medium-sized enterprises and all of the larger ones we talked to director's representatives and department directors. The answers were provided by a company's spokesperson only in two cases. We did not look into social or demographic characteristics of our respondents, since they were irrelevant to our goals. Even though the answers to the questions of the structured interview as such were subjective statements of the respondents, their content centered on managing and production processes of their companies, and not their personal view on the issue.

## 4. Results and discussion

In the period of economic growth, scientific and academic community tends to focus theoretical examinations and papers mainly on the issues of investments (Hnilica, Fotr, 2009; Ivanová, Koišova, 2014), finances (Friedman, 1997; Kotlebová, 2009; Kotulič et al., 2010), innovations (Kordoš, Karbach, 2014), competition (Joan, 2012), employment (Günter, 2002) and other topics (Havierniková, Strunz, 2014). Through our survey we managed to look into what is the primary focus of managers in this stage of economic cycle, i.e. we gained practical data from the people who deal with this issue in their everyday professional life. We asked respondents to name three most important groups of managerial measures that are used during different stages of economic cycle. A list of these measures was created according to the answers to an open question in the pilot survey (Table 1).

Table 1. Measures adopted by companies' management during economic growth

Measures	Count	%	Rank
Investments into manufacturing (innovations)	125	17,6	1
Increase in production and revenue growth	119	16,8	2
Changes in management and organization	80	11,4	3
Education and professional growth of employees	66	9,3	4
Changes in labor organization	51	7,4	5
Costs reduction (materials, energy)	46	6,3	6
Re-structuring the production	39	5,4	7
Incentives and rewards for employees	35	4,9	8
Improving company's culture	34	4,8	9
Implementation of flexible forms of employment	27	3,8	10
Employing higher number of employees	27	3,8	11
Lay-offs of employees	25	3,5	12
Increasing the use of labor (working overtime)	18	2,6	13
Reducing the production	16	2,4	14
Overall sum	708	100	14

Source: Own work

The majority (58 %) out of the overall number of measures considered to be the most important (708) fell only into 5 groups of considered managerial measures (out of the overall number of 14). Managers consider following areas to be priorities in the period of economic growth: investments into the manufacturing and innovations, increasing the production and revenue growth, changing the management and organization of production, education and professional growth of employees, and changes in the labor organization. On the other hand, measures that are rarely used in the times of growth are reduction of production, increase in the use of labor, and lay-offs of significant number of employees.

In addition, when asked to what extent operational managerial measures follow company's long term strategy, more than 90 % of respondents stated that their operational decisions are entirely based on the company's strategy of development.

When it comes to the question which managerial measures are important and implemented during the period of economic recession, most respondents clearly put this question into the context of the past financial crisis and the economic recession that followed. Nevertheless, respondents themselves without any kind of prompting emphasized that conditions in which they were creating and implementing managerial decisions and overall managerial processes during this period were exceptional and one-off. This is also implied by the answers we gained. The ranking of the managerial measures based on their importance during the period of growth significantly differs from the one applying to the period of recession.

None of the measures that are considered to be the most important in the times of growth can be found among the first five measures preferred in the times of recession. The first ranks are occupied by such measures as lay-offs, reducing the production and reducing costs and use of labor; i.e. the measures that were among the last in the previous ranking. The only measures whose perceived importance was roughly the same during the period of economic growth and recession were the issues of managing the production and labor organization (Table 2).

Table 2. Measures adopted by companies' management during economic recession (crisis)

Measures	Count	<b>%</b>	Rank
Lay-offs of employees	154	21,7	1
Reducing the production	148	20,9	2
Costs reduction (materials, energy)	103	14,5	3
Increasing the use of labor (working overtime)	94	13,4	4
Changes in production's management and organization	71	10,1	5
Changes in labor organization	45	6,3	6
Implementation of flexible forms of employment	19	2,7	7
Education and professional growth of employees	15	2,1	8
Re-structuring the production	13	1,8	9
Improving company's culture	12	1,7	10
Incentives and rewards for employees	11	1,5	11
Investments into manufacturing (innovations)	9	1,3	12
Increase in production and revenue growth	7	1,0	13
Employing higher number of employees	7	1,0	14
Overall sum	708	100	14

Source: Own work

It is a bit peculiar that it seems that in the recession companies tend to neglect issues relating to their employees; the so called "soft" factors of management – education, professional growth, incentives and rewards – fall into background and are deemed relatively unimportant. For example, when we compare rankings covering the period of growth and the period of recession, we can see that education and professional growth of employees fell from 4. place to 8., and incentives and rewards from 8. to 11. position.

It is understandable that measures such as reducing the volume of manufactured production or lay-offs can hardly be one of the goals of a company's long term development strategy. However, precisely these measures dominate managerial decision making in the adverse economic conditions. Does this imply that operational management of a company is not based on that company's development strategy in such conditions? When asked whether or not operational managerial decisions are in accordance with a company's development strategy, 32 % responded affirmatively. However, when asked to elaborate on the apparent contradiction, they reasoned that the main strategic goals of a company temporarily lose their importance and cannot be realized during the recession. More than a half of respondents (54 %) quite openly acknowledged that long term development strategies lose their importance during a recession, and the management of company's processes is based on the existing economic situation.

## 5. Conclusion

Investments, increasing a volume of production and revenues increase dominate managerial measures adopted in the times of economic growth. Issues such as labor rationalization and education, and incentives and rewards for employees are perceived as merely supplementary in these conditions. The most used managerial measures when trying to solve financial and economic problems in recession are reduction of production's volume and lay-offs. That implies that managers see reduction of production and lay-offs as a tool to solve urgent economic problems. Other economic and organizational decisions have their importance and can solve company's problems only in a long term perspective.

Once reduction of production and input costs ensures the stabilization of the company and its production, management starts to look for other different ways to reduce the costs and increase the productivity – through rationalization and labor organization, flexible forms of employment, education and training of their employees, etc. In general, we can conclude that while managers seem to prefer the so called "soft" approach to management in the times of economic growth, in the recession they tend to favor the "hard" approach more.

Also, the overall management of company's processes differs in the conditions of economic growth and recession. During the phase of economic growth, it is based on a company's long term development strategy. Tactical and operative managerial decisions are derived from a company's development strategy, and at the same time they are tools of its realization. Nevertheless, company's strategic goals temporarily lose their importance during the period of economic stagnation or recession. As a result, management's decision making process becomes more situational, without previously prepared plan or concept.

#### References

Belás, J., Bartoš, P., Habánik, J., Novák, P. (2014). Significant Attributes of the Business Environment in Small and Meduim-Sized Enterprises. *Economics and Sociology*, vol. 7, no 3, pp. 22-39.

Bowman, C. (1996). Strategický management. Praha: Grada Publishing. 1996.

Fotr, J., Vacík, E., Souček, I., Špaček, M., & Hájek, S. (2012). *Tvorba stratégie astrategické plánování*. Praha: Grada Publishing, 2012.

Friedman, M. (1997). Za vším hledej peníze. Praha: Grada Publishing, 1997.

Grant, R. M. (2010). Contemporary strategy analysis. 7th ed. Hoboken, NJ: John Wiley, 2010.

Günter, S. (2002). Wege in eine neue Vollbeschäftigung – Übergangsarbeitsmärkte und aktivierende Arbeitsmarktpolitik. Frankfurt/Mein, 2002.

Havierniková, K., Srovnalíková, P. (2014). The immunity of family business in the conditions of economic crisis. In *Problems of social and economic development of business*. vol. I. Montreal: Breeze, pp. 179-183.

Havierniková, K., Strunz, H. (2014). The comparison of selected methods used for identification of cluster potential in the regions of the Slovak Republic. In *Economic & tourism*. *SGEM conference on political sciences law, finance economics & tourism*, vol. IV, Sofia: STEF92 Technology, pp. 693-699.

Hnilica, J., Fotr, J. (2009). *Aplikovaná analýza rizika ve finančním managementu a investičním rozhodování*. Praha: Grada Publishing, 2009.

Ivanová, E., Koišová E. (2014). Interregional disparities in the Slovak and Czech Republic. In *Economic & tourism*. *SGEM conference on political sciences law, finance economics & tourism*, vol. IV. Sofia: STEF92 Technology, pp. 405-412.

Joan, M. (2012). Michael Porter jasně a srozumitelně: o konkurenci a strategii. Praha: Management Press, 2012.

Kordoš, M., Karbach, R. (2014). The issue of innovation in international economics. In *Economics & Tourism. SGEM* conference on political sciences law, finance economics & tourism, vol. III. Sofia: STEF92 Technology, pp. 653-660.

Kotlebová, J., Chovancová, B. (2009). *Medzinárodné finančné centrá. Zmeny v globálnej finančnej architektúre.* Bratislava: Iura Edition, 2009.

Kotulič, R., Király, P., Rajčániová, M. (2010). Finančná analýza podniku. Bratislava: Iura Edition. 2010.

Krajnakova, E., Navikaite, A., Navickas, V. (2015). Paradigm Shift of Small and Medium-Sized Enterprises Competitive Advantage to Management of Customer Satisfaction. *Inzinerine Ekonomika-Engineering Economics*, 2015, vol. 26, iss. 3, pp. 327-332.

Matulčíková, M., Srna, O. (2002). Krízový manažment. Bratislava: Ekonóm. 2002.

Mihok, J., Vidová, J. (2006). Riadenie podniku v kríze. Košice: SjF TU. 2006.

Napp, A. K. (2011). Financial risk management in SME. The use of financial analysis foridentifying, analysing and monitoring internal financial risk. [online] [cit.2009-12-28] Available: http://pure.au.dk/portal-asb-student/files/39817962/ThesisANapp.pdf.

Porter, M. (1994). Konkurenční stratégie. Praha: Victoria Publishing. 1994.

Rajnoha, R., Lorincová, S. (2015). Strategic Management of Business Performance Based on Innovations and Information Support in Specific Conditions of Slovakia. *Journal of Competitiveness*, vol. 7, iss. 1, pp. 3-21.

Šimák, L. (2006). Manaţment rizik. Žilina: ŽU - FŠI. 2006.

Slávik, Š. (2009). Strategický manažment. Bratislava: Sprint dva. 2009.

Thompson, A. A., Strickland, A. J. (2007). Strategic Management. McGraw-HILL. 2007.

Wheelen, T. L., Hunger, J. D. (1989). Strategic Management and Business Policy. Addison-Wesley Publishing Company. 1989.

Zuzák, R., Königová, M. (2009). Krizové řízení podniku. Praha: Grada Publishing. 2009.

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# 67. DOES THE ISO 9001 TAKE INTO ACCOUNT THE SPECIFICITIES OF SMALL AND MEDIUM-SIZED ORGANIZATIONS

Abstract: In recent years implementing a normalized quality management system becomes more and more popular even with small organizations. The purpose of this article is to present the organizational impact of implementing the requirements of ISO 9001 for small and medium-sized enterprises. The study was conducted in March and April 2014 using a technique online survey. Based on the results of the study and review of the literature indicated that the implementation of standardized quality management system has a positive impact on the achievement of the objectives in the area of quality, but do not take sufficient account of the specificities of small and medium-sized organizations.

Keywords: ISO 9001, quality, small and medium-sized organizations

JEL Classification: L1, M2

## 1. Introduction

Standardized quality management systems are readily implemented by organizations regardless of their size, industry or business profile. This is due to the fact that their idea that is seeking to meet customer requirements and its comprehensive service becomes a priority. This fact significantly affects the increase in popularity of standardized quality management systems, which were originally implemented only in large manufacturing companies (Malindžák, Zimon, 2014; Malindžáková, Rosová, 2014) a currently on their implementation they are increasingly turning to small and mediumsized enterprises.

The publication focuses on ISO 9001, which due to its versatility is addressed to every type of organization (Wolniak, 2013). The versatility of ISO 9001 is undoubtedly its strength (Sampaio, Saraiva, Guimaraes Rodrigues, 2009), but increasingly also becoming a target of criticism. Some researchers consider that when ISO 9001 is aimed at any organization, it did not really take into account the specifics of any of them. In addition, a high degree of generality of ISO 9001 makes specific requirements may be different and not always properly interpreted by individual organizations (Pacana et al., 2014), which may adversely affect the effectiveness and efficiency of the system. According to the author small and medium-sized businesses belong to the organization in which ISO 9001 standard does not always work. With this view correspond to the results conducted by Psomasa and co-authors (2010), which highlight a number of barriers to the implementation of the system by smaller organizations. It should also be noted that small and medium-sized organizations incurring relatively large financial outlays on the development, implementation and improvement of the system (Satanová et al., 2015) are counting on substantial profits in the management area (Poksinska et al., 2006; Okreglicka, 2016). However, we should to be aware, that the implementation and certification of the Quality Management System is an investment. The cost incurred during system's implementation, operation and improvement phases can be a significant burden on small and medium-

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sized organizations, often beyond their financial capacity. It is believed that this is due to the fact, that ISO 9001 requirements do not fully take into account among the other things, the following barriers faced by a small and medium size firms (Zimon, 2015):

- flat, single-level organizational structure
- inadequate value of equity limiting company's ability to self-finance or borrow funds for development projects
- unfavorable treatment by financial institutions
- limited ability to attract right mix of personnel,
- limited access to the latest technologies,
- development and compete based on flexibility and adapt quickly to changing market conditions.
- lack of clearly defined objectives and strategies.

It is worth noting, however, that in the literature many authors suggest that the implementation of ISO 9001 brings many benefits to both external and internal to each type of organization. Therefore, the main objective of this publication is to examine the ratio of representatives of small and medium sized organizations to a normalized quality management system in accordance with ISO 9001.

# 2. Methodology of the research

The main objective of this publication is to examine the ratio of representatives of small and medium sized organizations to a normalized quality management system in accordance with ISO 9001. The study was conducted in March and April 2014 using a technique online survey. Surveys were sent to a group of 150 small and medium-sized organizations carrying out their activities in the southern Polish. For the analysis classified 30 correctly completed questionnaires survey. In the study group there were 12 small and 18 medium-sized organizations. The research tool was a questionnaire, which consisted of 15 questions, both open and closed and it is addressed to representatives of the board of the organizations. The paper assumes the following research hypothesis:

 It is assumed that the ISO 9001 standard does not fully take into account the specifics of smaller organization.

# 3. Analysis of the results of research

The first question concerned the feelings of the respondents regarding the consideration of ISO 9001 specifics of small and medium-sized organizations (Figure 1).

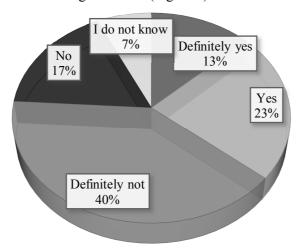


Figure 1. Does the quality management system take into account the specificities of small and medium-sized organizations?

Source: Own work

Analyzing the distribution of responses it can be seen that more than half of the respondents (57%) say that ISO 9001 does not fully take into account the needs and constraints of small and medium-sized organizations. Respondents justify their statement claimed that:

- small and medium-sized organizations do not have sufficient financial resources to fully meet the requirements of ISO 9001,
- there is a need to use the services of consulting firms, which are relatively expensive and their level is not always satisfactory (Semenescu, Badarau, 2014),
- the meaning and role of the certificate is slowly becoming widespread, and now it is no longer such an effective marketing tool which was 10 years ago, and smaller organizations can not afford to implement inefficiencies,
- ISO 9001 and the more systems industry should implement large companies on an international scale. On the other hand, 36% of the representatives of the Management Board consider that ISO 9001 sufficiently takes into account the specificities of smaller organizations. Respondents from this group pointed out that ISO 9001 leaves a large enough freedom to create documentation that can develop a system which takes into account the needs of a particular organization. However, they indicate the need to use the services of qualified consultants and the requirement for substantial commitment to the process every employee, regardless of position which is not easy in smaller organizations where workers are much burdened with responsibilities. Respondents also suggested that the quality management system brings many positives after a few years of implementation and should be patient. Consequently, the first few years companies have to spend on continuing improvement, streamlining procedures and conducting continuous adjustments developed system documentation (Briscoe et al., 2005). These views are also confirmed by the results of research conducted by Boirala and Heras-Saizarbitoria (2015) on a group of 65 organizations.

The next stage of the research process was an attempt to answer the question to what extent the quality management system contributed to the achievement of the objectives adopted in the policy of quality (Figure 2).

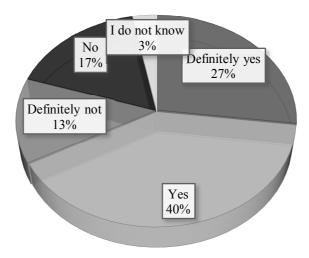


Figure 2. Did the quality management system affect the achievement of the objectives of quality?

Source: Own work

Distribution of the results shows that the vast majority almost 70% of respondents considers that the quality management system has contributed to achieving the objectives in the area of quality. Respondents emphasized that the mere requirement to develop quality policy and its inclusion in the organization's strategy was very important element influencing the growth of pro-quality awareness both managers and employees. Respondents pointed out that ISO 9001 particularly affect the achievement of the objectives in the area:

- improve relations with customers,
- organize activities through the requirement that a system procedures,
- improvement of internal communication similar results obtained in this regard Melão and Guia (2015),
- improve the forms of communication (both within the organization and with customers and partners).

It is worth noting that the proportion of respondents, who claim that ISO 9001 does not take into account the specificities of smaller organizations, admitted that it helps, but some considerable scope to achieve the objectives in the area of quality.

The analysis also shows that 30% of the organizations quality objectives have not been achieved. An in-depth analysis allowed to establish that partly resulted from improperly constructed quality policy, which was adopted targets with a high degree of generality, partly from the lack of involvement of top management and employees. This does not change the fact that quite a significant number of the organizations proved inefficient system, which puts into question its continuation quality management system primarily should you effectively and efficiently.

In order to deepen the analysis asked respondents the question about weaknesses in the system from the point of view of small and medium-sized organizations (It was an open question). Based on analysis of the responses it can be said that the most important barriers to the implementation of ISO 9001, according to the respondents may include:

- the significant costs associated with maintaining the system more than half of the representatives
  of the Management Board highlighted the that these costs are so high that as a consequence of it
  may lead to violations of economic efficiency of enterprises,
- the very idea of the process approach, which in smaller organizations does not apply,
- the problem in the development of clear procedures due to the fact that employees of smaller organizations often perform duties carried out in different departments, or their responsibilities often undergoes changes,
- staff shortages,
- the resistance of workers and negative attitude to the new rules and procedures.

The last question was to determine whether the studied organizations decide to maintain the system and implementing the requirements of the new ISO 9001: 2015 (Figure 3).

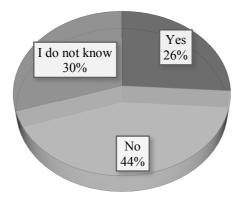


Figure 3. Do you choose to implement the requirements of ISO 9001: 2015?

Source: Own work

Representatives of the management in 44% of cases declared that the quality management system not fully met their expectations and therefore ensuing fact will not seek an extension of the certification. The main reason for this decision was too high costs in relation to the effects, lack of capital and the obligation to comply with the requirements of the standards mandatory for organizations to develop a number of unnecessary documents. Similar conclusions are based on studies came Vital and Skotnicka-Zasadzień (2007), who recognize that the financial problems and bureaucracy are the most important factor leading to the resignation of a certified quality management system. In addition, respondents says that by far the preferred solution for small and medium-sized organizations to use only selected solutions proposed by ISO 9001 without the need for a certificate. This solution can significantly reduce system maintenance costs (Raßfeld et al., 2015), also leaves more flexibility in the creation of the system (Venkatesh, 2014; Kafel, Sikora, 2014; Zimon 2016; Lisińska-Kuśnierz, Gajewska, 2014), which is a significant advantage for smaller organizations.

Moving on to the next part of the question most respondents claimed that, although not yet know the changes to be introduced by the latest amendment, however suspect that will continue to be a set of general guidelines, addressed mainly to the larger manufacturing companies. Do not inclusive of,

however, that after a full hearing with the new standard (which in the course of the research was not yet available) may verify their decisions. It is worth noting that a significant proportion of respondents (30%) have not yet determined whether it will implement ISO 9001: 2015, but they still have two years to make that decision and this period are planning to spend on in-depth analysis of the proposed changes and scrupulous calculation of the costs associated with further modification of the system.

According to the author it can not be excluded that the ISO 9001: 2015 will be enjoyed by a relatively high popularity among smaller organizations due to the less emphasis on documentation and new/reinforced approaches like consideration of organizational Context and (relevant) Stakeholders, Risk Based thinking and Knowledge Management (Fonseca, 2015).

## 4. Conclusion

Small and medium-sized organizations undoubtedly are forced to look for new solutions and ideas to improve their functioning. Based on the study and analysis of the literature is difficult to answer the question of whether the quality management system according to ISO 9001 is recommendable to small and medium-sized enterprises? However, the research process has allowed the following conclusions, which may affect the decision stuff in implementation of the requirements of ISO 9001:

- small and medium-sized enterprises, in most cases have to face the problem of lack of financial resources, infrastructure and qualified staff to develop and maintain a highly effective and efficient quality management system,
- In most cases, system maintenance costs are still too high,
- with the help of qualified consultants in parts of the organization we were able to implement a system of management's expectations,
- implementation of standardized quality management system improves the efficiency of achieving the objectives in terms of quality,
- representatives of small and medium-sized organizations do not have sufficient knowledge about the changes made in ISO 9001: 2015, which (for the moment) are the skeptical.

Adopted in the working research hypothesis can be considered true because:

 the majority of respondents considered that the ISO 9001 does not take sufficient account of the specificities of small and medium-sized organizations.

The results presented in the work may be helpful for the management of small and medium-sized organizations considering about the decision to implement a quality management system according to ISO 9001. According to the author, smaller organizations may consider the option to implement the requirements of the quality management system according to ISO 9001, which will not be certified. It should be emphasized also that due to the relatively small number of organizations surveyed, the results should be treated as some tips that will require further research and reflection

It should be remembered that in September 2015 the norm of ISO 9001: 2015 was published which was significantly modified in relation to ISO 9001: 2008. Perhaps the changes will lead to increased interest in ISO 9001 among small and medium-sized organizations. It will surely be an area worthy of further research and reflection (Zimon, 2016).

# References

Briscoe, J. A., Fawcett, S. E., Todd, R. H. (2005). The implementation and impact of ISO 9000 among small manufacturing enterprises. *Journal of Small Business Management*, vol. 43(3), pp. 309-330.

Fonseca, L. M. (2015), From quality gurus and TQM to ISO 9001: 2015: a review of several quality paths, *International Journal for Quality Research*, vol. 9(1), pp. 167-180.

Heras-Saizarbitoria, I., Boiral, O. (2015). Symbolic adoption of ISO 9000 in small and medium-sized enterprises: The role of internal contingencies. *International Small Business Journal*, vol. 33(3), pp. 299-320.

Kafel, P., Sikora, T. (2014). The level of management maturity in the Polish food sector and its relation to financial performance. *Total Quality Management & Business Excellence*, vol. 25(5-6), pp. 650-663.

Lisińska-Kuśnierz, M., Gajewska, T. (2014). Customer satisfaction with the quality of the logistic services. *LogForum*, vol. 10(1), pp. 13-19.

Malindžák, D., Zimon, D. (2014). The basic principles of the analyse for heuristic model creation in metalurgy, In *METAL* 2014, 23rd International Conference on Metallurgy and Materials, Brno, Czech Republic, pp. 549-552.

Malindžáková, M., Rosová, A. (2014). Risk assessment method applied for waste ashes processing and further use as a renewable sources. *Advanced Materials Research*, vol. 1001, pp. 484-491.

Melão, N. F., Guia, S. M. (2015). Exploring the impacts of ISO 9001 on small-and medium-sized social service institutions: a multiple case study. *Total Quality Management & Business Excellence*, vol. 26(3-4), pp. 312-326.

Okręglicka, M. (2016). Internal innovativeness and management of current finances of enterprises in Poland. In *Business Challenges in the Changing Economic Landscape*, vol. 1, Springer International Publishing, pp. 225-237.

Pacana, J., Pacana, A., Bednárová, L. (2014). Strength calculations of dual-power path gearing with FEM. *Acta Mechanica Slovakia*, pp. 18(2), pp. 14-21.

Poksinska, B., Eklund, J. A., Jörn Dahlgaard, J. (2006). ISO 9001: 2000 in small organisations: Lost opportunities, benefits and influencing factors. *International Journal of Quality & Reliability Management*, vol. 23(5), pp. 490-512.

Psomas, E. L., Fotopoulos, C. V., Kafetzopoulos, D. P. (2010). Critical factors for effective implementation of ISO 9001 in SME service companies. *Managing Service Quality: An International Journal*, vol. 20(5), pp. 440-457.

Raßfeld, C., Behmer, F., Dürlich, M., Jochem, R. (2015). Do quality costs still matter? *Total Quality Management & Business Excellence*, vol. 26(9-10), pp. 1071-1082.

Sampaio, P., Saraiva, P., Guimarães Rodrigues, A. (2009). ISO 9001 certification research: questions, answers and approaches. *International Journal of Quality & Reliability Management*, vol. 26(1), pp. 38-58.

Šatanová, A., Závadský, J., Sedliačiková, M., Potkány, M., Závadská, Z., Holíková, M. (2015). How Slovak small and medium manufacturing enterprises maintain quality costs: an empirical study and proposal for a suitable model. *Total Quality Management & Business Excellence*, vol. 26(11-12), pp. 1146-1160.

Semenescu, A., & Badarau, C. (2014). The role of public authorities in corporate social responsibility. *Argumenta Oeconomica*, vol. 33(2), pp. 39-66.

Skotnicka-Zasadzień, B., Witala, A. (2007). Certyfikacja systemu zarządzania jakością w małych firmach. *Problemy Jakości*, vol 4, pp. 42-44.

Venkatesh, G. (2014). Sisyphean Struggle or Pyrrhic Victory? Problems of Sustainable Development, vol. 9(2), pp. 73-77.

Wolniak, R. (2013). The assessment of significance of benefits gained from the improvement of quality management systems in Polish organizations. *Quality & Quantity*, pp. 1-14.

Zimon, D. (2015). Impact of the implementation of quality management system on operating cost for small and medium-sized business organizations affiliated to a purchasing group, *International Journal for Quality Research*, vol. 9(4), pp. 551-564.

Zimon, D. (2016). An attitude of subcarpathian's residents to sustainable solutions for urban transport, *International Letters of Natural Sciences*, vol. 50, pp. 41-52.

Zimon, D. (2016). Influence of quality management system on improving processes in small and medium-sized organizations, *Quality-Access to Success*, vol. 17, pp. 34-42.

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# 68. CHANGES AND DEVELOPMENT OF EVALUATION OF SOCIAL COMPETENCES IN FRAMEWORK OF TEACHER COMPETENCES

**Abstract:** This research is based on social competence defined in the educational curricular transformation (Slovak Ministry of Education, 2006); Oudova (2008). Communicational competences are recognized in three defined groups: ability to receive information – communicational sensitivity, ability to send information – expression, monitoring and control – regulation of communication. In the competence framework the teachers are classified under education and relevant skill set is based on communication and interaction. The evaluation of social competences is transformed from traditional normative approach to more dynamic approach with attention to self-awareness, flexible approach that allows teachers to adapt to fast changing environments. The competence evaluation requires individual approach and context specific approach therefore the research is based on the element of the competence evaluation by the students. The study is aimed to analyze the respective elements of social competences of the teacher's competence. The study is further narrowed and social competence is evaluated based on Riggia's competence classification.

Keywords: social competence, competence framework, teachers, educational competences, evaluation

JEL Classification: I21, I24, I26

## 1. Introduction

Academics and researchers in the last decades have highlighted to a greater extent the study of so called "key" competences. European commission defined key competence as the base of education for European educational systems. Key competence should be taught in primary and lower secondary education and further on developed in continuous process of lifelong education. It is recommended to integrate these key competences into the respective national educational systems with regards to cultural differences and historical background. Siegrist and Belz (2001, p. 174) state that "key competencies, are knowledge, abilities that lead to the ability to solve diverse scale of problems, arising over course of a lifetime". This research understands competence deriving from the KSA framework- knowledge, skills and attitudes that is described by Koprivova (2010).

The efforts of the international expert group of the European Commission in 2002 resulted in the identification of professional competencies of teachers in the Region. In particular paradigm emphasizes learning society, the need for social cohesion of society through education, m-learning (Kajanová, Sedlacek, 2014), the increasing importance of social and cultural competences.

# 2. Social competences

In recent years, the interest of professionals also he general public has been drawn to the competences characterized as key ones. The European Commission defines core competencies as a basis for

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European education systems already laid in the primary and lower secondary education (in elementary school) and they are developing throught the hole life. The European Commission has recommended to individual countries to integrate them into their education system to respect their historical and cultural traditions. Competence can be best described as a complex combination of knowledge, skills, behavior used to solve problems and perform tasks related to a job and role of the individual (Siegrist, Belz, 2001, p. 174). As concise content at perceived competence at work nettle (2010), where the author relies on the model KSA - Knowledge, skills and attitudes from which our contribution is based. In order to be classified as social competence 3 conditions need to be fulfilled (Kubeš, Spilerová, Kurnický, 2004):

- 1. Individual needs to posses abilities, capabilities, knowledge, skills and experiences that are needed
- 2. Individual is motivated and sees the importance of use of his skill set to fulfill his tasks
- 3. Appropriate environment.

From the Literature review it can be concluded that social competence is first discussed in Measurement of Social Competence (Doll, 1953), the author describes the term as an ability of an individual to take care of his own self in environment and the ability to connect and sustain social contact. Social competence is considered as a level of social maturity of an individual and it can be measured. Doll proposes social intelligence quotient or SQ a statistical abstraction similar to the standard score approach used to measure social maturity and physical age. According to Welsh, Bierman (1998) social competence is build from social, emotional and cognitive predispositions and behaviors required for successful social adaptation. Kollárik (2002) describes social competence as: "ability of an individual to get successfully and effectively integrated into the society, effective problem solving proves the integration." The authors argue that adaptation to a situation is not an individual's characteristics, but rather developed ability. Výrost (2004) developed a social competence framework with antecedents that create social competence (Table 1).

**Table 1. Social Competence Framework** 

Personal	Cognitive	Motivational	Emotional
Antecedents	Antecedents	Antecedents	Antecedents
Self-concept, identity	Social intelligence, creativity	Values	Emotional intelligence
Interpersonal characteristics	Social strategies	Attitudes	Attachment
Social Skills	Social scenarios	Social needs	Social emotions

Source: Výrost 2004

Based on the framework, it can be concluded that social competence is created by multiple factors and the main attribute is the realization of social goals. Riggio (Oudova, 2008) describes social competence as combination of communication skills categorized in 3 groups:

- 1. ability to receive information communicational sensitivity,
- 2. ability to send information expression,
- 3. monitoring and control regulation of communication.

These competences can be applied in two forms of verbal communication, social and nonverbalemotional. Combining the two forms six different areas are created: emotional expressivity, emotional sensitivity, emotional control, social expressivity, social sensitivity and social control. Elements are further discussed in the empirical research.

## 3. Standards and teacher competence profile

Slovak approach and classification of competence profile of teachers was inspired by European praised Oser's framework. The framework divides the teaching standards – teachers into following competence groups:

- 1. individual teacher himself/herself
- 2. educational institution, collaboration internal and external
- 3. individual student, relationship teacher and student, diagnostics of a student, derived interventions, educational support and evaluation of students
- 4. students as a group, discipline as a support for social behaviors of students
- 5. educational approach, management of the educational process, didactical and subject based abilities.

Similarly the teacher standards, defined by Slovak Educational law 317/2009 were classified in respect to the standards and general guidelines:

- 1. Prioritization of teachers personal development
- 2. Prioritization of competence model with indicators
- 3. Prioritization of teachers expertise.

Professional standards define the set of competences required to perform the role of a pedagogue. Interaction model between student, teacher and common educational process happening between both parties were identified by a selected expert group as 3 dimensions for creation of Slovak Professional Standards. Kasáčová and Kosová (2006) discuss it the competence profile as follows:

- 1. Pedagogical/vocational categorization
- 2. Minimum professional qualification
- 3. Pedagogical/vocational role managing position, specialist role
- 4. Pedagogical/vocational competence profile key competences build the job description of a teacher

The creation of competence profiles requires distinction of the organizational role and the position in the organizational charts in the institution. Key competences are classified in 3 categories: student based educational/process based and professional development. Professional competences differ from key competences that are individually formed and developed. Teacher's professional competences create system of 3 areas:

- 1. Didactical
- 2. Organizational
- 3. Interaction and Communication

Several dominant tendencies can be identified within the system that influences structure and priorities of teacher competencies:

- 1. Readiness and level of overall and content preparation of graduates
- 2. Context of educational situations
- 3. Teacher autonomous subject and development
- 4. Requirements raised by society, family, region, state, Europe and/or international community.

In this particular research the case is build on chosen social and educational scenario.

## 4. Methodology and Research

# 4.1 Methodology

Social competence evaluation of teachers is a part of overall school evaluation/rating of the educational institution overall quality. According to Štefančíková (2014) the evaluation can be categorized under human factors and competences factors. Sources of evaluation vary, mostly it is a subjective opinion given by students, colleagues- teachers, parents. Also inspections, student results, test results in compression with other institutions, student acceptance rate for further education. Valent (2008) states that several other analytical and comparative methods can be used to assess teacher's competence. Apart from these some more methods can be used: review and analysis of respective documents, self-assessment questionnaire, interview, student portfolios, focused groups, experiments and others.

Goal of the study: this study followed the method of teacher evaluation by their students. This method can be realized in several forms, this study followed form of post lecture survey conducted with students on individual written bases. This method and form were chosen, as students are in direct contact with teacher and the competence demonstrated throughout the lectures. Analyzing the survey findings the researchers aimed to understand the degree of expertise, educational level, lecture and education management, organization, communication and social competence of the teacher. The study aimed to analyze the respective elements of social competences of the teacher's competence.

Research methods: the empirical data were collected during the survey. Questionnaire was build with use of Liker's scale, with frequency evaluation: always, often, sometimes, rarely, never. Results identified were transformed into points and are shown in the average points. The sample was composed of 96 high school students. The objectives of research were high school teachers and subject their students.

Riggia's (in Oudová, 2008) competences classification was chosen as evaluation parameters for social competence: communication expressivity, communication sensitivity, control and regulation of the educational process.

Within the asumptions we expect that most teachers are prepared for the lecture, most teachers initiate feed back, most teachers support student activity, most teachers uses appropriate words and most teachers initiate activity in the class.

Responses on a scale "always and often" are considered as confirmatory arguments.

## 4.2 Results

This part is focused on the evaluation of social competence of a teacher. First fiure is focused on the evaluation of teacher's professional preparation for the teaching /lecture. Based on the survey, (Figure 1) 35% of students stated the teacher is always prepared, 26% thinks teacher is often prepared for the lecture. However 39% of students considered the preparation for the lecture as insufficient and lacking expertise in the lecture. Students evaluate teachers verification of load in 35% always, 26% often, 29% sometimes, 9% rarely and 1% never.

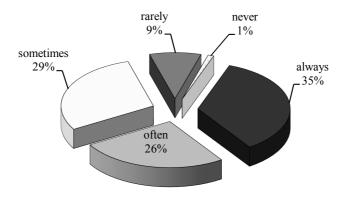


Figure 1. Teacher's professional preparation for the teaching/lecture

Source: Own work

In the lectures and teaching, it is necessary for a teacher to seek feedback, follow up on the delivery and understanding of the students. Secondly the research addressed communication expressivity of teachers. The result as follows: 19% followed up always, 51% often, 24% sometimes. (Figure 2).

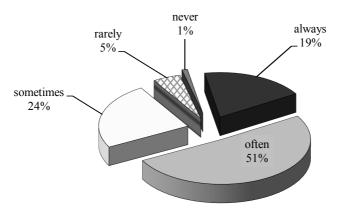


Figure 2. Teacher's self initiate follow up on the teaching/lecture

Source: Own work

Among other social competences there were assessed the communicational sensitivity and the ability to organize and control the communication flow, including positive feedback during the teaching.

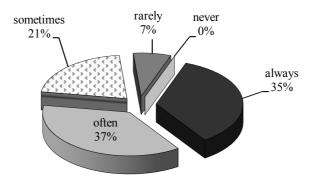


Figure 3. Teacher's positive feedback

Source: Own creation

The results showed that 35% of students consider that teacher always comments on positive student performance, 37% often sees positive feedback and use of motivation and 21% thinks it is sometimes (Figure 3).

The last evaluated area is the ability to lead the lecture, stimulate activity in the class and the communication sensitivity. Results showed in figure 4 demonstrate that 34% is always able to initiate activity among students, 35% often and 19% sometimes. Only 2% of teachers are unable to enable the class to be active.

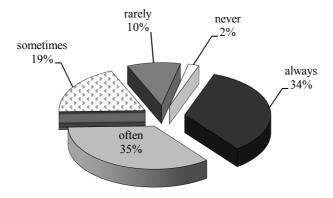


Figure 4. Teacher's ability to initiate activity in the class

Source: Own work

It can be concluded that lower scored were given in the area of preparation for the lecture and communication sensitivity. Identified results were transformed into points and are shown in the average points (Table 2).

**Table 2. Average Competence Rating** 

Question	Average rating
Teacher's professional preparation for the teaching /lecture	40.0
Teacher's self initiated follow up on the teaching /lecture	42.2
Teacher's positive feedback	43.6
Teacher's ability to initiate activity in the class	49.0

Source: Own work

Results in the area of communication organization and control as well as sensitivity are considerably better than in the area of communication expressivity. In contrast to the results the education of future teachers focuses on the lower evaluated area of communication expressivity.

# 5 Conclusion

The study aimed to evaluate the social competence of teachers. The authors understand social competence as a complex combination of knowledge, skills, behavior used to solve problems and perform tasks related to a job and a role of an individual. Social competence is a combination of

personal predispositions and social learning and experiences. Despite the current trend of diminishing normative approach towards social competence, it is important to distinguish key competence from professional competence/ expertise, that create the professional profile of a teacher.

The study introduces an evaluation of teacher's social competence realized by method of post lecture student survey with scale evaluation method, as it is argued that students are primarily receivers of teachings. Riggia's competences classification was chosen as evaluation parameters for social competence: communication expressivity, communication sensitivity, control and regulation of the educational process. The results are shown as relative frequencies of the mean value and transformed into point scale.

The findings showed that communication expressivity and lecture preparation of a teacher was evaluated with relatively lower score, despites the fact that during the education of future pedagogues this area dominates the study curriculum. Communication sensitivity as an element of social competence of a teacher was relatively positively assessed.

It is important to conclude that the findings of the study can only be interpreted in regards to the context and size of the study. The aim and future ambition of the study remains to further contribute to creation of such conditions and work environment for teachers that will allow and enable dynamic and gradual improvements of self-awareness, professionalism and ability to adapt to constantly growing requirements of teacher's role in the society.

## References

Belz, H., Siegrist, M. (2001). Klíčové kompetence a jejich rozvíjení: východiska, metody, cvičení a hry. Praha: Portál, 2001.

Bierman, K. L., Welsh, J. A. (1998). Social relationship deficits. In Mash, E.J., Terdal, L.G. (eds.). *Assessment of childhood disorders*. New York: Guilford Press, pp. 328-365.

Doll, E. (1935). The measurement os Socila Competence: Proceedings of the the American Association on Mental Deficiency. *Journal of Psycho-Asthenics*, vol. 40, pp. 103-26.

Kajanová, H., Sedláček, M. (2015). Madiness of students to use m-learning in education-case study Slovakia. In *SGEM Conference on psychology & psychiatry & sociology & healthcare & education*. Conference proceedings Volume III. Bulgaria, Sofia: STEF92, pp.737-743.

Kasáčová, B., Kosová, B. (2006). Kompetencie a spôsobilosti učiteľa - európske trendy a slovenský prístup. In Kolektív autorov. *Profesijný rozvoj učiteľa*. Prešov: Rokus, pp. 36-48.

Kentoš, M. (ed.) Sociálne procesy a osobnosť. Zborník referátov z konferencie SVÚ SAV Košice. Bratislava: ÚEP SAV, 2002. pp. 329-332.

Kollárik, T. (2002). Sociálna psychológia práce. Bratislava: UK, 2002.

Koprivová, M. (2010). Kompetencie andragóga. Bratislava: Univerzita Komenského, 2010.

Kubeš, M., Spillerová, D., Kurnický, R. (2004). *Manažerské kompetence:způsobilosti výjimečných manažerů*. Praha: Grada Publishing, 2004.

Melecký, L., Skokan, K. (2011). EU Cohesion and Its Evaluation in the Case of Visegrad Four Countries. In *Liberec Economic Forum 2011*. Proceedings of the 10th International Conference. Liberec: Technical University of Liberec, pp. 314-326.

Oser, F. (2001). Modelle der Wirksamkeit in der Lehrer- und Lehrerinnenausbildung. In Oser, F., Oelkers, J. (eds.). *Die Wirksamkeit der Lehrerbildungssysteme*. Zurich: Ruegger Verlag, pp. 67-96.

Oudová, D. (2007). Analýza sociální kompetence dospívajícich. Brno: Masarykova Univerzita, 2007.

Štefančíková, A. (2014). The mission and the importance of universities in regional development. In *SGEM Conference on psychology & psychiatry & sociology & healthcare & education*. Conference proceedings Volume III. Bulgaria, Sofia: STEF92, pp.1009-1016.

Valent, J. (2008). Metody a techniky dramatické výchovy. Praha: Grada, 2008.

Výrost, J. Sociálna kompetencia či sociálne kompetencie? In Baumgartner, F., Frankovský, M., Kentoš, M. (eds.) *Sociálne procesy a osobnosť. Zborník referátov z konferencie SVÚ SAV Košice*. Bratislava: ÚEP SAV, 2002. pp. 329-332. ISBN 978-80-969628-6-0.

Zákon 317/2009 o pedagogických zamestnancoch a odborných zamestnancoch a o zmene a doplnení niektorých zákonov (2009) [online]. [cit.2015-12-07]. Available: http://www.minedu.sk/data/att/2918.pdf.

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Authors	Collective of Authors	
	Małgorzata Okręglicka	
	Iwona Gorzeń-Mitka	
Editors	Anna Lemańska-Majdzik	
	Monika Sipa	
	Andrzej Skibiński	
Faculty	Faculty of Management	
Title	PROCEEDINGS OF THE 1st	
	INTERNATIONAL CONFERENCE	
	CONTEMPORARY ISSUES IN	
	THEORY AND PRACTICE OF	
	MANAGEMENT	
Place, Year, Edition	Częstochowa, 2016, 1 <sup>th</sup> edition	
Number of pages	479	
Publisher	Wydawnictwo Wydziału Zarządzania	
	Politechniki Częstochowskiej	
Press	Wydawnictwo Wydziału Zarządzania	
	Politechniki Częstochowskiej	
Number of copies	120	

ISBN 978-83-65179-43-2 ISBN 978-83-65179-41-8