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Faculty of Management**

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OF THE 3rd INTERNATIONAL CONFERENCE
CONTEMPORARY ISSUES IN THEORY
AND PRACTICE OF MANAGEMENT**

CITPM 2020

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**Czestochowa University of Technology
Faculty of Management
Poland**



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**Alexander Dubček University of Trenčín
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Slovak Republic**

**VŠB -Technical University of Ostrava
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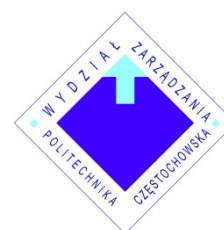
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1. CORPORATE SUSTAINABILITY: THE CASE OF MICRO AND SMALL BUSINESS ENTERPRISES IN ETHIOPIA

Abstract: The importance of small and medium enterprises for a country's economic growth takes the attention of scholars, practitioners, and policy makers. The aim of this paper is to review sustainability of micro and small business enterprises in Ethiopia in relation to environmental, social and economic dimensions. The paper is descriptive, it is the result of a desk research, which will be followed by a next research stage to be discussed by questionnaire survey among Ethiopian enterprises. The topic is actual and important, as besides agricultural sector, micro and small business enterprises (MSEs) generate the highest employment in Ethiopia. MSEs play vital role in the country's economic and social development, much attention has been paid by government of the Federal Democratic Republic of Ethiopia to the development of these enterprises. Despite the support given by the government, the sector's performance is lower than expected and MSEs lifecycle is very short. Literature sources showed that, sustainable growth of small and medium enterprise is very important and company leaders must focus not only on the current profit rather take due attention to the how the enterprise will exist in the business environment. Nowadays, community members and consumers are conscious about sustainability and business firm's environment, economic, and social responsibilities. Thus, small and medium firms in Ethiopia needs to work toward sustainability of their business in order to expand their market share, to be well accepted members of the community, generate high revenue, keep the wellbeing of the society to get a competitive advantage.

Keywords: economic, environmental, micro and small business enterprises, social, sustainable growth.

JEL Classification: M21, L26, Q01

1. Introduction

Small and Medium Enterprises (SMEs) have a crucial role to play in building a sustainable future through responsible business practices and there is a clear business case for SMEs to join this challenge. Responsible business practices are about continuous improvement; combined with sustainability reporting they reinforce each other, helping SMEs integrate sustainability thinking into the organization and capture new value (GRI, 2016). To be successful, companies cannot be indifferent to the society and environment in which they operate, and this is no different for SMEs. Peaceful conditions, a healthy environment, legal certainty and good human relations within the company are key elements of business success. SMEs can start by ensuring that their vision, mission, strategy and business model embrace responsible business practices and consider these practices as critical factors in the SME's future viability.

Corporate sustainability practice of companies has taken a great attention of many researchers and practitioners nowadays. It becomes a hot issue for governments and policy makers due to urbanization and industrialization across the globe (Bahrami, Nostratabadi, Illés, 2016). In developing countries, economic, social, and environmental conditions are highly affected by growth of population, industrialization and urbanization (Bekhet, Othman, 2017). As the sustainability of the human life depends on natural resource, and the natural resources are limited and getting depleted from time to time, the industries are now needing to revisit and redesign their production system in a way that makes conducive life for the society and protect the environmental in their business operation strategy. Thus, the immediate concern of a business firm is a corporate sustainability issue than it was before in order to remain in the market in the long run and needs to implement sustainability.

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Firms have to perform their activity to the whole civil and economic society more than to their stakeholders and employees as the community has changed to the idea that firms should engaged in social areas (Bansal, 2005). Companies in their operations system, which is recommended by sustainability initiatives are synergy between production results, conservation of the environment, and respect for the society are appreciated matters by consumers (Milne, Gray, 2013). During the 2008 recession, firms that experienced sustainability have recovered faster and performed upstairs the average in the financial markets (Whelan, Fink, 2016). Many researchers confirmed that, companies that have a full-bodied sustainability experiences have showed a better operational and financial performance. Rather than concentrating on the short-term perspective of profit creation, to attain long term goals, firms are implementing ethical dealings of corporate social accomplishments, passing many changes in their business environment due to competition and globalization (Anser, Zhang, Kanwal, 2018; Reverte, Gómez-Melero, Cegarra-Navarro, 2016).

Many researchers have made their studies on the sustainability of giant industries in which the single industry have great impact (Arruda, de Jesus Lameira, Quelhas, Pereira, 2013; da Silva Batista, de Francisco, 2018; Chang, Chen, Hsu, Hu, 2015; Garcia-Torres, Rey-Garcia, Albareda-Vivo, 2017). However, although small and medium-sized enterprises have relatively little individual importance, associatively they can have great impacts on the regions where they are operating. This characteristic is relevant in certain regions or countries, such as Latin America, where 95% of its business fabric is SMEs, and, specifically, in Ecuador, where 99% of its business fabric is SMEs (Sarango-Lalangui, Álvarez-García, del Río-Rama, 2018). So, it is very important to consider the strategic role of these types of companies in the economy and the economic, social, and environmental impact of their activities taken together.

According to Gebrehiwot and Wolday (2006) more than 11,000 MSEs in Ethiopia were surveyed and about 5 percent of them admitted having main constraints like lack of working space for production and marketing, shortage of credit and finance, regulatory problems (licensing, organizing, illegal business), poor production techniques, input access constraints, lack of information, inadequate management and business skill, absence of appropriate strategy, lack of skilled human resource, low level of awareness of MSEs' as job area, low level of provision and interest for trainings and workshop. These constraints confirm with other developing countries, especially poor management, corruption, lack of training and experience, poor infrastructural development, insufficient profits and low demand for product and services.

Even though in the past decades the focus of Ethiopian government was mainly on large organizations, particularly on manufacturing sector, the recent wave of private sector development initiatives however shifted the policy efforts to MSEs. This new orientation has been possible because of poor performance in most state owed companies and the tension introduced by globalization and the increased need for competitiveness (Zewde and Associates, 2002). Thus, the health of micro and small business sectors is very important for the overall economic growth potential and future strength of an economy since they utilize local resources, satisfying vital needs of large segment of the population with their products and services, serve as sprees of technological, marketing and management capacity and skill acquisition, and enable technological process via adoption technology (FMUDH, 2016).

Therefore, the basis for this study is that government of Ethiopia formulated some policies and established many institutions to promote the smooth functioning of SMEs. However, the sector is not performing up to the expectations of many stakeholders as it has been suffering from several problems. While contributions of MSEs were recognize, many programs and policies were developed to support them, their journey in many instances is short-lived with high rate of failure mostly in Africa due to several factors (Zewde and Associates, 2002). There are many obstacles hindering their growth like competitions, lack of access to credit, cheap imports, insecurity, debt collection, marketing problems, lack of enough working space, identical products in the same market, change in demand and absence of market linkages, lack of raw material accessibilities.

The basic aim of the study is to identify the SMEs sustainability by considering the three pillars; social, environmental and economic dimensions performance of MSEs in Ethiopia.

2. Research Methodology

In order to achieve the goal of the researchers, a thorough literature survey was carried out on analyzing the present situation of micro, small and medium enterprises in Ethiopia, which lays down the theoretical background of the further studies. The collection of literature sources was made using various databases of Scopus, Web of Science, ScienceDirect, Google Scholar and other search tools and using the institutional libraries in Ethiopia, where the most relevant literature sources were found. Keywords like “SMEs”, “micro enterprises”, “corporate sustainability”, “entrepreneur”, and “enterprise management” were used for achieving the relevant literature sources. Thus, research method is represented by desk research.

As the work was the first step of the PhD studies of one of the co-authors, the time is a main limitation of this work. Thus, this article is the result of a desk research, where literature survey represents only the basic international literature sources, and serves as the first step of the future research steps.

3. Small and Medium Enterprises (SMEs) in Ethiopia

3.1. Overview

The rapid economic growth, achieved by Ethiopia during the past 12 years, has been the result of its economic and social development programs as well as the measures the country has taken to build good governance. In recognition of the vital role micro and small enterprises (MSEs) play in the country’s economic and social development, much attention has been paid by government of the Federal Democratic Republic of Ethiopia (GoE) to the development of MSEs. The Micro and Small Enterprise Development Policy and Strategy is evidence of the focus given to MSE development (FMUDH, 2016).

The Micro, Small and Medium Enterprise (MSME) sector has emerged as a highly vibrant and dynamic sector of the Ethiopian economy over the last decade. MSMEs not only play a crucial role in providing employment opportunities but also contribute enormously to the socio-economic development of the country, notably in their role as catalysts for the transition to an industrial society. MSMEs are viewed as seedbeds for the development of medium and large enterprises. It is reported that there are approximately 800,000 SMEs across the country.

Next to agriculture, the micro and small enterprises sector generates the highest employment in Ethiopia. In addition to their capacity to generate greater employment, their size, location and capital investment make the SMEs to effect the rapid economic growth in developing countries (Zewde and Associates, 2002). Poverty reduction and economic growth becomes the main objectives of donors and policymakers given that SMEs are the major tools and are playing a significant role in employment and income generation especially for women (Wasihun, Paul, 2010).

Ethiopia has become one of the fastest growing countries and registered strong economic growth in agriculture, industry and services, social services especially education and health sector in the past fifteen years. To achieve the growth and transformation plan (GTP) and maintain the economic growth momentum, the government of Ethiopia has given special attention to the promotion of SMEs. So, to realize the agricultural led industrialization (ADLI) program, SMEs can become the key pillar of growth and transformation plan (MoFED, 2010).

Table 1. Definition of SMEs in Ethiopia

Size of the Enterprise	Sector	Human Power	Total Asset
Micro Enterprise	Manufacture	≤ 5	≤100,000 ETB
	Service	≤ 5	≤50,000 ETB
Small Enterprise	Manufacture	6-30	100,001 ETB - 1.5 Million ETB
	Service	6-30	50,001 ETB - 500,000 ETB
Medium Enterprise	Manufacture	31-100	1.5 Million-20 Million ETB
	Service	31-100	500,000 ETB-1.5 Million ETB

Source: Compiled from Micro and Small Enterprise Development Strategy 2018 (1\$ = 16,7 Ethiopian birr – ETB)

Despite the notable progress achieved so far, the experience to date has also identified the existence of stumbling blocks that have prevented MSEs from making greater progress. According to micro and small enterprise development policy and strategy (2016), the main constraints have been widespread

unfavourable attitudes toward manual work, preference to be employed than start one's own business, shortages of capital, skills gaps and lack of markets. Moreover, rent seeking and dependency attitudes were stumbling blocks for efforts aimed at overcoming these constraints.

The term SME includes a wide range of definitions and measures, varying from country to country. The definitions are also different based on the economic activity sector. According to the new small and micro enterprise development strategy of Ethiopia, 2018, the working definition of small and medium enterprise is based on paid up capital and number of employees (Table 1).

3.2. Definition and Concept of Corporate Sustainability

Corporate sustainability has a varied definition and gives different meaning for a research scholar and practitioners. Long term growth, innovation, creativity, profitability, and competitive advantage over competitors are pillars of corporate sustainability. Thus, the balance among social, economy, and business environment is mandatory for sustainable corporate strategy (Krauss, 2017). The steadiness between economic, environmental, and social goals of an organization is also taken as corporate sustainability (Hansen, Schaltegger, 2016). Sustainable development from the viewpoint of business can be defined as an overall strategy embarked on by an organization to attain the current objective of the firm without compromising the need of the future generation (Bansal, DesJardine, 2014). It means that, attaining all the three goals by incorporating the dimensions of the triple bottom lines of environmental, economic and social in their strategy.

Sustainability encompasses renewable energy, accepted and adored in the community member, conserving resource, eco-friendly service, and fair environment system (Jepsen, Grob, 2015). Likewise, environmental sustainability entails reprocessing and waste management actions, recycling, and renewable programs.

Business firms that adhere to sustainability can adopt responsive approach to a call from sustainability. This means that, the business enterprise made a proactive decision to social and environmental effects and minimise the risk by keeping the wellbeing of the society without affecting its strategy both in the short and long run terms which in turn benefit the society and strengthen its business strategy.

The environment is the first dimension that linked to sustainable development and is the first definition on sustainability of firms with an environmental approach which was adopted by the United Nations General Assembly in 1987 which deals with how to reverse the problems associated with environment. The definition adopted for sustainable development at that time is, "sustainable development is a development that meets current needs without compromising the future generation to meet their own needs". Sustainability is, however, have varied explanations with several complexity and multidimensional concepts (Hart et al., 2003). Sustainability concept in the business context gets much attention after the sustainability reporting of the triple bottom line (TBL). From the business organization context, TBL is an approach and movements to attain the three interrelated goals of social, economic, and environmental dimensions (Figure 1).



Figure 1. People – Planet – Profit: the triple bottom line

Source: own compilation

The crossroad of many theories is social responsibility of business firms. Some of the theories are, capital stock theory, human rights theory, business and corporate studies. The author also mentioned social responsibility as a method that includes community resilience, labour right, social justice, equity and responsibility. As the current and future generation needs fairness, welfare, health and safety; social responsibility is the only way to protect and preserve the values (Schaefer, Corner, Kearins, 2015). The author also states policy makers and scholars used social responsibility, corporate social responsibility, and corporate citizenship to influence business leaders to include environmental issues in the firms' strategic plan. Sociable or green business entrepreneurs are happy to enhance the condition of life of the stakeholders, community employees and community at large. They also abide by the law, support community projects, delight their customers by providing quality products and service, loyal taxpayers, and reveals the environmental protection cases.

The most difficult part that entrepreneurs face in leading their business is how to make a profit and sustain the business growth over the long term (Gupta, 2015). Economic sustainability comprises utilization of firm's resources in addition to harmonizing the triple bottom line of financial, environmental, and social commitments to generate profit and guarantee firm's growth for ever. Participating small and medium enterprises in sustainability route has costs and opportunities (Oberoi, 2014).

Costs associated with educating or awareness creation, certification, appraisal of internal and external activities, persistent development plans to join the environmental requirements have unfavourable financial effect on small and medium firms' performance (Roome, Louche, 2016).

Even though sustainability program has a high cost, implementing the sustainable business strategy have more benefits (Dyllick, Muff, 2016). According to Wade (2016), nowadays consumers are become more aware about sustainability issues than ever before. Thus, sustainability helps to increase business chances, market share expansion, and generate business revenues constantly.

Researchers have been interested to study determinant factors of SMEs growth in developing countries as the SMEs operating in this region are malfunctioning and faces frequent failure rate (Asa, Prasad, 2015). The growth of small and medium enterprise sector operating in Africa was affected by many determinant factors. For instance, high taxes, hostile legal requirements, unstable exchange rate and inflation are some of the factors affecting SMEs in African countries to generate substantial profit to continue their business (Olawale, Garwe, 2010).

Though research scholars and practitioners identified various factors affecting growth of business firms, the understanding about if the factors may affect the firm growth for the short-term or forever is seldom and doubtful. Among the different factors affecting SMEs performance in Africa and solution forwarded by researchers and policy makers, the variables most related with sustainable growth of SMEs are non-managerial qualities such as business reputation, honesty and integrity, hard work, good customer service and good quality products at competitive price (Illés, Szuda, 2015).

4. Conclusion

This paper put a base for future researchers, practitioners and policy makers to focus their attention on sustainability of small and medium enterprises operating in Ethiopia. The review can also assist the entrepreneurs and business owners to understand and develop a new business solution for their enterprise to attain the newly environment standard programs. The next steps of our research will assess through a survey how the Ethiopian MSEs may face this challenge, and based on the future findings researchers may formulate direct conclusions. At the present stage of the research, only general conclusions are summarized.

Nowadays, community members and consumers are conscious about sustainability and business firm's environment, economic, and social responsibilities. So, small and medium firms in Ethiopia needs to work toward sustainability of their business in order to expand their market share, be loved member of the community, generate high revenue, keep the wellbeing of the society to get a competitive advantage. It is true that government of Ethiopia has given a due consideration to SMEs and promote the sector by designing supporting policies and strategies for the attainment of sustainable developments. However, mostly the strategies seem more of short-term growth which compromises future generation interests.

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2. INVESTIGATING CONVERGENCE: A CASE STUDY OF THE CZECH REPUBLIC

Abstract: The article deals with the research area of economic convergence. The European Union has undergone several phases of the economic cycle, including recession, during the period 1995-2015, which has had a significant impact on economic convergence between the Member States. In this article selected econometric techniques through which the economic convergence can be estimated is presented. The aim of the article is to develop a metric, catching-up β ($c\beta$), which reflects the trend of growth of the economies focusing on β -convergence, and show how it can be applied to analyze the economic convergence within EU countries. To confirm the main hypothesis that the proposed $c\beta$ metric was evaluated on the case of the Czech Republic economy. This developed metric can help the analysts in investigating the growth of an economy in more detail than the traditional convergence techniques. This methodology can serve as a useful management tool for the economic policies of individual EU Member States. The study of economic convergence therefore also has an important place in the management sciences.

Keywords: β -convergence, individual convergence, economic growth, EU, GDP.

JEL Classification: C10, C20, C50

1. Introduction

Traditionally, the real convergence is regarded as a decrease of economic differences among different regions or countries (Meleck, 2012; Haviernikova, 2014). The sigma (σ)-convergence, a popularly used concept for the measurement of convergence, denotes the dispersion of the levels of incomes of different economies. The lessening of the value of σ over a given time period indicates the existence of the convergence phenomenon in the set of economies under consideration.

In the process of convergence, lower-income economies are expected to catch up with the higher-income economies in terms of different measures for economic condition, such as GDP per capita (ECB, 2015; Sala-I-Martin, 1996). Beta (β)-convergence is another well-known technique for the measurement of convergence. The β -convergence happens when lower-income economies follow the catching up process to grow more rapidly than the higher-income ones. When the value of β is negative for a group of economies, it indicates the existence of convergence phenomenon in them. The β -convergence basically refers to the faster convergence of the countries which have not yet reached their steady-states.

Both the σ - and β -divergence can be caused due to the low growth of smaller economies and/or high growth of larger economies. However, the aim of forming a union of some economies, such as EU, is at the growth of the economies. Hence, growth of larger economies should also be welcomed. Therefore, the main focus can be put on the low-growth of the smaller economies to ensure the overall growth of the union.

Again, traditional σ - and β -convergence focuses on the growth rates of the economies on a target time period. Hence, it shows the situation/condition of the economies in that particular time period.

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It does not speak about the trends of growths. In some situations, despite satisfactory growths of the smaller economies in a particular time period, a slower convergence may be observed due to the high growth of the larger economies.

2. Theoretical and Literature Overview

The term convergence⁴ is used in a variety of semantic modifications. Therefore, its definition is dependent on a type of observed issue. The term convergence can be found in various natural sciences; then it has a specific meaning in the language of economists. Economic convergence is understood as a process where there is a reduction of differences in the economic level and efficiency of individual countries (eventually regions) as well. Providing that there is an opposite case, that is an increase of differences in the economic level and economics efficiency, it is a divergence then.⁵ However, the focus is not only whether the differences are decreasing or increasing, but it is also important to examine how quickly these changes are done. The economic convergence and its speed then become the focus of economic comparisons, see works of Brada et al. (2005), Bruha et al. (2010), Crihfield et al. (1995), Dědek (2002), Schutz et al. (2017), that examine how the differences in economic efficiency of compared countries are changing in time.

Convergence as a category of macroeconomic theories is closely related to the issue of long-term economic growth, respectively the economic theory of growth. The goal of this theory is to examine factors that affect the rate of economic growth in individual countries and explain differences in their real incomes per capita. From the chronological point of view origins of convergence studies can be seen in the examination of absolute convergence. It can be defined as a process where economies with lower capital per worker grow faster than economies with higher capital per worker. Based on an empirical observation it has been found that the absolute convergence hypothesis is out of accord with reality, because economies with a higher ratio of capital per worker achieve faster growth of GDP per worker as well. Due to this fact a necessary condition of economies homogeneity was introduced; if it is valid there is the process of convergence in the real economy. If there is a measurement of convergence within a homogenous group of economies with the same institutional parameters, we can speak about a conditional convergence. A typical group of countries for measuring the conditional convergence are for example OECD countries. In contrast, convergence of Bangladesh and USA can be only hardly expected.

The concept of β -convergence, Pfaffermayr (2009), Furceri (2005), Michelacci and Zaffaroni (2000) worked with it, is based on the neoclassical theory of economic growth which postulates that initially poorer countries show higher dynamics of growth. Thus, the poorer countries gradually converge to richer countries whose growth rate is not so high. The growth of GDP per capita is negatively dependent on the initial economic level. Beta convergence leads to the following regression equation:

$$\frac{1}{T} \log \left(\frac{Y_{iT}}{Y_{i0}} \right) = \alpha + \beta \log Y_{i,0} + \gamma Z_i + \varepsilon_i. \quad (1)$$

The left side of the β -convergence regression equation is the average growth of GDP per capita in the real formulation in the purchasing power parity during the period from 0 to T, which is dependent on the initial economic level $Y_{i,0}$ and a set of exogenous factors Z_i . T variable expresses the number of analyzed years, α indicates the required level constant, β and γ are coefficients, ε_i is a random component. Index i denotes particular countries. The β -convergence occurs when there is a negative direction of the beta line.

The concept of σ -convergence comes also from the neoclassical theory of economic growth, according to which all countries converge to the same level of forwardness or to the same economic performance. Sigma convergence is defined as a reduction of variance of real GDP per capita logarithm in time. The sigma convergence, for example Dalgaard a Vastrup (2001), Lucke (2008), Miller a Upadhyay (2002) applied it, can be denoted as the so-called catching up effect among particular economies, while beta convergence is associated with countries converging to a steady state.

⁴ Academic dictionary of foreign words lists these concept meanings of convergence: convergence, concurrence, approximation.

⁵ The concept of divergence means deviation, diversion and in economic theory it means increasing differences in economic efficiency of individual countries.

When marking the variance (dispersion) of the logarithm of real GDP per capita in the group of countries at time t , then σ -convergence between period t and $t+1$ means:

$$\sigma_t^2 > \sigma_{t+1}^2. \quad (2)$$

3. Methodology

The aim of the article is to develop a metric, catching-up β ($c\beta$), which tries to reflect the trend of growth of the economies focusing on β -convergence, and show how it can be applied to analyze the growth of the economies of the EU countries.

Taking into consideration the main objective of this paper, the following research hypotheses has been put forward:

Hypothesis: The $c\beta$ metric can help the analysts and decision makers in investigating the growth of an economy more detail than the traditional convergence metrics.

As the reference country, the Czech Republic was chosen. The reference period covers the years of 1995-2015, which include not only the financial crisis impact, with the aim of obtaining a more detailed view of economic development thanks to the proposed metric.

The conditional or absolute convergence can be verified via the so-called β -convergence and σ -convergence. Application of these approaches depends mainly on the methodological framework for research of the given types of convergence.

Another interesting point about β (and also σ)-convergence is that it performs a relative measurement among the different economies. Such a convergence may not necessarily happen as a result of economic developments. Figure 1 and 2 presents such a scenario. Figure 1 presents the values for the calculation of β for the EU countries from the year 2001 to 2012. The regression line is denoted by L in the figure. For the sake of discussion, let us suppose that each of the average growth rates of the EU countries from the year 2012 to a hypothetical year Y is 0.01 less than what is reported in the Figure 1. This leads us to Figure 2. Interestingly, we get almost the same β value here (if we plot these growth rates against the states of the economies in 2001, we will end up with exactly the same value as reported in Figure 1). Thus for both the data in Figures 1 and 2, β -convergence reports the same convergence phenomenon though growth rates are much different. Thus a β -convergence may still be observed even if the growths of all the economies decrease. Such a convergence, of course, is not expected, but the traditional β -convergence does not reflect such situations differently.

In this article, we present a metric, catching-up β ($c\beta$), which tries to reflect the trend of growth of the economies focusing on β -convergence, and show how it can be applied to analyze the growth of the economies of the EU countries.

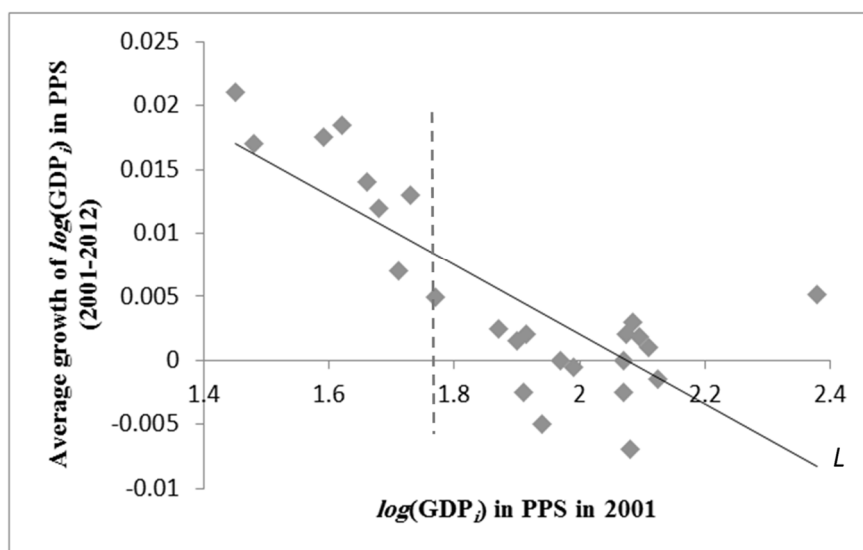


Figure 1. β -convergence in EU 2001-2012; ($\beta = -0.027$)

Source: Authors' calculations (Dvoroková, 2014a)

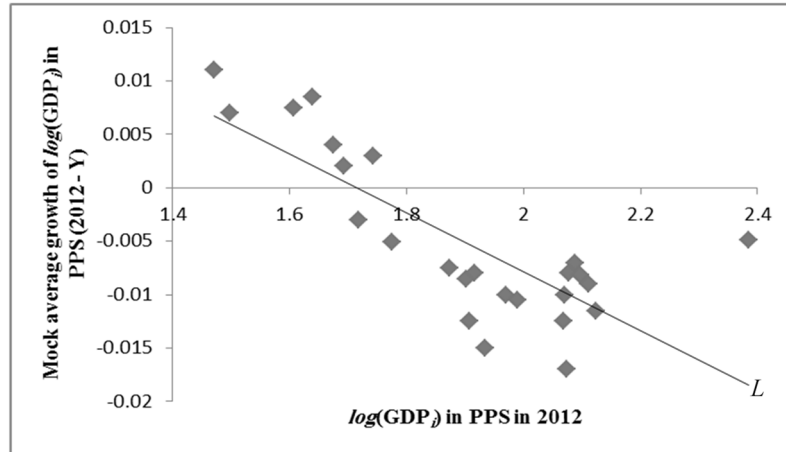


Figure 2. β -convergence in synthetic/mock data of EU 2012 - Y; ($\beta = -0.0272$)

Source: Data in x-axis are authors' calculation (Abdullah-Al-Wadud, Dvoroková, 2018), and each of the data in y-axis are 0.01 less than what is reported in Figure 1

4. Investigating Convergence by the Prism of the Catching-up β ($c\beta$) Metric

We follow the regression line on plot for testing β -convergence (Figure 3 shows such a plot). The economies falling under the regression line are actually having lower growth than what is expected in comparison with the other economies under consideration. With respect to the current time period, the $c\beta$ metric mainly focuses on the growth of these economies in the next time period.

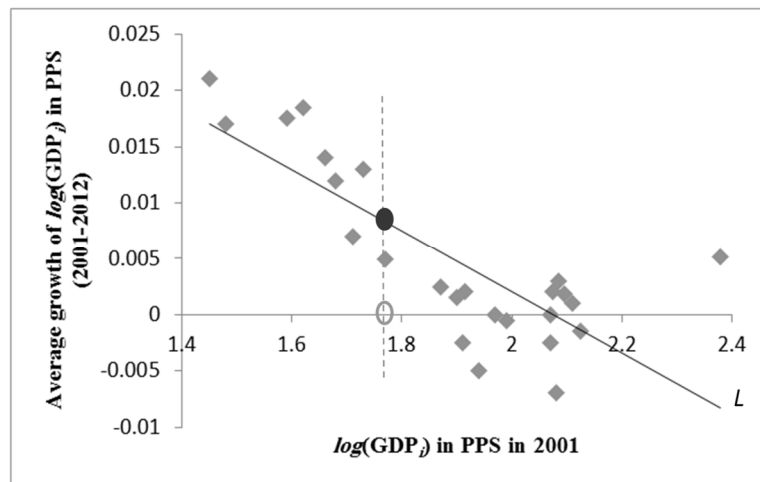


Figure 3. β -convergence in EU 2001-2012; ($\beta = -0.027$). A value for $s_k^{t_p}$ is shown by the hollow circle on the x-axis, and the corresponding $l_{g_{kt_p}}$ point is shown by the solid circle on the regression line L

Source: Authors' calculations (Dvoroková, 2014a, Dvoroková 2014b)

Let us suppose n economies e_0, e_1, \dots, e_n , where the sizes of the economies (in per capita GDP or logarithm of GDP, for example) are $s_0^{t_p}, s_1^{t_p}, \dots, s_n^{t_p}$ at the beginning of a time period t_p , and the average growth rates of the economies during t_p are $g_0^{t_p}, g_1^{t_p}, \dots, g_n^{t_p}$, respectively. If the growth rates are plotted with respect to the sizes of economies, we will have a plot similar to what is shown in Figure 1. L is the approximated regression line.

Let us use the notation $l_{g_{kt_p}} = L(s_k^{t_p})$ to represent the expected convergence point for the economy e_k to be on the convergence line. When $l_{g_{kt_0}} = g_k^{t_p}$, the growth of economy e_k can be thought to be in harmony with the β -convergence phenomenon observed in the concerned union of economies while $l_{g_{kt_0}} < g_k^{t_p}$ indicates more growth of e_k than the required value to be on the regression line. On the

other hand, $l_{g_{kt_0}} > g_k^{t_p}$ means the growth of the economy e_k is less than what is the expected to ensure β -convergence. Accordingly, the n economies can be divided into two sets U_{t_p} and O_{t_p} as

$$U_{t_p} = \{e_k | l_{g_{kt_p}} > g_k^{t_p} \text{ and } k = 1, 2, \dots, n\}, \quad (3)$$

$$S_{t_p} = \{e_k | l_{g_{kt_p}} \leq g_k^{t_p} \text{ and } k = 1, 2, \dots, n\}. \quad (4)$$

Here the U_{t_p} is the set of the *undergrown* economies which are lagging to catch up with the β -convergence, while S_{t_p} can be thought to be set of the economies with comparatively *satisfactory* growth as the union of the n economies are concerned.

The proposed $c\beta$ metric mainly focuses on the growth of the economies in U_{t_p} . Again, as mentioned earlier, we propose to track the growth rates in the next time period t_{p+1} too. Hence, we find the *undergrowing* economies $U_{t_p}^N$ as

$$U_{t_p}^N = \{e_k | l_{g_{kt_p}} > g_k^{t_{p+1}} \text{ and } k = 1, 2, \dots, n\}. \quad (5)$$

$U_{t_p}^N$ consists of the economies having less growth in the time period t_{p+1} than what is required to be on/above the regression line drawn for the time period t_p . Such economies may include some of the economies in U_{t_p} who are still under the regression line and some others who are not maintaining their growth in t_p in the next time period.

Upon finding the sets U_{t_p} and $U_{t_p}^N$, our next concern is to quantify the laggings of these economies to catch up with regression line. For the time period t_p , we calculate the value as

$$d_{kt_p} = g_k^{t_p} - l_{g_{kt_p}}. \quad (6)$$

Clearly, the economies in U_{t_p} will have negative d_{kt_p} values while the d_{kt_p} values calculated for the economies in $U_{t_p}^N \setminus U_{t_p}$ will be positive.

Similarly, we propose to follow the *laggings* of these economies in the time period t_{p+1} with respect to the regression line for t_p as

$$d_{kt_p}^N = g_k^{t_{p+1}} - l_{g_{kt_p}}. \quad (7)$$

Note that all the economies in $U_{t_p} \cup U_{t_p}^N$ will have negative $d_{kt_p}^N$ values. d_{kt_p} quantifies the required *catch-up growth* for e_k to be on the regression line to maintain the β -convergence during t_p while $d_{kt_p}^N$ provides with the *catch-up growth* that is still required in the next time period with respect to the same reference level.

Based on d_{kt_p} and $d_{kt_p}^N$, the proposed *catching-up* β ($c\beta$) metric quantifies the advancement of the economy e_k made in the next time period as

$$c\beta_k^{t_p} = \begin{cases} d_{kt_p}^N - d_{kt_p} & \text{if } e_k \in U_{t_p} \cup U_{t_p}^N \\ \infty & \text{otherwise} \end{cases}. \quad (8)$$

A positive value of $c\beta_k^{t_p}$ indicates the advancement in growth of the economy while a negative value indicates worsening.

To see the trend of the growth of an economy through a duration, instead of showing the overall performance at the end of the duration, $c\beta$ values can be plotted for smaller periods in the duration. Moreover, the required *catch-up growth* (*lagging*) values, d_{kt_p} , can also be plotted along with the $c\beta$ values so that it can give a comprehensive view to the performance of the target economy where the instantaneous growths of the economy can be viewed in comparison with the *required catch-up growth* (*lagging*) values at the corresponding point to be on the regression line.

5. Evaluating the Growths of EU Countries Based on the $c\beta$ Metric

To begin with, let us first focus on the scenario depicted in Figure 1 where similar β values are yielded for the two different datasets. Here the $c\beta$ values calculated in the two time periods are negative for every country, indicating the unexpected decrease of the economic growth.

For a sustainable convergence, the growths of the lower income economies are also required to be sustainable (ECB, 2015). In other words, a consistent long-term growth is necessary. However, the traditional β - and σ -convergences present the information of overall conditions of the economies. Since such calculations are done on the data at the start and end of a specific duration, they do not provide mechanisms to investigate the ups and downs that might happen in between. At this point, the duration can be divided into smaller time periods, and the $c\beta$ values can be calculated at all these time periods. This can give much better insights about the actual growth of the economies.

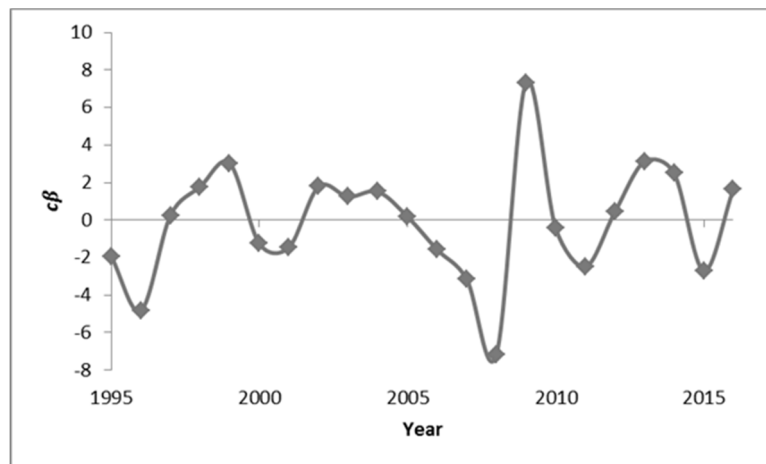


Figure 4. The $c\beta$ values calculated for Czech Republic at every year from 1995 to 2016

Source: Authors' calculations (Dvoroková, 2014a)

Figure 4 demonstrates on the use of the $c\beta$ values to analyze the growth of the economy of the Czech Republic from 1995 to 2016. It shows that the economy was growing during the early years of this millennium. However, there was a continues decrease of the $c\beta$ values during the years at the end of that decade, which reflects the downfall of the trying situations during the Great recession. Thus, the $c\beta$ metric can help the analysts and decision makers in investigating the growth of an economy more detail than the traditional convergence matrices.

6. Conclusion

The $c\beta$ metric can be used as a supportive measure to enable detail analysis of performances of different economies. The research hypothesis stated in the article was generally verified. The traditional β -convergence (and also the σ -convergence) provides with an overall idea about the conditions of convergence of the economies under consideration, it does not clearly show the performances of the economies individually so that policy makers could rigorously analyze the economies to take monetary decisions in order to improve their situations. The main advantage of the proposed $c\beta$ metric is that it shows a way to look into more detail of the growths of the countries' economies and analyze the trends of the individual performances of the different economies falling under the regression line. Hence, it has the potential to be applied by the policy makers to take necessary steps to strengthen the growths through revising the fiscal policies and structural set-ups to ensure more favorable conditions for making better utilization of available resources in the economies. While this study contributes to fill a gap on the knowledge of economic convergence, some limitations open up avenues for further research. The future research will be aimed at ex-post evaluation of the newly proposed metric on the data of individual EU economies during the Programming period of 2014-2020.

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3. IMPACT OF ELECTRICITY TARIFFS ON ECONOMIC BALANCE OF HOUSEHOLDS

Abstract: Nowadays, electricity suppliers offer a range of tariffs tailored to consumers' specific needs. These tariffs, when appropriately used, have a large impact on economic balance of households. A household that decides to sign an agreement for electricity purchase in a specific tariff is subject to some limitations that result from the fact that the price of electricity depends on the season, day or time it is purchased. The aim of this paper is to show that compliance with settlement principles applied to tariffs G12, G12W or G13, and consequently, purchase of electricity beyond peak hours, guarantees significant savings in a household's budget compared to the standard G11 tariff. The article was based on own research consisting in measuring energy consumption using a wattmeter as well as a second electricity meter of individual equipment in the household. Analysis of the research results showed large price differences between the purchase of energy in a one-zone tariff and two-zone tariffs.

Keywords: balance, budget, consumption, economics electricity tariffs.

JEL Classification: D1, D14

1. Introduction

Electricity consumption in every sector of the national economy is becoming an issue of growing importance. Energy efficiency is addressed by a broader energy and climate policy and is an important factor impacting enterprises' production costs (and by extension their profits) and socio-economic development. Consequences of non-rational use of energy include over consumption of energy-producing raw materials, pollution of the environment and limited competitiveness of domestic enterprises on world markets. From the perspective of an individual consumer, energy efficiency is one of the main ways of reducing the share of electricity costs in a household's budget. In recent years, the European Commission has made numerous efforts to reduce electricity consumption in households through, among other things, promoting energy-saving lighting (Whittle, Jones, While, 2020) subsidies for home micro-installations of renewable energy sources, requirement of energy labelling of household appliances and liberalisation of electricity market in a broad sense. It is households that purchase energy in the second zone, i.e. when its supply is greater than its demand, they are able not only to save money in the home budget but also contribute to the efficient use of transmission networks.

2. Characterisation of Households

According to the current data, there are 37734000 people living in Poland creating 14 448 872 households (GUS). 50% of these households have cubature of less than 200 m³ and floor space of less than 60 m² and are occupied by 2-3 people, 2.66 on average (Kott, 2015). Recent years have seen a systematic increase in dwellings floor space and cubature and a systematic decrease in the average number of people in a household (Tian, Chang, 2020). During a year, a statistical household in Poland is able to consume around 2000 kWh of electricity, which is twice less than the average for EU countries (Wojtulewicz, Osicki, Pasierb, 2006).

The characterisation of households in terms of electricity consumption (Malko, Wilczyński, 2007) was developed based on the guidelines presented in the document published by Eurostat – Manual for statistics on energy consumption in households (MESH), and using data from the Polish Central Statistical Office (GUS).

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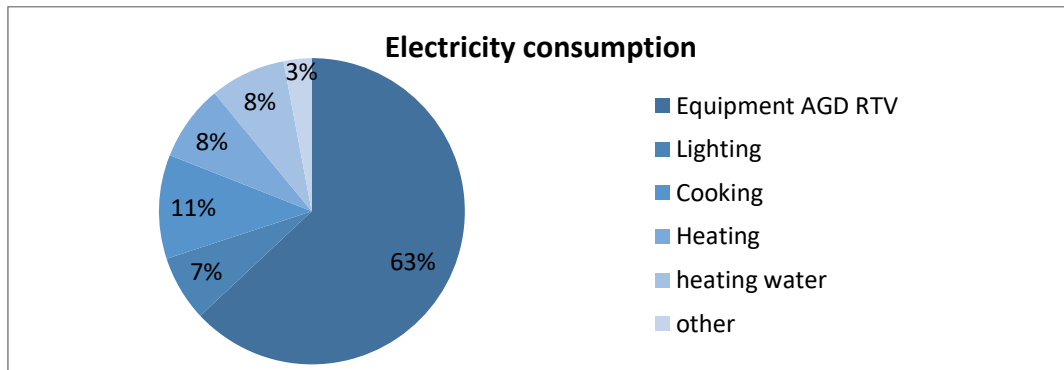


Figure 1. Electricity consumption by equipment group

Source: Own study based on GUS data, <http://stat.gov.pl/> [2020, February 26]

Current-using equipment has been divided into 6 groups:

- space heating equipment,
- water heating equipment,
- cooking equipment,
- space cooling equipment,
- lighting, household appliances and consumer electronics,
- other, not mentioned in the other groups.

Only 5.3% of dwellings are equipped with the equipment from the first group. Due to high costs of heating with electrical devices and availability of other, cheaper energy carriers (in particular coal), it is not widespread. Electrical heating devices mainly serve as additional heat sources or are applied where other types of heating cannot be used (Abrardi, Cambini, 2015)

23.5% of households have water heating electrical devices (geysers, boilers) installed. The number of such devices has remained stable in recent years. The average age of such devices is 9 years, meaning that they are not technically outdated (Ślupik, 2015). Gas cookers with electric ovens can be found in every second household, whereas fully electrical cookers (hob with an oven) in every tenth one. It should be also mentioned that over 50% of households are equipped with a microwave. (Murawska, Mrozińska, 2016) Air conditioners can be found (Zou, Lou, 2019). in less than 0.5% households, but their number has significantly increased in recent years due to newly built high standard apartments. These are mostly devices for cooling single rooms. Only 0.04% of dwellings have central air-conditioning. Lighting, household appliances and consumer electronics constitute the largest group of current-using equipment. Almost every household is equipped with a fridge, a washing machine and a TV set. The average power of installed bulbs (including energy-saving fluorescent lamps and LED sources) in a household is estimated at 550 W, whereas the power of installed bulbs per floor space unit is 7.21 W/m² (Lekveishvili, 2019).

Figure 1 presents electricity consumption by equipment group for Poland. The largest differences can be seen in electricity consumption shares for space heating equipment and household appliances. In the case of the first group of equipment, the results can be interpreted as showing lack of profitability of investments in electrical space heating in Poland. The reason for excessive consumption of electricity by household appliances in Poland is, among other things, the old age of such appliances. It should be noted that household appliances in Poland are characterised by lower energy class compared to corresponding household appliances in highly developed EU countries.

3. Energy Tariffs in Poland

Energy tariff is a specific offer with rates for kWh, as presented in Table 1, in a time zone and with additional options. A wide range of energy tariffs allows a consumer to select the best offer to suit their needs and expectations (Michalak, 2010). Each energy tariff is assigned to a specific tariff group (Ahmad et al., 2019). The division is based on the required level of supply voltage (Thompson, 2014). Currently, there are four tariff groups: G, C, A and B (Andruszkiewicz, Lorenc, Weychan, 2019). Energy tariffs for households belong to the tariff group marked with letter G. This is the only tariff group where the Energy Regulatory Office (Polish: Urząd Regulacji Energetyki) requires energy sellers to approve electricity prices. All major electricity sellers in Poland have three standard tariffs, i.e.:

- G11 - one-zone tariff where the price of electricity is the same regardless of time
- G12 - two-zone tariff that divides a day into peak hours, when electricity is more expensive than in the G11 tariff, and off-peak hours, when electricity is cheaper than in one-zone tariff (Frąckowiak, Galan, 2013).
- G12w - two-zone tariff also known as weekend tariff, where the lower price of electricity during off-peak hours is also charged at weekends and on all public holidays.

Table 1. Electricity tariffs

Tariff	Zone	Electricity price	Distribution price	Total
G11	round-the-clock	PLN 0.3606	PLN 0.2375	PLN 0.5981
G12	Zone I	PLN 0.4449	PLN 0.2523	PLN 0.6972
	Zone II	PLN 0.2296	PLN 0.0688	PLN 0.2984
G12w	Zone I	PLN 0.4750	PLN 0.2895	PLN 0.7645
	Zone II	PLN 0.2296	PLN 0.0626	PLN 0.2922
G13	Zone I	PLN 0.3974	PLN 0.1802	PLN 0.5776
	Zone II	PLN 0.6170	PLN 0.2972	PLN 0.9142
	Zone III	PLN 0.2680	PLN 0.0481	PLN 0.3161

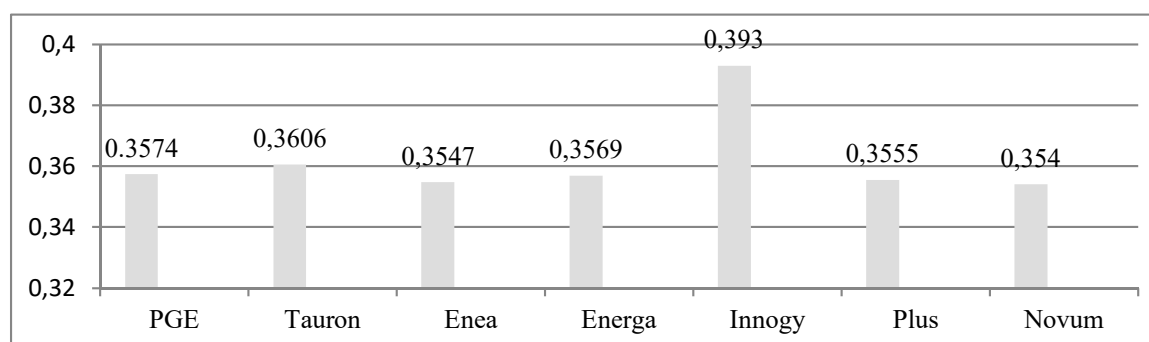
Source: Own study based on data from www.tauron.pl

Apart from the tariffs above, individual sellers, depending on the specificity of a given region, apply extended tariff variants such as:

- G12n - two-zone tariff, where the night tariff also applies on Sundays.
- G12e - two-zone tariff, where off-peak hours are only at night.
- G12g - two-zone tariff with more off-peak hours and cheaper hours at weekends.
- G12r - two-zone tariff where night hours and certain hours in the daytime are cheaper.
- G13 - three-zone tariff that divides a day into a morning peak, afternoon peak and the remaining hours.

G11 is the most popular with customers. It is the simplest tariff, where the same prices for purchase and transmission of electricity are charged throughout the whole day (Białek, Frąckowiak, Gałan, 2018). In part, this results from the fact that this is a default tariff that is automatically assigned to all customers. According to unofficial information, as no institution in Poland reveals such data, this tariff is used by around 10 million households.

Depending on the energy seller of choice, the price for 1 kWh may vary (Nęcka 2012). The Table 1 shows a comparison of prices charged by five largest infrastructural energy sellers and two virtual ones, i.e. not possessing their own power plants or transmission lines.

**Figure 2. Electricity prices as charged by individual sellers in the G11 tariff**

Source: Own study based on data from sales offers of the entities above as of 25.02.2020

The figure 2 above shows that at the time of writing this paper the virtual seller plus had the most attractive electricity price offer in the G11 tariff for households, whereas Innogy offered the least attractive rate. An alternative to a round-the-clock tariff is a multi-zone tariff. Almost 3 million households have already decided to switch from the standard one-zone tariff to a two- or three-zone one. The most popular two-zone tariff is the so-called night G12 tariff. In the case of this tariff, there are two price zones rather than one. (Lachman, 2017) One of the zones - during off-peak hours - is cheaper, while the other - during peak hours - is more expensive, which is illustrated in figure 3. The

off-peak hours usually include night hours, from 10.00pm to 6.00am, and two hours during the day: from 1.00pm to 3.00pm. During other hours, i.e. from 6.00am to 1.00pm and from 3.00 pm to 10.00 pm, electricity prices are much higher.

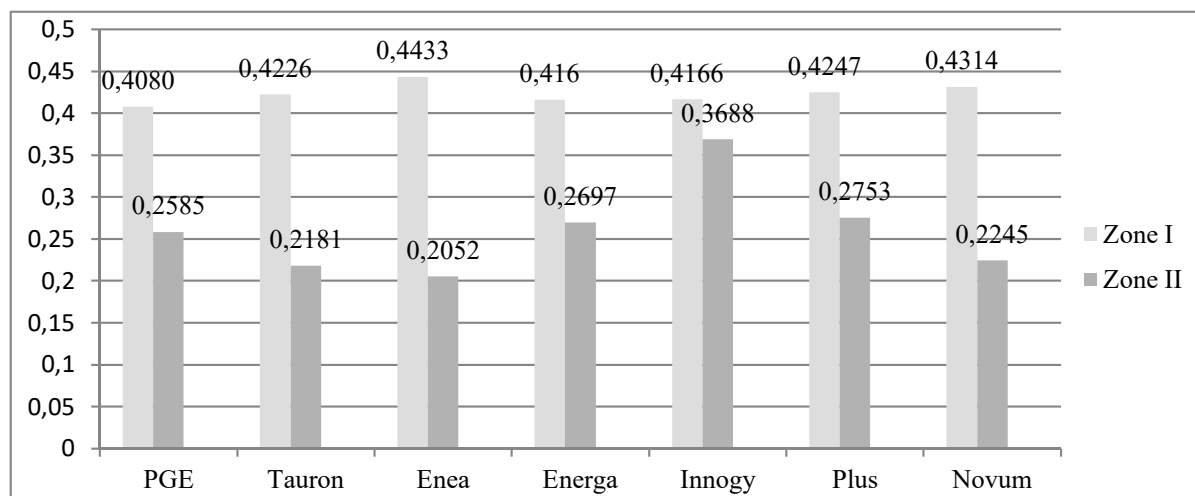


Figure 3. Electricity prices as charged by the individual sellers in the G12 tariff

Source: Own study based on data from sales offers of the entities above as of 26.02.2020

Figure 4 shows that conscious consumption of energy in the second zone is the most cost-effective in the case of purchasing energy from Enea. This company offers the lowest price per 1kWh during off-peak hours, whereas in the case of Innogy, there is a very small price difference between electricity purchased in the first and second zones. The company Novum offers the most expensive electricity of all sellers in the first zone.

Hours when electricity prices are higher or lower vary depending on the electricity seller and distributor, which is illustrated in table 2.

Table 2. Peak and off-peak hours in major energy sellers in Poland for the G12w tariff

Energy supplier	Peak zone	Off-peak zone	Weekend
Enea	Mon-Fri 6.00 am-9.00 pm	Mon-Fri 9.00 pm-6.00 am	Saturday + Sunday + public holidays 00.00-12.00 pm
Energa	Mon-Fri 7.00 am-1.00 pm and 4.00 pm-10.00 pm	Mon-Fri 1.00 pm-4.00 pm and 10.00pm-7.00 am	Saturday + Sunday + public holidays 00.00-12.00 pm
Innogy	Mon-Fri 6.00 am-10.00 pm	Mon-Fri 10.00 pm-6.00 am	Saturday + Sunday + public holidays 00.00-12.00 pm
PGE	Mon-Fri 6.00 am-1.00 pm and 3.00-10.00 pm	Mon-Fri 1.00 pm-3.00 pm and 10.00 pm-6.00 am	Saturday + Sunday + public holidays 00.00-12.00 pm
Tauron	Mon-Fri 6.00 am-1.00 pm and 3.00 pm-10 pm	Mon-Fri 1.00 pm-3.00 pm and 10.00 pm-6.00 am	Saturday + Sunday + public holidays 00.00-12.00 pm

Source: Own study based on data from sales offers of the entities above as of 15.02.2020

An extension of the tariff commonly known as night tariff is the G12w weekend tariff. In the case of this tariff, electricity is cheaper not only during certain hours during the day and in the night zone. Lower electricity rates in the G12w tariff are also charged at weekends and on public holidays, which is presented in Figure 4. Weekend is usually deemed to start on Friday at 10.00pm and end on Monday at 6.00 am.

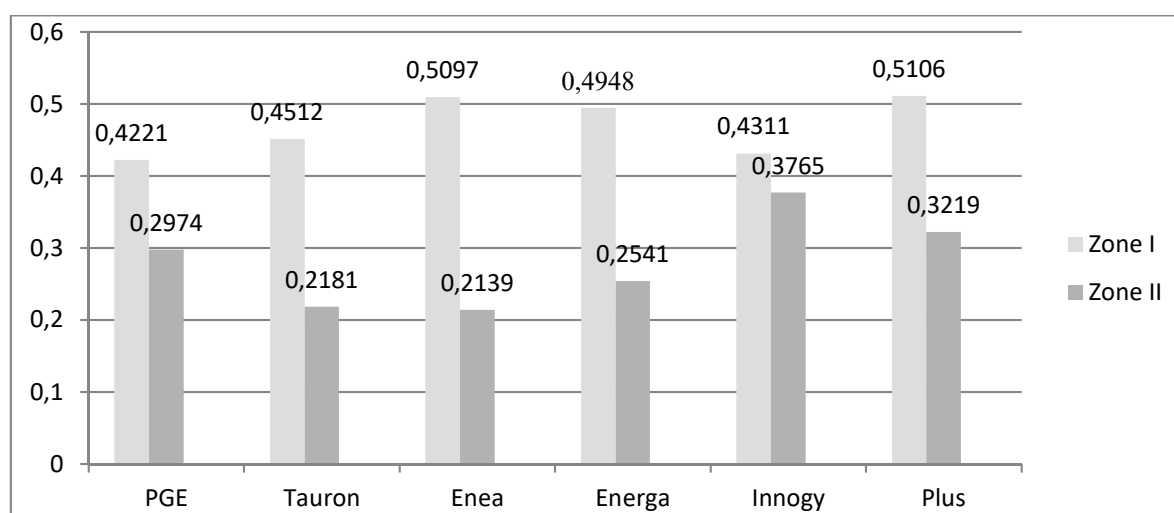


Figure 4. Electricity rates as charged by the individual sellers in the G12w tariff.

Source: Own study based on data from sales offers of the entities above as of 28.02.2020

Figure 4 shows that the biggest disproportion between electricity prices in Zone I and Zone II is in Enea's offer. This company sells electricity for the lowest price in Zone II, but in Zone I the price is the highest.

It is assumed that for a zone tariff to be cost-effective for a household, the household has to consume at least 30-40 percent of the daily demand for energy in the off-peak zone. These conditions are often met by people spending most of weekdays away from home. When using the G12w tariff, it is best to change one's habits so that most housework that relies on electricity consumption is done at the weekend (Andruszkiewicz, Lorenc, Maćkowiak, 2018). Activities such as ironing, washing-up, vacuuming, mowing, washing, do-it-yourself, charging electric devices should be preferably scheduled on Saturday or Sunday (Tomczykowski, 2014).

The weekend tariff will be a good solution if many people living in a given block of flats are in the G12 tariff. Due to quiet hours, it is not possible to turn on noise-generating electrical appliances any time. Another group of consumers that can benefit from the weekend tariff is people who use electricity to heat their houses.

Although the G12w tariff is mainly targeted at households, halls of residence, clergy houses, hospices, orphanages etc. can also take advantage of the offer.

The most recent (experimental) is the G13 tariff, which was introduced a few years ago. Currently, it can be purchased in almost all parts of Silesia and Lesser Poland Voivodeships, if the distributor of energy is Tauron. The temporal distribution of the G13 tariff ensures a relative flexibility in electricity use (Frąckowiak, Galan, 2012). The tariff is specifically designed for households that use electricity to heat a house by means of electric heating appliances, i.e. electric storage heater and heat pumps. This is due to the distribution of three energy rate ranges: morning and evening peaks and the other ranges (discounted tariff), which is presented in Figure 5. In the case of the G13 tariff, there are around 17 hours of cheap energy in a day per year, taking into account holidays, Saturdays and Sundays (statistically, around 114 in a year). In the winter period (from 01.10 to 31.03), this share is around 16 hours in a day. For weekdays from Monday to Friday, it is 13 hours in a day in the winter period (from 01.10 to 31.03) and 15 hours in a day beyond the winter period (from 01.04 to 30.09). At weekends (and on public holidays), the discounted tariff is applied (24 hours a day). The morning peak with the average energy price lasts 6 hours in a day in the span of a week from Monday to Friday. The evening peak lasts respectively 5 hours in a day (from 01.10 to 31.03) or 3 hours in a day (from 01.04 to 30.09) on weekdays.

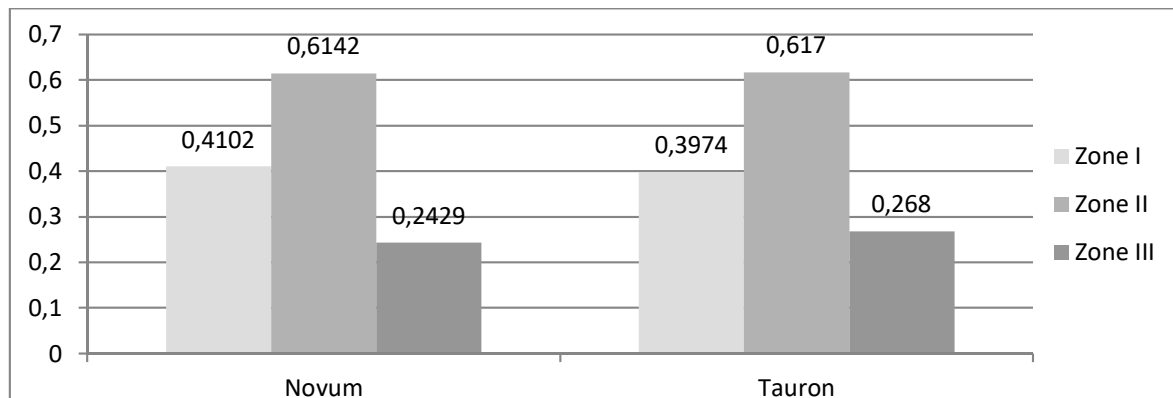


Figure 5. Electricity prices in the G13 tariff as charged by sellers

Source: Own study based on data from sales offers of the entities above as of 28.02.2020

Figure 5 presents energy prices in the G13 tariff for only two entities selling energy in this variant. Price differences between sellers depending on the zone are negligible.

4. Methods

The study concerned not only the consumption of electricity by individual appliances in the household, but above all the costs that this consumption generates on a particular electricity sales tariff. Measurement of energy consumption for a given equipment was carried out using a wattmeter as well as to check the correctness of the measurement using a second electricity meter. The measurement for each tested device type fridge, television lasted 3 days, while for the washing machine or dishwasher 3 washing cycles were measured. The study itself lasted a month also concerned the time trend during which a given device works, or the number of cycles it performs. Of course, both the time of use and the number of work cycles of a particular device will vary depending on the size of the house and the number of people in a given household. The data obtained after a month's study enabled the development of a summary listing the most common household appliances as well as the time or number of cycles of their work. This information was compared to generally available energy prices on the market in individual tariffs, which enabled the calculation of energy purchase costs in a given tariff. Such knowledge allows a household to optimally manage costs by adapting its energy consumption to the guidelines imposed on a given tariff.

5. Results

Energy bills may be small or huge (Pacudan, Hamdan, 2019). There are numerous factors impacting the final amount on an electricity bill such as (Zhang et al., 2019):

- energy class of the appliance,
- tariff,
- energy seller,
- when a given appliance is used.

The simplest way to cut electricity bills in a household is to replace obsolete equipment that consumes a lot of energy by new one with the highest energy class A+++ (Niu et al., 2019). However, this is not a cheap solution, and not every household can afford it. It is by far cheaper to change the energy supplier or the tariff. The Table 3 presents monthly costs of using electronic equipment when using tariffs G11, G12 and G12w. A month is assumed to have 30 days with 21 weekdays and 9 weekend days.

Table 3 presents electricity consumption by a household in three energy tariffs. In the month covered by the study, a household consumed 491.5 kWh. The most energy, i.e. as much as 240 kWh, was used to produce domestic hot water, whereas the least electricity was consumed by an electric kettle. If this consumption was in the G11 tariff, the monthly electricity bill would come to around PLN 293.96. In the case of the G12 tariff, it would come to PLN 342.64 if the electricity was consumed in peak hours, and PLN 146.66 - beyond peak hours. In the case of the G12w tariff, if electricity was purchased only in zone I, the bill would come to PLN 375.75, while if it was only in zone II - PLN 143.61.

Table 3. Monthly costs of using electrical appliances in three tariffs

	Monthly operating time	Tariff	Energy consumption kWh	Energy cost PLN	Energy consumption in a zone, PLN	Average cost	
Fridge	Continuous	G11	Round-the-clock	21.6	0.5981	12.9186	12,9186
		G12	Zone I	12.6	0.6972	8,7847	11,4703
			Zone II	9.0	0.2984	2.6856	
		G12w	Zone I	8.820	0.7645	6.7428	10,4771
Zone II	12.780		0.2922	3.7343			
Washing machine	23 washing cycles	G11		16.8		10,0480	
		G12		-		11,7129	8,363
				-		5,0131	
		G12w		-		12,8436	8,8762
	-			4,9089			
Dishwasher	15 washing cycles	G11		14.4		8,6126	
		G12		-		10,0396	7,1682
				-		4,2969	
		G12w		-		11,0088	7,6082
	-			4,2076			
Induction hob	30 hours	G11		105		62,8005	
		G12		-		73,206	52,269
				-		31,332	
		G12w		-		80,3675	55,5242
	-			30,681			
Oven	20	G11		40		23,924	
		G12		-		27,888	19,912
				-		11,936	
		G12w		-		30,58	21,134
	-			11,688			
Boiler	120	G11		240		143,544	
		G12		-		167,328	119,472
				-		71,616	
		G12w		-		183,48	126,804
	-			70,128			
Iron	4	G11		8.0		4.2672	
		G12		-		4.8696	3.462
				-		2.0544	
		G12w		-		5.4632	3.7336
	-			2.004			
Electric kettle	5.5	G11		5.5		2.9337	
		G12		-		3.3478	2.3801
				-		1.4124	
		G12w		-		3.7559	2.5668
	-			1.3777			
Hair dryer	6	G11		9		4.8006	
		G12		-		5.4783	3.8947
				-		2.3112	
		G12w		-		6.1461	4.2003
	-			2.2545			
TV set	150	G11		16.5		8.8011	
		G12		-		10.0435	7.1403
				-		4.2372	
		G12w		-		11.2678	7.3251
	-			3.3825			
Lighting	90	G11		15		8.001	
		G12		-		9.1305	6.4912
				-		3.852	
		G12w		-		10.2435	7.0005
	-			3.7575			

Source: Own study

6. Conclusion

The above research has shown that by purchasing as much energy as possible in the second zone of the G12W tariff, it can significantly contribute to lowering the electricity bill for a household. However, due to separate hours of the second zone, it may prove very burdensome. The study shows that in order to preserve the profitability of using the G12W tariff, a minimum of 50% of energy in the second zone should be purchased. If you purchase less energy in the second zone than 50%, using the G12W tariff becomes unprofitable and such a household should use the G11 single zone tariff. The study also shows that equipment working 24 hours a day, such as a fridge or central heating boiler, works best in a dual-zone tariff.

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4. TIME AND COST EFFICIENCY OF TRANSPORT WITH REGARD TO BUSINESS TRIPS – CASE STUDY

Abstract: Management efficiency is an important economic category used for analyzing and optimizing the way enterprises operate. Optimization deals predominantly with costs, but is also used with regard to the time required for specific tasks to be completed. A simultaneous satisfaction of these, and other, conditions allows for efficient management of the organization's activities. Consequently, this paper aimed to analyze the time and cost efficiency of business trips using company vehicles and public means of transport. The study made use of data obtained from an enterprise headquartered in Warszawa. Its employees made several business trips a month to the company's branch offices in every province capital in Poland. The management wished to develop an optimization plan for the time and costs consumed by such trips. After adopting the necessary assumptions, a summary of data was arrived at that enabled a rational choice to be made between the need to cut the costs of posting employees and the duration of their business trips. The outcome of the study was planned to serve as practical tool for implementation.

Keywords: costs, efficiency, transport, trip duration.

JEL Classification: R41, R42

1. Introduction

Management efficiency is an important economic category used for analyzing and optimizing the way enterprises operate. Planning decisions often entail compromises between contradictory goals, with the business owner usually having to choose between the time required for task completion and the costs involved. Therefore, efficiency is perceived differently depending on the organization's overall objectives.

Transport efficiency can be looked at from a number of perspectives – that of a service provider, a customer or a government, or from the point of view of sustainable development of the enterprise. Efficiency will always mean more or less the same thing, but the emphasis may be shifted from a strictly financial aspect to a social or environmental one depending on the adopted perspective (Bokor, Markovits-Somogyi, 2010). In this paper, the focus is on the time and cost efficiency of transport.

The study made use of data obtained from an enterprise headquartered in Warszawa. Its employees made several business trips every month many branches of the company in every province capital in Poland. The management wished to develop an optimization plan for the time and costs consumed by such trips. Thus, the study aimed at analyzing the time and cost efficiency of business trips using company vehicles and public means of transport. The results obtained will be used in the company's efforts to effectively manage business travel policies. The analysis was commissioned by the entity and therefore the nature of the study is strictly practical.

2. Literature Review

Efficiency is a popular subject of discussion and analysis, and thus calls for a detailed description. However, the author's analysis of literature indicates that although the concept of efficiency is explored in numerous sectors of management, achieving its unequivocal definition is difficult, if not impossible. Therefore, only some of the available definitions are presented further in the paper.

Efficiency can be regarded as the ability to produce a desired effect, product, etc. with a minimum of effort, expense or waste (Goldman, Sparks 1996), but also „efficiency is how effective a given

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process is in converting inputs to outputs” (Nash, Weidmann, 2006). The simplest definition of efficiency describes it as the ratio of achieved effects to incurred expenses and, according to the principle of rational management, the greater the effect per unit of expenditure the higher the effectiveness (Hajduk, 2018). It can thus be accepted that efficiency is a ratio of effects to expenses incurred that results from prior effort.

Similar problems accompany attempts to define transport efficiency, or time and cost efficiency of transport. O’Sullivan describes transport efficiency as a matter of meeting the needs for movement at the least social cost (O’Sullivan, 1980). As for time efficiency, it can be defined as a measure of performance ensuring a minimum waste of time (Archer, 2010). One of the definitions of cost efficiency claims that full efficiency is achieved by a decision-making unit when, and only when, none of its inputs or outputs can be improved without worsening some of its other inputs or outputs (Cooper, Seiford, Zhu, 2004).

For the purposes of the present paper, it was assumed that time efficiency of transport was a ratio of the length of the journey driven in a passenger car or travelled on a train to the duration of the journey to the given destination. As for cost efficiency, it was treated as a ratio of the length of the journey driven in a passenger car or on a train to the cost of the trip to the given destination.

Time and cost efficiency of transport has been the focus of analyses in numerous papers (Barczak 2019, Baltazar, Jardim, Alves, Silva, 2014; Baron, 2010; Rohacs, 2010), although most of them are limited to air transport. The efficiency of road transport has been researched by, for instance, Walter (Walter, 2009), whose studies concentrate on cost-related aspects. Efficiency is studied with the use of, for example, indicators (Graham, 2008), or a parametric approach (Cullinane, Wang, Song, Ji, 2006). Many other papers make use of the DEA method in transport efficiency analyses (Pina, Torres, 2001, Sow, Oukil, Ndiaye, Marcos, 2016; Tran, Bhakar, Bunker, Lee, 2016; Bokor, Markovits-Somogyi, 2010). Clearly, this list is not exhaustive, as sources discussing efficiency abound.

3. Methodology

For the purposes of the present study, the following assumptions were made:

1. With regard to trips by passenger cars:
 - the shortest routes (at the same time offering the shortest travel times) were selected for the analysis,
 - it was assumed that no road events were to delay the passage,
 - a maximum of two persons were to travel to the same city,
 - the average price of E95 gasoline was adopted (Data based on the macroeconomic indicator database at www.bankier.pl (access: 04//12/2019). Average price of the E95 petrol at Polish filling stations in November 2019 was PLN 4.95 per liter.),
 - the cost of travel by passenger car included possible motorway toll charges;
2. With regard to trips by train:
 - direct connections were assumed,
 - it was assumed that no delays were to happen,
 - no ticket discounts were allowed – all employees bought regular tickets,
 - the average ticket price for the given route (the prices from all carriers were averaged) and average travel time were used - applicable at the time of analysis.

The situation of there being no car immediately available to the employees was not allowed. Moreover, it was assumed that there was no need to carry anything else but hand luggage, and that all journeys were round trips (the costs and duration of both inbound and outbound travel were accounted for).

The employees had ten passenger cars at their disposal:

- Ford Focus (1.6 petrol, 105 hp, average combined fuel consumption: 7.0 L/100 km) – 4 pieces,
- Skoda Octavia II (1.4 petrol, 122 hp, average combined fuel consumption: 7.3 L/100 km) – 4 pieces,
- Opel Astra (1.4 petrol, 100 KM, average combined fuel consumption: 7.3 L/100 km) – 2 pieces.

In order to analyze the costs of rail travel, early morning departures from Warszawa were considered aiming to avoid the necessity for the employer to pay for overnight accommodation. If possible, the return journeys began at 3 pm – 4 pm. Trips to Gorzów Wielkopolski, Rzeszów and Szczecin made it necessary to book accommodation due to a lack of suitable rail connections.

4. Results

Figures from 1 to 4 present an analysis of the time and costs of travel by car or by train, according to the aforementioned assumptions. No time (An analysis of time efficiency indicator for the same destinations is presented in the paper: Barczak A., Time efficiency of transport in Poland, Research Journal of the University of Gdańsk, Transport Economics and Logistics, Vol. 81 (2019), <https://doi.org/10.26881.etil.2019.81.02>, p. 19-27) or cost efficiency indicators were determined, because the enterprise studied wished otherwise. According to the company’s management, indicators posed more difficulties in interpretation.

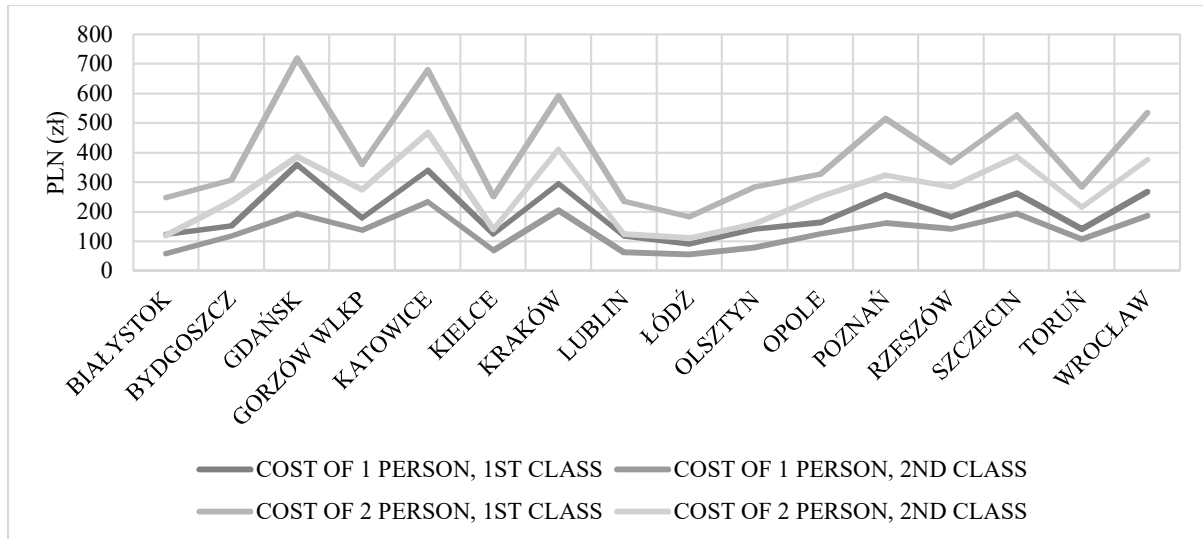


Figure 1. Average cost of rail travel

Source: developed by the author based on the passenger train timetable, www.rozklad-pkp.pl, access: 10/12/2019

The average cost of rail travel presented in Figure 1 is shown for a first or second class trip by one or two persons.

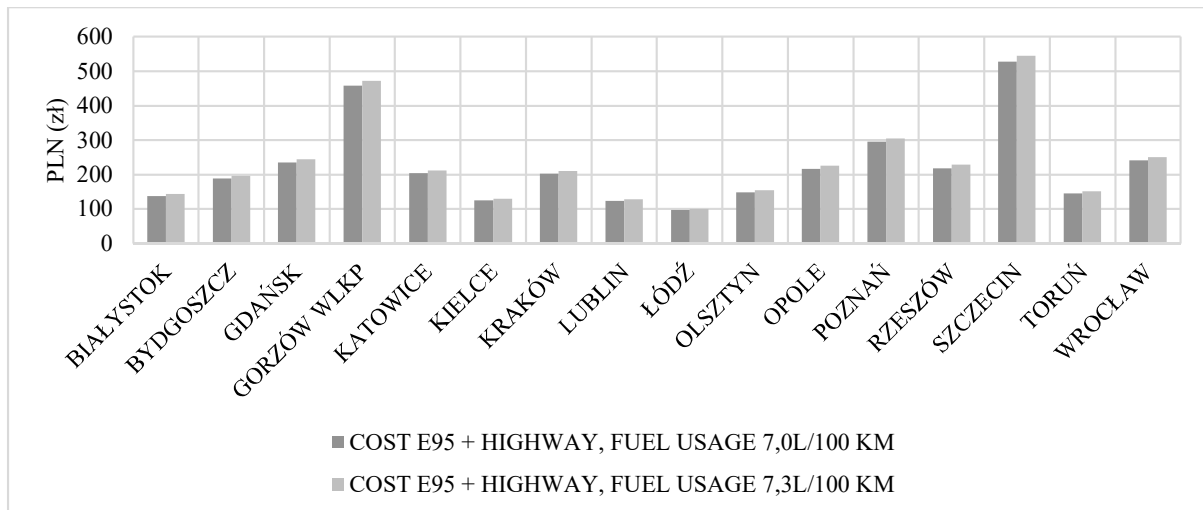


Figure 2. Average cost of passenger car travel accounting for possible motorway toll charges based on data from www.autostrada-a2.pl/payments (access: 09/12/2019)

Source: author’s own study

An analysis of the average cost of a trip by passenger car is presented in Figure 2. The average fuel consumption of the cars used by the enterprise did not cause significant differences between the costs generated by the individual cars. Obviously, the cost of travel by one employee equaled the cost of travel by two employees.

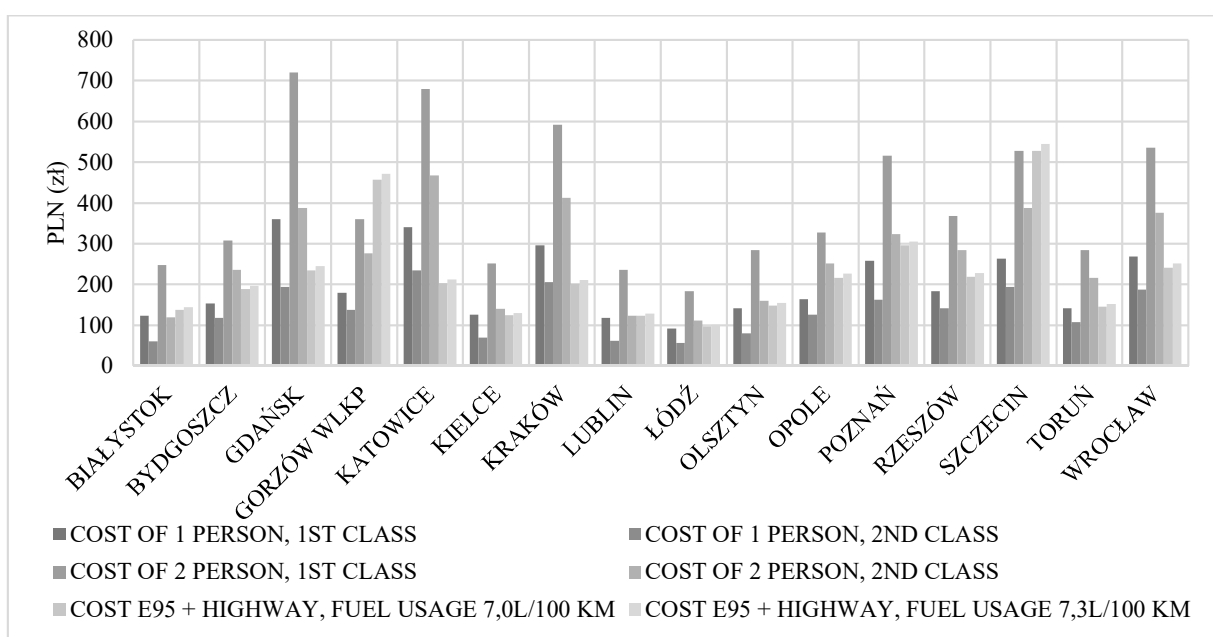


Figure 3. Comparison of the costs of travel to different destinations

Source: author’s own study

A comprehensive summary of the cost of travel by one or two employees, depending on the chosen mode of travel, is shown in Figure 3. The largest cost deviations were observed for the connections from Warszawa to Gdańsk, Katowice, Kraków and Poznań, which was due to the fact that these connections were served by the Pendolino high-speed train. The cost of travel by that train was almost 3 times the normal fare in case of a first-class ticket (Gdańsk – 2.79 times, Katowice – 2.83 times, Kraków – 2.94 times, Poznań – 2.49 times, Wrocław – 2.69 times) and almost 2.5 times the normal fare in case of a second-class ticket (Gdańsk – 2.38 times, Katowice – 2.42 times, Kraków – 2.50 times, Poznań – 2.84 times, Wrocław – 2.31 times).

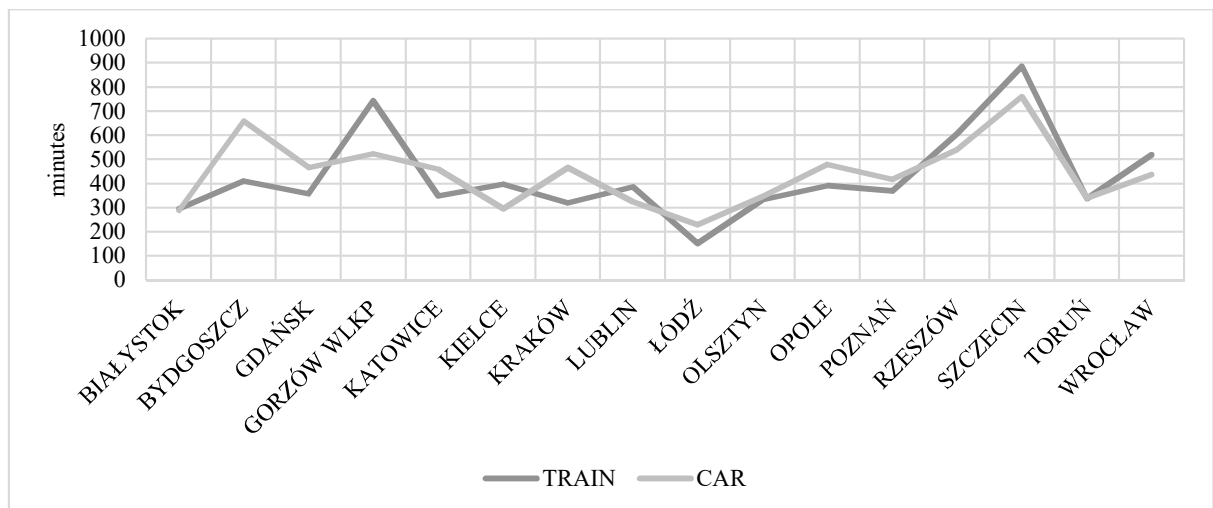


Figure 4. Comparison of the duration of travel to different destinations

Source: author’s own study

Figure 4 presents average times of travel by individual means of transport. The most significant differences between the times of travel could be observed for the trips from Warszawa to Bydgoszcz (a journey by train was 246 minutes shorter), Gorzów Wielkopolski (a journey by passenger car was 219 shorter), Kraków (a journey by train was 146 minutes shorter) and Szczecin (a journey by passenger car is 127 shorter).

5. Conclusion

Table 1 presents the proposed itinerary accounting for the cost and time of travel. Taking into account the need to cut costs, a version offering lower costs and shorter times was considered in the first place.

Table 1. Itinerary for most time and cost effective trips

Destination	One person		Two persons	
	Lowest cost	Lowest time	Lowest cost	Lowest time
Białystok	train class I and II	car	car	car
Bydgoszcz	train class I and II	train	car	train
Gdańsk	train class II	train	car	train
Gorzów Wlkp.	train class I and II	car	car	car
Katowice	car	train	car	train
Kielce	car	car	car	car
Kraków	car	train	car	train
Lublin	train class I and II	car	car	car
Łódź	train class I and II	train	car	train
Olsztyn	train class I and II	train	car	train
Opole	train class I and II	train	car	train
Poznań	train class I and II	train	car	train
Rzeszów	car	car	car	car
Szczecin	train class I and II	car	car	car
Toruń	train class II	train	car	train
Wrocław	train class II	car	car	car

Source: author's own study

An analysis of the timetable showed that rail connections offered from Warszawa to Gorzów Wielkopolski, Rzeszów and Szczecin did not allow the passengers to make it to these destinations early the same day. Therefore, it turned out necessary to book overnight accommodation. In the case of travelling to Gorzów Wielkopolski, the cost of a first or second class train ticket for one person together with the accommodation cost was lower than the cost of travel by passenger car. However, if two employees were to embark on a journey it was preferably to be undertaken by passenger car. In case of a trip to Rzeszów, the combined cost of accommodation and train journey (both for one and two persons) exceeded the cost of a trip by car. As for a trip to Szczecin, one person travelling can choose either a first or second class ticket which, even if combined with the cost of accommodation, will still be cheaper than a trip by passenger car. The same, however, is not true for two persons travelling, as in that case a trip by passenger car will be more cost-effective.

The connections served by the Pendolino train offered a substantial reduction of travel time. However, it must be remembered that the tickets for this high-speed rail service cost almost three times as much as a regular fare. This choice, while increasing the time efficiency of the trip considerably, decreased its cost efficiency.

The summary presented above facilitates a rational choice between the need to reduce the costs of posting employees and the duration of business trips. The research results obtained are of an implementation nature, but one must take into account changes in fuel prices and train ticket prices. Therefore, both costs and transit times must be constantly monitored.

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5. EMPLOYMENT AND LIFE EXPECTANCY OF OLDER PEOPLE IN SLOVAKIA AND EUROPEAN UNION

Abstract: Population ageing and age management policies to extend working life of older people is a managerial issue in European countries. The aim of the paper is examining the percentage and absolute employment rates and life expectancy of older people categorized into four age groups from 55 to 74 by sex in Slovakia compared to the European Union in 2012, 2014, 2016 and 2018. We record an increase in percentage and absolute employment and life expectancy from the data obtained and recalculated for selected age groups of males and females in Slovakia and the EU 28 from the databases of the Statistical Office of the Slovak Republic and Eurostat. The values in Slovakia are lower in comparison to the EU 28. There is a significant increase of employment of females by 0.02 in the 60-64 age group in Slovakia for the reported period. There is a significant decline in employment for the 65-69 age group compared to the previous age group 60-64 in Slovakia and the EU 28. These values reflect pension systems. Life expectancy of older people has an increasing tendency in the period under review. Slovak population reaches deeply advanced age with a 16% share of people over 65 years of age. We try to outline possible ways of exploiting the employment potential of older people in the Slovak labour market through improving education of employees, reducing discrimination of employment of older people, especially women, and changing policies aimed at solving the demographic issues.

Keywords: employment, labour market, life expectancy, older people.

JEL Classification: J11, J14, J21, J26

1. Introduction

The paper is divided into four main sections. The second section is focuses on current issue of ageing population in relationship to employment of older people in Slovakia and European Union. Age management of older people in cohort 55-74 is a challenge for European countries because it seems to be necessary to extend working life as the populations are ageing and because of pension system changes as well. The third section fills the research gap with examining the percentage and absolute employment rates and life expectancy of older people categorized into four age groups from 55 to 74 by sex in Slovakia compared to the European Union in 2012, 2014, 2016 and 2018. We discuss the findings of research. The last section concludes the findings, indicates advantages, limitations and possible applications of the research.

2. Population Ageing and Employment Situation

The United Nations examining the aging population states that “population ageing is a challenge for many countries around the world, including countries in Europe. The share of people aged 60 or older in the global population is expected to rise from 12% in 2015 to 22% in 2050, and from 24% to 34% in Europe” (as cited in Hardy et al., 2018, p. 69). Dudel and Myrskylä (2017, p. 2102) consider population ageing the major global challenges of the twenty-first century. Lutz et al. claim that “population ageing will accelerate particularly in Central and Eastern European countries, where the employment rates among older workers are lower than in Western European countries” (as cited in Hardy et al., 2018, p. 69). Komp-Leukkunen (2019, p. 2) in her study about life-courses describes modern Western societies as “centered on paid work” and therefore suggests “a tripartite structure: youth is dedicated to socialization and education, which prepares for paid work; middle age is when people work for pay; old age is the time of retirement, after people have withdrawn from paid work”. Principi et al. (2018, p. 57) describe that towards the phenomenon of an aging population came the

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concept of successful or productive aging, which developed especially in the United States of America on “a neoliberal emphasis on personal responsibility and signal the expectation that older people will continue to contribute to society rather than being a burden on health and welfare services”.

Slovak population as of January 1, 2018 was 5,4 millions inhabitants (Cerulíková, 2019, p. 8). According to demographic analysis, the population of the Slovak Republic is aging (see Figure 1). The age average increased. While in 2012 it reached 39.3 years (Škrabáľková, 2014, p. 1) in 2018 it was 40.82 years (Statdat, 2019). Forecast of the Demographic Research Center for 2060 is more than 49 years (Epale, 2019). The total fertility rate before 1980 was 2.5 children per female (Bútorová et al., 2013, p. 48) while in 2017 in Slovakia there was 1.6 children per a mother in her reproductive age 15-49 (own calculation based on Data Cubes, 2018). Ageing population definition by World Health Organization says that “the aging population means increasing proportion of older people with a decline in the percentage of children. According to the UN, a population is considered old when the share of population aged 65 and over is more than 7% of the total population. When the proportion exceeds 10% of the total population, this means the population is entering the phase of advanced age” (as cited in Łaszkiwicz, Bojanowska, 2017, p. 77). The percentage of the population of the Slovak Republic over 65 years of age in 2018 is 16% (own calculation based on Data Cubes, 2020) what is the phase of advanced age.

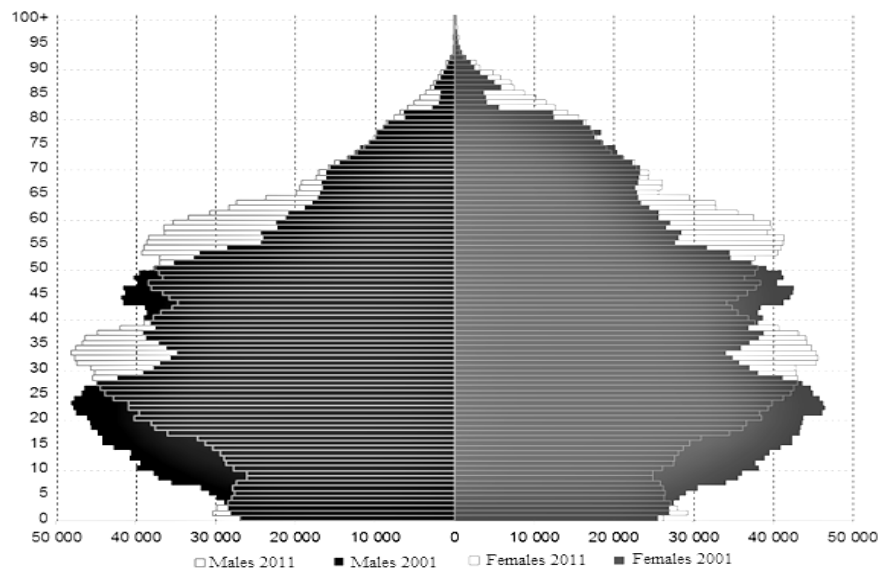


Figure 1. Age structure of the population of the Slovak Republic in comparison with 2001 and 2011

Source: Statistical Office of the Slovak Republic, Population and Housing Census 2001, 2011 (*MINV*, 2013, p. 9)

Natural population growth decreased year-on-year during 2018 (Ústredie ŠÚ SR, 2019). Mrúzová (2014) notes that “over the past 50 years, we have seen changes in the population of Slovakia related to the numerous and proportional representation of seniors. The average age of the population has increased and the average age of a person has increased by twenty years. The share of seniors has doubled, which has a significant impact on the population structure”.

Government of the Slovak Republic needs to address many areas of social life more urgently than previously considered. This is particularly about exploiting the labour potential of older people in the labour market as the current social system in particular pension insurance. It currently indicates insufficient incomes in the form of old-age pension contributions that means an insufficient number of workers and therefore taxpayers. People engaged in social insurance consider that pension savings through the second and third pillars will not be sufficient, and therefore a discussion on another form of social security has developed for instance unconditional basic income is a reality in some countries in the form of an experiment or as a legal claim based on citizenship (Woś, 2017). The same issue solves governments worldwide. Raemdonck et al. comment on it that “governments are taking more and more policy actions to encourage ageing workers to extend their working lives and their employer to retain them” (as cited in Midtsundstad, Nielsen, 2019, p. 49).

Unemployment or employment and the demands placed on the qualifications of the older generation in the field of information systems and the current changes in the labour market, e.g. Industry 4.0, will have to be reflected in their work potential. "Due to population aging in 2050, up to 21% of the labour force is missing in Slovakia" (Epale, 2019). People dealing with this issue propose to link the education of third age universities with practice and focus on the competence education of older people (MINEDU, 2012). Midtsundstad and Nielsen (2019, pp. 48-49) see that "globalisation, digitalisation and technological development are leading to new types of jobs and changes in skills needed for existing jobs and they suggests facilitating access to formal education among older workers which may be an important contribution to extending working lives".

Until recently the index of economic dependence of old people (the ratio of workers to old-age pensioners) was 3,2 to 1 in Slovakia. Future estimation ratio is 1,5 worker per a retirement pensioner in 2070 (MFSR, 2018). Dragan estimates that "for each person aged 65 and older there are going to be 4 persons at working age in Poland 2060. The decrease in labour force may result in crash of pension systems and shortage of workers. One of the ways to maintain an appropriate quality of health care and level of pensions is extending the age of economic activity" (as cited in Ćwirlej-Sozańska et al., 2018, p. 376).

Some economists are of the opinion that even in the current setting of levies and the old-age pension system in Slovakia (three pillars) it will not be sufficient to cover pension expenditure in the future. Although the statutory retirement age has been set at the age of 64 in the future when the distribution of political forces changes it does not preclude this situation from changing. Pawera and Jančíková (2017, p. 98) observe an issue of age in the labour market in Slovakia where "86% of employers have confirmed they do not seek workers older than 50, especially women" (p. 93). Pawera and Jančíková (p. 98) expect that "next decades will bring a lot of challenges in the labour market connected with age issues and changes in the professional requirements to the employees". Hardy et al. (2018, p. 69) researched that "the individuals least likely to retain jobs after the age of 60 were women, those with lower education, working in industry, in medium or low-skilled occupations, and those living with a nonworking partner. The policies aimed at encouraging job retention in Central and Eastern Europe should focus on these groups of workers". Zieliński (2018, p. 334) in research of employment in the Central and Eastern European countries found that "the economic situation has a low impact on the employment level of people in pre-retirement age (employees aged 55–64 years old). In only two countries (Croatia and Slovakia), the correlation coefficient was statistically significant between the GDP change and the change in the employment level of people in pre-retirement age at the significance level of $p < 0.05$. It should be emphasized that occurred in these cases negative correlation that is the level of employment age group 55-64 years reacts inversely to the economic situation." At first glance, we see the advanced age population and the effort to extend the working life of older people. As we can see, it is both an issue for social system in particular pension insurance and a challenge for government to ensure sufficient labour force and exploit the labour potential of older people in the labour market. Therefore, in this work we decided to focus more closely on employment and life expectancy of older people in Slovakia's labour market compared to the EU 28 (European Union of 28 countries) and to monitor their development.

3. Data of Employment and Life Expectancy of Older People in Slovakia and EU 28

This section provides data on employment potential of older people exploited in the labour market and their life expectancy divided into four age groups 55-59, 60-64, 65-69, 70-74 for males and females separately both for values of Slovakia and EU 28 in years 2012, 2014, 2016 and 2018 as shown in Tables 1 and 2. The term employment potential Baránik & Habánik (2004, p. 152) define as: 1. working population (productive population of 16-64 years), 2. population that may not work (it is financially secured), 3. basic service soldiers, mothers on extended maternity leave, persons of working age in prison, homeless people, 4. a population that does not want to work (unemployed, who are satisfied with social benefits for the unemployed). In broad literature authors use term older people (Hardy et al., 2018, Łaszkiewicz & Bojanowska, 2017, Ćwirlej-Sozańska et al., 2018, Neary et al., 2019, Midtsundstad & Nielsen, 2019, Van der Horst et al., 2017, Wahrendorf et al., 2016, Wahrendorf et al., 2017, Stafford et al., 2019, Gautun & Bratt, 2017, Fournier et al., 2018, Whitley & Popham, 2017) for different age cohorts but we have not found a specific age limit. Authors set up their own age limits according to researched samples. The term "older people" MINV (2013, p. 6) uses mainly

in the context of employment relations and their activities in the formal labour market, and the term seniors is used in the context of activities and relationships after reaching retirement age. In this paper, we incline to the age limit of older people 55+ especially for measuring employment age groups. We find labour market as a place where the demand for work by potential employers meets the supply of labour represented by individuals applying for a job, where the purchase and sale are not the individual but their labour force (Tuleja, 2007, p. 147).

3.1. Methodology of Research

To obtain the data we used the databases of the Statistical Office of the Slovak Republic and Eurostat. Some of percentage and absolute age groups values were obtained through calculations because they were not available in the categories listed in the selected databases as shown in Tables 1 and 2. For some age groups neither percentages nor absolute values were available. Through the calculations, we added values for individual categories. Data retrieval limits were that we could not track or calculate some data because we did not have sufficient or reliable data sources. We used following mathematical procedure.

$$a = e - f - g \quad (1)$$

$$z = \frac{x_1 + x_2 + x_3}{100} \quad (2)$$

$$b = \frac{x_1}{z} * g \quad (3)$$

$$c = \frac{x_2}{z} * g \quad (4)$$

$$d = \frac{x_3}{z} * g \quad (5)$$

a = 55-59	(Absolute in Age Group)	g = 60-74	(Absolute in Age Group)
b = 60-64	(Absolute in Age Group)	x ₁ = 60-64	(Percentage in Age Group)
c = 65-69	(Absolute in Age Group)	x ₂ = 65-69	(Percentage in Age Group)
d = 70-74	(Absolute in Age Group)	x ₃ = 70-74	(Percentage in Age Group)
e = 55+	(Absolute in Age Group)	x ₃ = 70-74	(Percentage in Age Group)
f = 75+	(Absolute in Age Group)	z = 0.01	

3.2. Result of Research

Comparing employment in Table 1, the first age group (55-59) of males in Slovakia and the EU 28 shows no significant differences over the period under review, and over the years, the percentage employment in Slovakia grew by 0.07 as in the EU 28. In the second age group (60-64), male employment in Slovakia is below the EU 28 average, but at the same time, it grew by more than 0.07 in the years under review, the same as in the EU 28. In the third age group (65-69) of the post-productive Slovak population, we can see that the proportion has fallen and it is well below the EU 28 average. The fourth age group (70-74) records the lowest values among all age categories and has a rising trend of around 0.01. Absolute figures are rising in Slovakia during the period under review as well as in the EU 28. As far as life expectancy is concerned, the demographic phenomenon common to all age categories of males in Slovakia is that it is lower than the EU 28 average by 1.00 - 2.00 years. At the same time, the average life expectancy in all cases of age groups and territorial units has an increasing character of around one year.

When comparing employment in Table 2, the first age group (55-59) of females in Slovakia and the EU 28 for the reporting period shows different values than for males. The percentage of working females in Slovakia has increased significantly over the years by 0.2 compared to the EU 28, and there is also an increasing trend of 0.1. The employment of females in Slovakia has even exceeded the EU 28 average since 2014. The values in the second age group (60-64) have a markedly increasing trend in both monitored territorial units. During the evaluated years in Slovakia, it is about 0.17 and in the EU 28 by 0.12. However, compared to the EU 28 average, the proportion of working females in Slovakia is much lower than in the EU 28 in the range of 0.1 - 0.16 for the reporting period except for age group 55-59 in 2014, 2016 and 2018. In the third age group (65-69) of the post-productive Slovak population, we see that the proportion of females have fallen and is well below the EU 28 average.

In the period under review, employment in Slovakia is growing by 0.04 and in the EU 28 by 0.02. The fourth age group (70-74) records the lowest values among all age categories and has a rising trend of around 0.01 as well as for males. Absolute figures are rising in Slovakia during the period under review as well as in the EU 28. As far as life expectancy is concerned, the demographic phenomenon common to all age groups of females in Slovakia is that it is lower than the EU 28 average of approximately one year. At the same time, the average life expectancy in all cases of age groups and territorial units has an increasing character of around one year.

Table 1. employment and life expectancy of males in Slovakia and European Union, 28 Year 2012, 2014, 2016 and 2018 by age groups

Males			Age Groups							
			55-59		60-64		65-69		70-74	
Employment	Year	Value	Slovakia	EU 28	Slovakia	EU 28	Slovakia	EU 28	Slovakia	EU 28
	2012	%	71.4	71.5	31.6	40	5.6	14.5	2.4	7.4
	2014	%	73	72.8	30.2	43.7	5.5	15	2.8	7.6
	2016	%	74,	75.3	34.6	47.5	6.9	15.6	2.9	7.9
	2018	%	78.1	78,2	38.3	51.6	9.7	17.2	4.5 ^a	8.4
Employment	2012	1000	130.1	11 289.37	45.0	5 867.45	8.0	1 690.85	3.38	735.80
	2014	1000	135.9	11 851.67	44.51	6 454.25	8.37	1 900.07	4.1	767.82
	2016	1000	134.5	12 545.85	54.36	7 122.47	10.8	2 108.75	4.53	796.35
	2018	1000	136.7	13 306.55	66.3	7 926.17	17.2	2 358.67	4.25 ^a	917.45
Life Expectancy	2012	Years	21.43	23.74	17.75	19.88	14.49	16.22	11.49	12.8
	2014	Years	21.86	24.3	18.21	20.38	14.88	16.72	11.82	13.3
	2016	Years	22.18	24.32	18.43	20.4	15.11	16.8	12.09	13.34
	2018	Years	22.27	n. a.	18.54	n. a.	15.16	n. a.	12.12	n. a.

a – low reliability according to Eurostat (2020) n. a. – non-available

Source: Data and own calculation based on data from Data Cubes (2020), Statdata (2019), Eurostat (2020) and Sisene, E., Kharitonova, O. (2019)

Table 2. Employment and life expectancy of females in Slovakia and European Union, 28 Year 2012, 2014, 2016 and 2018 by age groups

Females			Age Groups							
			55-59		60-64		65-69		70-74	
Employment	Year	Value	Slovakia	EU 28	Slovakia	EU 28	Slovakia	EU 28	Slovakia	EU 28
	2012	%	54.6	57	9.3	25.7	2.4	8.1	1.0	3.8
	2014	%	59.6	59.5	13.1	30.1	3.1	8.4	1.2	3.8
	2016	%	67.1	59.6	20.2	34.1	4.5	8.9	1.69	3.7
	2018	%	74.9	67.1	27.2	37.8	6.7	9.9	2.6 ^a	4.1
Employment	2012	1000	112.1	9 498.72	13.78	4 088.22	3.53	1 068.75	1.48	456.32
	2014	1000	115.9	10 168.82	24.77	4 827.50	5.88	1 213.55	2.23	456.60
	2016	1000	128.7	10 963.80	36.64	5 526.72	8.19	1 370.55	3.06	448.75
	2018	1000	137.6	11 736.57	53.4	6 293.30	14.2	1 554.07	n. a.	541.62
Life Expectancy	2012	Years	26.38	28	22.03	23.66	17.88	19.44	13.93	15.44
	2014	Years	26.92	28.54	22.55	24.18	18.39	19.96	14.41	15.94
	2016	Years	27.37	28.5	22.97	24.14	18.79	19.94	14.87	15.92
	2018	Years	27.27	n. a.	22.89	n. a.	18.72	n. a.	14.76	n. a.

a – low reliability according to Eurostat (2020) n. a. – non-available

Source: Data and own calculation based on data from Data Cubes (2020), Statdata (2019), Eurostat (2020) and Sisene, E., Kharitonova, O., (2019)

3.4. Discussion

Changes in the demographic structure of employment of older people in Slovakia and the EU 28 show that the percentage of employment in selected age groups is increasing. The employment growth of older people in Slovakia could be explained by several pension reforms, when the retirement age has been set at 64 years. At the same time, the researched groups are stronger among age groups of the population. Here the question arises how effective is the effort to prolong the working life of older people? As employment growth in Slovakia correlates with GDP growth, we can expect the employment decline of older people in an economic recession. There is the lack of interest on the part of employers to employ older people in Slovakia in these age groups, especially females. The change in pension policy saw a marked increase in the percentage of females employment by almost 0.2. An alternative for extending the working lives of older people is in their education. According to the data, it is clear that people, after reaching retirement age, prefer active rest to active working life. For males in Slovakia, it is approximately 15 years and for females 18 years in the third life-course, when they left paid work.

4. Conclusion

The issue of older people's employment is topical in Western societies because of the aging of the population. Governments are aware of this phenomenon and are trying to develop policies and apply tools to adequately exploit the employment potential of people of pre-retirement and post-productive age. In our paper, we focused on the specifics of employment and life expectancy of older people in Slovakia and we compared the obtained data with the EU 28 benchmarks. The limitations of the research are low data reliability and data non-availability of several age groups. Despite the fact that in the surveyed values older people in Slovakia are in most cases below the EU 28 average, we observe an increase in both percentage and absolute employment during the period under review. According to studies, this increase can be attributed to Slovakia's GDP growth and to the change in pension policy. The significant increase in the percentage of female employment in Slovakia by almost 0.2 is mainly due to a policy change in which women could have earlier retired according to the number of their children. If governments want to motivate older people to extend their working lives while the life expectancy is raising, they will have to find more effective tools than prolonging the retirement age. It could be a better form of health care, raising the minimum wage, tax policy for older people's employers, tax bonuses for working pensioners, setting up gradual retirement from working life. On the one hand, we have a demographic crisis in the form of an aging population in Slovakia, where the state has minimal incentives to have and raise children (the future productive population). On the other hand, the government is trying to fill the labour market by exploiting the labour potential of older people (post-productive population) by increasing the retirement age, as there is also a problem of covering the cost of paying pension benefits. Taking into account the life expectancy of older people, productivity cannot be expected to increase in the post-productive age. Extension of working life of older people depends on education. People with higher education stay longer in working life than people with lower education. If it is necessary to solve the prolongation of the working life of older people in Slovakia and the effective utilization of their employment potential in the labour market, one of the most suitable tools could be their complementary education.

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6. SOCIALLY BENEFICIAL MARKETING OF INNOVATION PROJECT MANAGEMENT IN RUSSIAN HIGH-TECH MEDICAL FIELD

Abstract: The article suggests a concept of socially beneficial marketing and efforts integration of health care, science, business and state administration as decision instruments on the basis of problem analysis of Russian health care innovation development. The research objective is to work out an assessment and selection algorithm of innovative projects in medicine field applying traditional marketing methods and socially oriented marketing techniques which allow increasing of innovative projects operational efficiency in medicine and health care. The essence and aims of marketing in the medical field are studied; the issues of information-analytical support of innovation implementation projects and innovation promotion roadblocks, together with the ways to overcome them are covered to specify the suggested tool. The authors put forward some principles of socially beneficial marketing of projects in the high-tech medical field. It is concluded that there is a necessity to track health saving technologies, to take into account the principle of client-centeredness as the basis for innovative development of Russian health care. A successful solution of tasks discussed in the article is possible through the development and implementation of innovative-investment projects in the field of high-tech medicine by joining efforts of representatives of various branches of scientific knowledge (in engineering, economics, medical and social sciences), business and government on the principles of mutually beneficial partnership, socially-beneficial relationships that will provide for a synergy effect from the implementation of the project results.

Keywords: client-centeredness, high-tech medical services, innovative project, socially beneficial marketing.

JEL Classification: M31, O32, O35

1. Introduction

The topicality of the chosen research is conditioned by the fact that the scientific discoveries of the mid-twentieth century not only determined the main scientific and technological directions of development, but also became the basis of many innovations in modern life, including health care. In recent years, innovations in medicine have resulted from research at the intersection of several areas of medical science and technology. The appearance of high-tech innovations in osteosynthesis and orthopedics, cardiac surgery, ophthalmology, functional diagnostics, and so on, proves this. Since the scientific and technological level of society is associated with the development of productive forces, with social, intellectual, cultural, physical quality of their subjective component, the health of the population is one of the most important indicators of the society's well-being, the condition of its economic development. The public health is interrelated with human innovative capacity, social, economic, spiritual development of the country. Unfortunately, medical innovation is characterized by the same basic problem as innovation in any other field: the progress from an innovative idea to its

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implementation as a product or service can take several years. In the case of medical innovation project, it is also a significant time spent on various types of tests to prove its applicability for humans, a lot of resources for patenting and certification. Thus, from the point of view of investors, innovative projects in medicine lose in comparison with projects in other areas because of the very long pre-investment phase, which is bringing the results of scientific research up to the level of innovative goods with great commercialization capacity. Despite the existing success of Russian manufacturers in the range of medical devices, apparatus and equipment, Russian medical institutions are not complete with medical equipment properly, up-to-date; the instrument stock does not fully meet modern requirements, entailing serious restrictions on meeting the public demand in medical care. It depends significantly on the following factors:

- the absence of a marketing concept and strategy for the development and implementation of projects, including the consideration of health-saving technologies;
- imperfection of marketing services in the medical industry;
- the immaturity of the supply system and maintenance of medical equipment.

In this regard, the research objective is to work out an assessment and selection algorithm of innovative projects in medicine field applying traditional marketing methods and socially oriented marketing techniques which allow increasing of innovative projects operational efficiency in medicine and health care.

2. Literature Review. Discussion and Methods

The works by Abrishami, Horstman, 2014; Akopyan, 2001; Andreasen, 2002; Al-Zaidi, Al-Zuhairi, Salih, Dunay, 2018; Appelt, Hauser, 2006; Cătoi, Geangu, Gârdan, 2013; Corbin, Kelley, Schwartz, 2001; Formoso, Marata, Magrini, 2007; Gupta, Tyagi, Sharma, 2013; Hastings, 2012; Islam, 2018; Key, Czaplewski, 2017; Lefebvre, 2013; Lega, 2006; Provines, 2010; Saunders, Barrington, Sridharan, 2015; Walsh, Rudd, Moeykens, Moloney, 1993 are devoted to various aspects of improvement of the health management system, including medical business, reveals the essence and aims of the socially beneficial marketing, project marketing in medicine and health care. The researchers have worked out the definitions of medical marketing, formulated the basic marketing principles to be used in health care. They study the components of the medical marketing complex, offer practical guidelines for marketing research and market segmentation. A number of works are devoted to the problems of cause (non-commercial) marketing in medicine, because of the need to optimize the system of compulsory medical insurance created in Russia (Reshetnikov, 1998). However, the research has not sufficiently covered and solved the problem of socially beneficial marketing management of innovation projects in the field of high-tech medicine and health care.

Socially beneficial project marketing for medical innovations may face several problems, and this fact determines some disputability of the idea about the need for marketing in this area.

In the first place, there is concern that the integration of marketing into the health care system and the exploitative approach to healthcare provision poses a threat to the professional status of physicians (Evans, Cruse, 2004). To reduce this risk, marketing-oriented project management of high-tech medicine should be based on the ethics of social marketing, fair competition, reliability and faithful representation of research methods, ways to promote medical products and the consequences of their use.

Secondly, socially oriented marketing of projects faces the problem of mismatch, and often conflict of participants' motivation. Motivation of representatives of state and municipal authorities and private business is the most important factor influencing the success of innovative projects management in the sphere of high-tech medicine. Therefore, project management based on marketing relationships should be complemented by mechanisms of public-private partnership (PPP) to enhance synergies. PPP is one of the approaches to infrastructure development, and is based on the strategic cooperation of the state and business, allowing private business to get involved not only in infrastructure projects, but also in their subsequent operation. The necessity to create an effective management model in the health sector is actualized in the Russian state program "Healthcare development", designed for the period up to 2025. In accordance with this program, the main goal of the state policy in health care is to achieve the possibility of getting medical care and increase in the effectiveness of medical services. PPP can contribute to Russia's self-presentation in the world as a new center for high-tech medical services provision in the following areas:

- support for development programs of leading Russian clinical centers based on PPP principles,
- ensuring high quality of service component of medical treatment in terms of PPP,
- introduction of new forms of management, including the use of socially beneficial marketing.

Attracting funds to healthcare from private sources allows to saturate the material and technical base with modern equipment, to attract new technologies, skilled manpower to medicine, to guarantee the necessary level of client-centeredness. Development of key technologies for federal and regional state needs; involvement in economic turnover and commercialization of research and development results, obtained with the use of state budget funds and development of infrastructure and technologies are special causes of motivation of PPP participants. The reasons for motivating business include increase in mass of profits due to access to public funding, research results and inventions in the public sector and its infrastructure, information and equipment. To improve the productivity of PPP mechanisms at the regional level, it is advisable to standardize the scheme of support and implementation of PPP projects (taking into account regional specific factors) and to provide organizational support by establishment of a PPP coordinator post at regional authorities.

These arguments reduce disputability of the marketing-oriented project management issue in the field of medical innovations and improve the efficiency of management decisions in this direction, resulting in the growth of the number and quality of completed innovative projects.

The study methodology includes a number of principles and specific methods and conceptual ideas. The application of the following methodological principles allowed summarizing of the research main results, having regard to all significant external and internal factors that determine the efficiency of medical innovation projects:

- the objectivity concept, which implies a comprehensive consideration of the factors underlying the phenomenon under study (it avoids a one-sided approach in assessing the nature, applicability, boundaries and tools of socially beneficial marketing in the health care sector);
- the consistency principle allows to treat the nature and mechanism of relations among all participants of medical innovation projects as a whole;
- the principle of ontological analysis associated with the insight into the laws of existence and development of complex socio-economic systems and key factors of their dynamics, the possibility of their targeted changes.

The methods and concepts used are:

- methods of system and logical analysis, allowing to take into account and effectively use the data varying by nature, form and volume, obtained during the examination of source and secondary information;
- ad hoc sociological techniques (Bikmetov, 2014) and methods of marketing research (including expert estimations, observation), focus groups interviews – participants of medical service process (patients, doctors, managers of medical facilities, clerks of Ministry of Public Health of the Republic of Bashkortostan) and participants of the process of medical innovations development (scientists and professors of Bashkir state medical university, scientists-engineers of Ufa state aviation technical university, engineers and managers of plants (manufacturers of medical goods for osteosynthesis and orthopedics), investors and officers of the Ministry of Public Health of the Republic of Bashkortostan);
- statistic analysis of the Russian Federation export-import transactions database on medical goods in 2013-2018;
- an integrative approach that promotes the unification of heterogeneous components of systems in solving innovative problems in health care. Due to the choice of some integrating basis, this approach allows to exclude the potential disunity of science and technology, medicine, authorities and investors;
- the concept of "relationship marketing", focused on the partnership management of relations among all participants of innovative processes in the health sector.

The authors propose to rely on the concept of "relationship marketing" in the management of innovative projects, closely related to the development and needs of the social sphere, in the field of high-tech medicine (Gummesson, 1998; Keller, 2002; Malhotra, Agarwal, 2002; Payne, Frow, 2017; Zhang, Watson, Palmatier, 2016). R. Morgan and S. Hunt believe that relationship marketing refers to all marketing activities aimed at establishing, developing and maintaining successful interactions (Morgan, Hunt, 1994). Positioning of relationships should be considered as a condition of marketing-oriented management of innovative projects in the field of medicine.

3. Results

Thus, reduction of the stage of market launch duration due to the scientifically planned and organized marketing-oriented management of innovative projects can be one of the ways to overcome the problem of the long time of innovation in the field of high-tech medicine. At the same time, the authors mean a system of interrelated goals and programs to achieve them, which are a set of research, development, production, organizational, financial, commercial and other activities, properly organized, by the notion of the innovative project.

The authors believe the number and sequence of marketing innovative project stages in the field of high-tech medicine to be not significantly different from the traditional view, but to have its own characteristics in content and priorities (Figure 1).

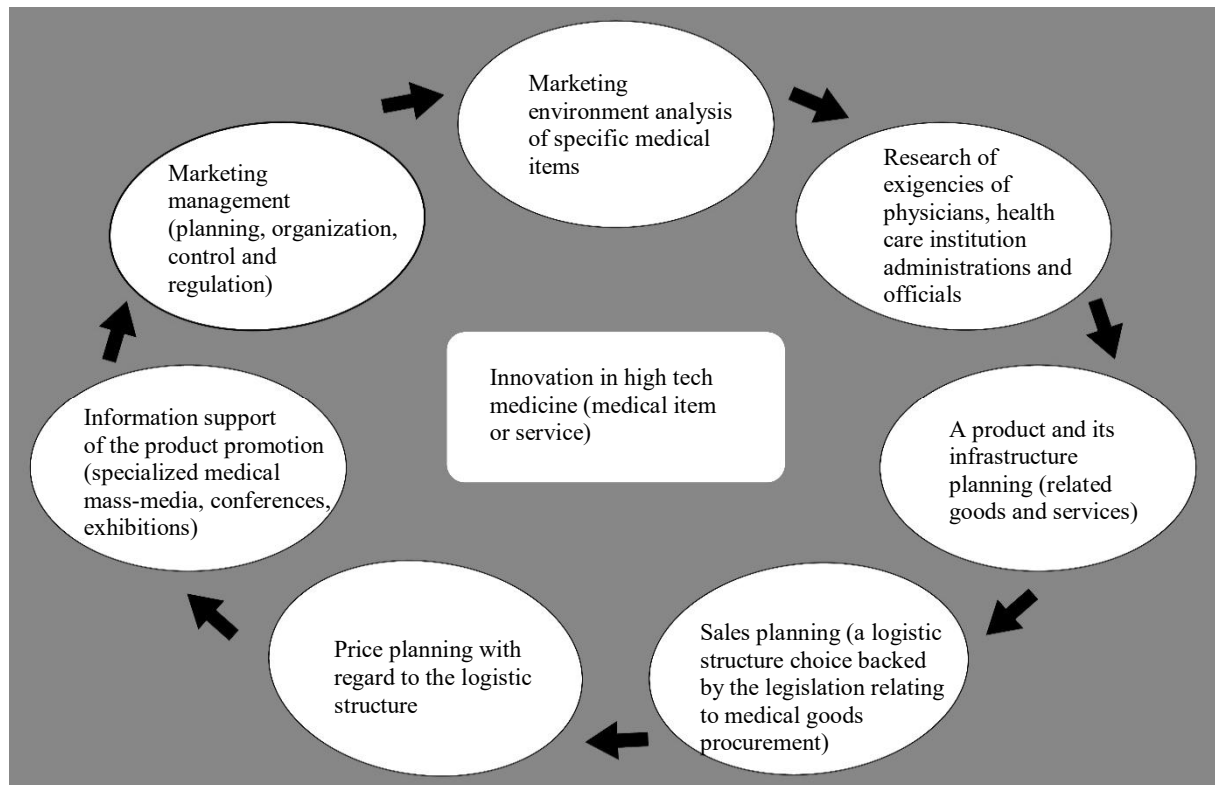


Figure 1. Stages of marketing support of regional project management in the field of high-tech medicine

Source: Figure is based on the results of the investigation conducted by the authors of the article

Fast access to information becomes a pressing issue within the conditions of society informatization, steady and major modifications in many of its aspects. Relevance in understanding this information, its timely and correct use increases the efficiency of decision-making. Therefore, special emphasis should be placed on information support during the project preparation and implementation, using a set of targeted marketing communications, public relations tools, involving a careful choice of means, ways of influence, providing feedback to target audiences. According to the authors, special attention should be paid to monitoring and assessing the impact of information support of innovation and investment projects in medicine in everyday practice, to the positive perception of the idea and the product by medical professionals, government officials as well as by the public. Such control should be organized at the pre-investment phase, during the project implementation – the initial market launch of the innovation and following the results of the mass market launch of the innovation.

The current innovative technologies in the field of medicine allow us to talk not just about lifespan extension, but also about life quality improvement. Such readings as "total lifespan", "active life expectancy", and others related to the concept of "quality of life" (from a medical point of view – "health") are more preferable for working out of various strategic programs for the development of both the medical industry and the region or state, as indicators (goals) of the programs, than the economical variable "income level". Legislative and regulatory documents, state programs,

scientific research put emphasis on such concepts as "health saving", "health saving technologies" and their execution implies the use of medical innovations and decision-making at all levels of social management.

The health-saving technologies designing involves the development of a set of organizational, educational and outreach activities that ensure the maintenance and growth of physical and socio-spiritual health. At present, the national government macrolevel (within the society system), the meso-level of municipal management and the micro-level of particular enterprises and institutions witness the urgent necessity for:

- an independent safety review of the industrial, engineering, managerial and other technologies for health;
- working out of criteria for the implementation of the project social function in medicine and health care (social adaptation, rehabilitation, integration of physically disabled people into society);
- monitoring of public opinion on the problems of people's understanding of the healthy lifestyle essence and attitude to it;
- observance of the employees' rights in matters of protection of their physical and socio-spiritual health. At the same time, it is necessary to analyze and assess the health variations dynamics not only during the period of employment at a particular enterprise, but also the attitude to the health issues of the whole society.

An important factor of the innovation management in the medical field is the impact of innovation on the growth of the regional socio-economic indices. For example, during the elaboration of the project of technology solutions engineering centre (projects of end-to-end turnkey manufacturing facilities) for companies in the medical industry, indices of the "Socio-economic development strategy of the Republic of Bashkortostan for the period until 2030" were designated. The growth of these indicators will be influenced by the engineering centre formation and advance. The indices include: life expectancy at birth (years), the ratio of organizations engaged in technological innovations in the total number of organizations (%), the share of domestic research and invention costs in the gross regional product (%), the ratio of the number of high-performance jobs to the average annual number of employed people (%), the share of high-tech and science-based industries in the gross regional product (%).

4. Conclusion

The suggested algorithm of estimation and selection of innovative projects in medicine field with the help of traditional marketing methods and socially beneficial marketing techniques can be applied both by investors and state structures to make a fulfillment of investment and innovative project decision, resulting in curtailment of decision-making terms and improving both the project realization and its product.

There are limitations to using this algorithm.

1. Breakthrough and radical analogue-free innovations in medicine may limit the usage of this algorithm. That means the absence of statistic on its implementation and use, ambiguity and/or lack of information about advantages and long-term consequences of a medical innovation application.
2. Poor knowledge of the principles of marketing thinking by the main participants of innovative projects in the field of health care (medical personnel, design engineers, government officials).

Ensuring innovation efficiency in the field of medicine and health care will require solving of a number of tasks:

- changes in the management guidelines of all structures related to the production of medical products and services;
- introduction of socially beneficial marketing based on the principles of relationship marketing, involving a comprehensive study and consideration of the community needs for medical services;
- reevaluation of the state structures' attitude not only to the medical sphere, but also to those ones that provide for production of medical products and services;
- financing scale-up of the facilities and resources of the entire healthcare system;
- passing "the threshold of distrust" of all the participants of medical service process.

The solution of the majority of these tasks requires the acceptance and active use of the principle of client-centeredness, adapted to the peculiarities of the healthcare sector. From the standpoint, taking into account the specific aspects mentioned above, the authors propose to consider the three main components of client-centeredness for the medical sector:

- the process of healthcare delivery and medical personnel;
- health IT;
- backend and external infrastructures of a healthcare organization.

The potential effectiveness of socially beneficial and client-centered projects implemented in the health sector can be characterized by the following results:

- growth of people satisfaction with medical services,
- growth of satisfaction of healthcare staff with working conditions and technical equipment,
- improvement of the medical care quality,
- increase in the affordability of health care.

A successful solution of tasks discussed in the article is possible through the development and implementation of innovative-investment projects in the field of high-tech medicine by joining efforts of representatives of various branches of scientific knowledge (in engineering, economics, medical and social sciences), business and government on the principles of mutually beneficial partnership, socially-beneficial relationships that will provide for a synergy effect from the implementation of the project results. Socially beneficial, client-centered nature of innovative medical projects requires significant state participation in the regulation of market relations in health care, which is expressed in the need to develop a strategic course of the medical services market development, to determine the most efficient directions of the medical services market. The state interests in people's health maintenance favour the provision of a particular person, a target group with medical products and services, and determine the features of demand in the healthcare services market.

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7. CONSIDERATIONS REGARDING THE DEVELOPMENT OF THE ORGANIZATION THROUGH TALENT MANAGEMENT

Abstract: Talent management is a process that emerged in the 1990s and continues to be an important practice by which companies can come to realize that by knowing and involving the talents and abilities of the employees they can attract success in business. Recently there has been an increase in the interest of implementing and developing the strategy for acquiring talents from business leaders. It is becoming increasingly obvious that attracting and retaining the right people is a serious constraint on business success, and for this the talent leaders must have the ability to build more mature talent organizations, capable of both operational excellence and strategic vision. The methodology has a qualitative approach, based on the investigation of the specialized literature, in order to describe the cases of the companies, in which through activities and strategies strongly oriented towards the management of talents, performance was measured. Thus, the development of talent management is achieved through the implementation of strategies for knowing the personality and talents of the employees, knowledge that aims at the correct transposition and valorization of the corresponding tasks and the techniques of reward and loyalty. The contextualization of the labor market and the outline of some procedures for the selection of human resources constitute the main support in identifying talents, a stage which, in the context of consolidating the role of talent management in organizations, acquires a strategic character.

Keywords: organizational development, performance, strategies, talent management.

JEL Classification: J24, M12

1. Introduction

The economy of today is in a dynamic paradigm both from the perspective of people and organizations. Talents are the key element in the profitability and sustainability of the business. Whether it is entry level, middle or top management positions, or whether it is highly specialized or less specialized positions, talent management is a critical process in any organization (Dragan, 2016).

Talent management is considered to be a new organizational priority in managing people, being proposed by practitioners as an innovation with a considerable interest in research and debate (Al Ariss, Paauwe, 2014).

Talent management begins with a robust and measurable selection process that responds to the need for talent acquisition in accordance with the business strategy. This process is continued with the identification and preparation of the talents in the organization, the proper management of the career and, last but not least, with the identification and preparation of the nursery of the leaders and successors, to meet the needs of the organization in the short, medium and long term.

Talent management, as a process, implies the existence at organizational level, of a grid to identify the caliber and sub-standard performers, to recognize the strengths and areas to improve in the context of the role of each team member. Thus, in the organization it is necessary to identify specific actions, which should be addressed to those with performances under standards and those from the talent nursery to develop what and where it is needed.

The processes of selection and development of well-defined and correctly articulated talents add measurable value and have a significant financial impact on organizations. Talent management from the perspective of result generates: decrease of personnel fluctuation, improving the company's reputation, increasing sales, improving leadership and creating a strong performance – oriented culture. All of this can be achieved through the selection, retention, training and promoting talents.

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High potential employees play an important role in the success and sustainability of teams and organizations. Before organizations can identify and develop high potential employees, it is necessary to define the potential in a manner applicable to all departments.

Therefore, the purpose of this paper is to highlight how organizations can develop through talent management.

2. The Conceptual Framework

2.1. Why do Organizations Need Talent?

New social technologies, the emphasis on emotional intelligence and the existence of specialized tools for optimizing talent management redefine the role of human resources.

In recent years, there have been visible movements in terms of human resources that influence the fate and role of the human resources function in organizations.

Increasing employee mobility globally, especially among developing countries, creates a talent shortage, mobilizing human resources departments to focus all their resources to cope with them.

Since the emergence of the phrase “war for talent”, a great emphasis was placed on the concept of “talent” by both practitioners and researchers. Part of the reason for this intense focus on talent is because it is one of the most important resources in terms of organizational success. Goffee and Jones suggested that talented employees are able to combine their potential (good ideas, knowledge and skills) with other resources that the organization offers, to create “added value for the organization” (Goffee & Jones, 2007). Similarly, Lawler mentioned that the right talent is the building block when it comes to creating an organization capable of innovating, changing and using it as a source of competitive advantage (Lawler, 2005). Thus, having the right talent in the right position can greatly contribute to the success of the business. Meanwhile, Lunn argued that managers with different levels of talent contribute to the profit of the organization differently, and the contributions and benefits of talent are not just limited to generating profit, but spread to other tasks as well (Lunn, 1992).

Thus, it is clear that talent is an important driver of business success, and this explains why organizations are fighting for the best talent. Dries concludes that the “war for talent” is based on two main assumptions, namely (Dries, 2013):

- the traditional source of competitive advantage based on the knowledge economy loses its advantage, while the source of human talent is a renewable source and cannot be easily copied or stolen by competitors;
- attracting and retaining talented people is becoming increasingly difficult, mainly due to demographic trends.

As has been observed in the practice of the business environment, “without a good talent, most of the other actions carried out by the organization would not have been successful” (Lewis & Heckman, 2006).

2.2. What is Talent?

Highly potential employees that an organization wishes to develop can be identified at appropriate times by their superior motivation (Smyth, Edkins, 2007).

Talent is not an artistic personality and is not a concept related to the entertainment industry, but it defines a top professional, regardless of field or specialization. Talent is the employee who will create value in the organization in which he works and whose skills are indispensable to the success of that company. At the same time, talent gives people the ability to deliver visible performance in certain areas of work and to achieve a better result than people of the same age or with the same experience, having the best personal performance in a consistent manner (Nijs, Sels, 2014).

Ever since ancient times, kings were accompanied by the brightest personalities, from unbeatable generals to priests with mystical powers. Power needs the best in a certain area of expertise.

For today’s companies, talent management involves the coordination of different talents, at the level of human resources. The talent of an employee involves many factors, from qualifications and skills, to potential, personality and motivation. Talent can mean: abilities, skills, strengths, innate abilities; the natural ability, above average, to do a certain thing better than the others; a person with one or more exceptional competencies (Dragan, 2016).

Therefore, we conclude that talent has become one of the most important resources for organizations.

2.3. Talent Management

Global talent management is defined as those organizational efforts for the recruitment, selection, development and maintenance of talented employees in strategic positions on a global scale. A key aspect of this definition is the focus of the organization on a group of key employees. (Scullion, Caligiuri, 2010).

Talent management is a process that emerged in the 1990s and continues to be an important practice, as each company realizes that the talents and abilities of the employees can lead their success in business. In 1997, McKinsey invented the term “war for talent” in response to the shortage of skilled employees in the market and the need for organizations to make serious efforts to manage talent (Michaels, Axelrod, 2001). Previously, the concept of talent management, treated more or less as an administrative process, was strategically removed and has developed into a “continuous organizational practice” that leads to organizational results (Fegley, 2006). The literature reveals that the definitions and the concept of talent management can be grouped into three distinct meanings, as follows:

- first, it is different from the notion of human resources management;
- secondly, the focus is on the development of talent groups, focused on “designing the personnel needs of the employees and managing the progress of the employees through positions”;
- the third meaning refers to the way of managing talented people.

Above all these manifestations and practices on talent management, organizations are facing a new problem, that of losing talent. Due to attracting and recruiting talent in the highly competitive market, the risk of losing them in front of competitors appears as a serious threat to the progress of organizations (Sutherland, Torricelli, Karg, 2002).

Each organization practices different sets of strategies to put an end to this, such as maintaining work-life balance, but attracting and retaining talented employees is becoming increasingly difficult (Qu, Zhao, 2012). To date, researches has only indicated problems related to talent management, such as skills shortages, and they have been ongoing since the last decade (Clarke, 2001). Today’s talent management practices, according to prospective studies, can be characterized as manager – oriented, as compared to criticism in the field of human resources management (Delbridge, Sengupta, 2011). In recent years, there has been remarkable research in global talent management, having only a theoretical basis (Farndale, Sparrow, 2010). Changing demographics and psychological trends are not enough to understand the phenomenon of failure (Dries, 2013). Focusing on understanding the current goal of the employee perspective and analyzing talent management practices for the human development perspective will certainly serve as a cost-effective strategic approach to demonstrate the organization’s values.

Talent management deals with everything related to human resources, technological and administrative processes, referring to issues such as: recruitment, selection, socialization, maintenance, development, deployment, planning and analysis. In other words, talent management is associated with the acquisition and development of employees and managerial processes, being described as “talent optimization” (Schweyer, 2004).

Talent management consists of identifying the talent and then aligning with the work roles in order to maximize the involvement of individuals. Consideration is given to aligning the roles that match the strengths of the employees. Thus, talent management will carry out a series of activities integrated in the organization in order to ensure the attracting, maintaining, motivating and developing current and future talented employees (Hajikarimi, Soltani, 2011).

According to Blass, talent management can be defined as “additional management, processes and opportunities that are made available to people considered talented in the organization (Blass, 2007). In a competitive environment, each organization realizes that the talents and abilities of the employees are the most important driver for its success. Attracting and retaining good employees is an emerging problem, and therefore organizations are investing tactically to overcome the related issues, adopting various strategies for maintaining a healthy talent pool (Lyon, Marler, 2011).

Also, talent management can be referred to as a practice in human resource management that aims to balance the multidirectional forces of labor markets, employee needs and economic concerns (Mellahi, Collings, 2010). Talent management is defined by the following stages:

- analysis of organizational needs regarding talents;

- identifying and discovering the right talents;
- talent recruitment;
- identifying the optimal salary package;
- training and development of experts;
- evaluation of talent performance;
- building the career plan;
- applying a retention strategy.

The stages mentioned above have a single aspect that unifies them and is represented by the organizational culture. This defines management processes, tactics and manners, which allows talent management to become a fluid, clean strategy that fits the culture, mission and values of an organization.

A significant amount of talent management efforts are directed towards managing the talent pool and developing career trajectories of the top talent in the company. This may involve career planning, development programs, and a host of other strategies that can be implemented for high-potential or high-performing employees (Cappelli, 2009).

Human resources specialists have the responsibility to identify and coordinate the talents within the company. Therefore, it is about a complex process, in which each step is equally important. The success of this process is ensured by following some basic principles:

- hiring the right people: not only the expert must bend to the culture of the company, but also the company must be the ideal environment for his personal development;
- keeping promises: it is vital for building a long-term professional relationship;
- recognition of merits: appreciation, motivation and rewards at the right time encourage performance;
- a positive working environment: the talents need the ideal conditions for the maximum development of the potential;
- growth opportunities: there will always be competition for talented employees, who choose to stay only where they can express themselves and where they can experiment;
- recreational activities: several responsibilities must be accompanied by complementary fun activities (team building, free days, providing a recreational space in the company).

Respecting these principles contributes to shaping an effective talent management strategy.

Through talent management, the efficiency of the organization will constantly increase. The discrepancies between the most requested competencies and the skills available on the market will be weaker within the organization. The business objectives will be achieved at a higher level. The resignation rate will decrease and motivation will increase. Talent satisfaction is directly proportional to the satisfaction of the entire organization.

2.4. Challenges and Success Factors in Talent Management

Collings investigated the challenges and opportunities related to talent management in multinationals and described how a combination of global mobility and global talent management can help organizations succeed. He introduced human capital, social capital and dynamic capabilities as theories appropriate for using this (Collings, Mellahi, 2009).

According to Tafti, among the most important challenges and obstacles in talent management are (Tafti, Mojtaba, 2017):

- lack of integrated human resources systems;
- lack of a competence model in organizational strategies;
- lack of strategic alignment between human resources strategies and business strategies;
- lack of professional and specialized managers in the field of human resources;
- lack of an integrated approach to talent management;
- the intangibility of the results of the human resources processes;
- lack of adequate motivational approaches;
- lack of competencies of human resources departments in addressing the challenges of talent management;
- poorly implemented performance management systems;
- saturation of population and labor market;
- gap between supply and demand;

- the slow movement towards privatization and globalization;
- mental and cognitive biases;
- resistance to change among managers;
- gender discrimination;
- nepotism;
- lack of commitment, support and belief of top managers;
- lack of understanding of the importance and significance of talent management;
- lack of commitment to the development of employees' capabilities and careers.

According to Tafti, among the most important success factors in talent management are (Tafti, Mojtaba, 2017):

- use of standard tools and processes of talent management;
- creating pre-support and talent management processes;
- financial analysis of the human resources development indicators;
- integrated talent management program;
- the strategic alignment between the human resources strategies (especially the talent management strategy) and the business strategy;
- organizational structure and hierarchy;
- motivational systems based on the talent management process;
- positive and successful experiences;
- performance management based on the talent management process;
- increasing the stability of management;
- the commitment and support of top managers;
- strategic perspective on the development of human resources;
- the commitment, support and involvement of senior managers;
- talent management as a strategic priority;
- holistic approach to talent development;
- succession planning;
- making rational decisions at the management level;
- developing collaborations.

3. Research Methodology

Our research aims to highlight companies from different fields, which, through strategies and good practices have applied talent management and have achieved remarkable results.

The chosen method is the case study. Thus, have been studied three representative organizations that have adopted talent management strategies to attract and retain the most talented employees, in order to identify how these organizations have gone from a traditional human resources management, to a talent-oriented management.

Therefore, to describe the cases of organizations that have adopted activities and strategies strongly oriented towards talent management, we used the documentation method, so we consulted online documents, press articles, employee forums, etc.

The research through case studies allows to understand the way in which the theoretical-methodological aspects of the management interact with the concrete, pragmatic aspects of a concrete case. In our intention have been taken instrumental case studies, which concern a depth issue, which can support the theoretical developments regarding the definition of talent and talent management in the organization. Specifically, the description of these cases provides detailed and qualitative information on how organizations can move from a traditional management to a one oriented towards talent management, a step that brings the organization to the point where it wants.

4. Results

In order to encourage innovation and compete for top talent, some companies bring radical changes to their cultures and deviate from traditional business practices. Given the speed and scale technology, the way people work and how they have been managed needs to change in order to keep up. Many companies still rely on old talent management methods and policies. However, there are some industry leaders who are not afraid to try something new when it comes to how they hire, fire and manage their people.

Company 1: PriceWaterhouseCoopers (PwC) – is the largest professional services, consulting and auditing company in the world and one of the largest private companies. The company has offices in 157 countries and over 276,000 employees, being one of the most important professional service networks in the world. This is part of the group of the largest audit firms in the world called the Big Four.

In the past, professional services firm PwC required employees to give up any technological projects they were a part of before joining the company. Now, the organization has decided to allow its employees to start or keep their own projects while retaining their jobs at PwC. Leader of digital change PwC said that: “if we wanted to hold the heart and soul of people we would move away from a pool of talents” (Klemp, 2016).

Organizations like PwC are creating more flexible work environments to keep up with today’s changing demands. Allowing employees to maintain their innovative spirit not only benefits them, but also the company as a whole. These changes in human resources management have brought PwC a profit of \$ 42.4 billion and a number of employees of 276,005.

Company 2: Netflix – has been leading the way for digital content since 1997, being the most important streaming entertainment service in the world. It is an American organization based in California, that offers online movies and TV shows.

Patty McCord spoke about the company’s unique approach to human resources in a Harvard Review article (Klemp, 2016). He discusses the need to hire people with the right skills and remove people from positions where their skills do not match. As organizations evolve, the skills needed for different roles may change. On Netflix, if an employee’s skills are no longer adequate to his or her current role, another role will be found for the employee in question and will be released with a generous severance package. Even if someone was a good and loyal employee, Netflix doesn’t believe in wasting time and resources with people who don’t add value to the company.

Another way that Netflix deviates from traditional human resources policies is to have no formal employee review process. A few years ago, the organization made the decision to eliminate formal reviews after realizing that they were too “ritualistic and rare”. The management of the company decided to ask the managers to have regular conversations about performance as part of their daily routines. They believe that it is better to follow the employees’ organic performance, thus maintaining an open communication between the manager and the employee. Following the implementation of these talent management strategies, Netflix announced in 2018 a record revenue of \$ 11 billion, over 6 million subscribers and 7,300 employees.

Company 3: Zappos – is an online retailer of footwear and apparel based in the United States. The company was founded in 1999, inspiring the world, emphasizing that it is possible for an organization to provide happiness to customers, employees, shareholders and the community in a sustainable way.

In 2013, Tony Hsieh, the executive director at Zappos, launched a new radical self-management system called Holacracy (Klemp, 2016). The goal of Holacracy is, essentially, to eliminate the hierarchy and create a workplace where every employee has an equal voice and bureaucracy does not lead innovation. Since the implementation of this system, managers no longer exist. Thus, Zappos is known for such a positive culture and work environment, having a blog dedicated to highlighting and shaping this culture. Zappos wants dedicated, involved and enthusiastic employees who have the right qualities for their company. Even if the high cost of their payment is visibly felt, by promoting long-term talent management, they will have a more productive workforce that brings value to them and can easily eliminate other competitors.

5. Conclusion

The development of the organization through the implementation of the principles and processes specific to the management of talents becomes a constant reality of our days that positions the man and the knowledge in balance with fundamental benchmarks in the business, such as the market and the products. The knowledge of man, in the process of recruiting the human resource, but also in the process of identifying and selecting the human resources, proves to be the most effective strategy in the sustainable development of the organization, generating the foundation of stability in the face of competition.

5.1. Advantages

The experience recently reflected in the field by the big corporations justifies us to conclude that talent management is more than a current, it is a true competitive weapon capable of identifying, attracting talented human resources and empowering talent as a renewable source of the organization.

Effective applied talent management generates net competitive advantages over traditionalist organizations, beyond the external image plus, bringing stability and work balance, in the production process and in the planning actions of the general management.

All these constitute a complex process of development of both the organization and its employees, a framework that is in an objective-instrument-employee symbiosis. Employee career planning, thinking and carrying out talent management, personal and professional development programs or highlighting and self-confidence of employees will bring the expected result in the direction of the rise of collective performance, productivity, quality, all in the an ideal and natural environment.

As a living science, talent management forces us to distance ourselves from traditionalism, hierarchies, bureaucracy, formalism and leads us to attract innovation and nonconformism, including in neighboring branches such as human resources management, favoring communication between manager and employee, knowing the needs and solutions expected by the latter.

5.2. The Limits of the Research

Although the present paper contributes to the enrichment of the general knowledge regarding talent management, certain limits are present, as rumored: the results of the study cannot be generalized to a larger population; the present study considered the description of only 3 representative cases and we cannot be sure that these conclusions can be applied to other organizations.

5.3. Implications of Research

The technological evolution, but also the change of the pace of social mobility, impose a greater rigor on the research community in formulating conclusions or proposals, but this precaution is understood and we tend to eliminate it through the quality of theoretical and human analysis.

Beyond the contribution made to consolidation of general knowledge in talent management, the results and approaches of the paper provoke the interest of the researchers and specialists in the field in deepening the subject and by diversifying the approaches, which can generate directions practically applicable to the organizations.

We consider that the approach and the results presented are capable of translating into reality the proposed research-development objective, in the sense of transposing the innovative principles on the development of the management of its talents and activities, obtaining results in economic and social level.

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8. ANALYTICAL HIERARCHY PROCESS METHOD'S APPLICATION PROPOSAL FOCUSING ON HUB'S SELECTION BY BRAZILIAN AIRLINES

Abstract: The selection of a hub airport, by airlines, is essential to guarantee the necessary infrastructure to carry out the flight operations. This article presents the Analytical Hierarchy Process (AHP) as a potential method of decision making to improve the selection of the choice of an airport hub. The choice of a hub airport considers factors such as location, runway capacity, capacity for handling passengers and availability for multiple destinations are objects of this study that influence the choice of a hub. In this context, the work aims to identify the essential parameters in the establishment of a hub airport by airlines. The method consisted of three stages: the first involved a literature review. The second stage included eleven interviews with aviation specialists. The last step included the use of the Analytical Hierarchy Process to assist in choosing a hub airport. At this stage, three criteria and three alternatives were established. The result showed that Guarulhos airport, in the analyzed criteria, was the most suitable for hosting flight operations.

Keywords: AHP, airlines, airport hub, air transport, decision making.

JEL Classification: C44, 018, L91, L93, M10, R40

1. Introduction

The necessity for instant mobility in the territory requires the improvement of the means of transport. The air sector represents a significant modality in the territorial fluidity and in the social and economic relations of society (Pereira, Silveira, 2008).

According to the International Air Transport Association, IATA (2016), it is estimated that by the year 2035 around 7 billion passengers will be transported by air. In Brazil, airlines carried in 2018 a total of 103 million passengers paid on domestic and international flights. (ANAC, 2019).

For Young and Wells (2014) the airport is essential part of the air transport system. In fact, the airport is the physical place where modal shift occurs from air to ground and ground to air. Ashford et al. (2015) states that airlines in nowadays have greater control of route and frequency services after deregulation, which allowed the installation of airport hubs.

The hubs and spoke air services network exploit economies of scale in aircraft operation. In these network operations, there are more passengers from hub and to hub than on a direct route between individual city pairs. As a result, operators can offer more frequent services at a lower cost per passenger (Daniel, 1995).

In Brazil, air transport is one of the most relevant means of transport, as a result of the country's territorial size and the absence of other high-speed means of transport (Cajueiro et al., 2019). Airlines expect airports to further and support their flight operations and facilitate passenger flow (Ikhmeis, Das, 2019). In this context, with the projections of increased demand for air transport, the choice to operate at airport hubs may be strategic and involve several criteria. Thus, this work aims to characterize airports hubs and auxiliary, through the Analytical Hierarchy Process (AHP) method, the choice of a hub that can serve the airlines, taking into consideration some parameters that guide the literature.

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2. Literature Review

2.1. Air Transport

The evolution of the air transport sector has been influenced by several political episodes. Evolution began with the 1944 Chicago Convention; the deregulation of the United States (USA) market in 1978; the liberalization of the European market in the 1990s, as well as the “open skies” movement between the US and the European Union (Urban et al., 2018).

The transport sector is changing at a rapid pace, attracting the attention of the most diverse economic actors. (Berti, Casprini, 2018). The rapid development of air travel causes increased population and freight mobility, acting as a driver of economic growth (Maltsev, Matveeva, 2018).

Maltsev and Matveeva (2018) understand that with the development of processes and globalization, people's mobility increases markedly. The authors state that the airline industry is related to the development of the global economy. It is emphasized that air transport has the highest speed and mobility compared to other means of transport.

Airport capacity is one of the main challenges for the future development of air transport (Öttl et al., 2013). It is noteworthy that an attractive and effective airport collaborates to make passengers feel better and want to repeat the experience in the future (Borges, Wrubel, Hein, 2017).

The basic assumptions of an airport infrastructure are to provide aircraft access to airspace, facilitate interchange between aircraft and facilitate traffic consolidation. To perform these functions, airports must have infrastructure elements such as runways, taxiways, patios and ground resources for passengers or cargo (Reynolds-Feighan, Button, 1999).

2.2. HUBs Airports

According to Miozzo (2019), airport infrastructure represents an axis of economic growth of a country. An airport is an essential part of the air transport system. (Young, Wells, 2014).

HUB airport is one that stands out in the country or region both for its size and for the attraction of large number of flights, many coming from airports called Spoke system (Almeida, 2012). Hub and spoke structures were instrumental in helping to lower costs and increase the choice of travel available (Wei, Yanji, 2006).

According to Quadros, Roboredo and Pessoa (2018) Hubs are facilities found in distribution systems that operate mainly with transfer and exchange points, being used to concentrate and consolidate flows. Ashford (2015) states that Hubs provide services to other major airports, also called Hubs, and to smaller airports (spoke airports). For the author the effectiveness of a hub airport is dependent on some parameters, such as:

- airport charges;
- geographical location;
- availability of flights to various destinations;
- ability to move aircraft;
- capacity for passenger movement;
- availability of layout for passenger movement.

For the development of this work, it was decided to focus on the choice of hubs from the perspective of the items proposed by Asford (2015).

Matsumoto and Domae (2019) argue that not only is the location of the HUB a factor to be considered as a comparative advantage, but also other factors. Malighetti (2018) states that the choice of a HUB is driven mainly by parameters such as infrastructure and location facilities.

According to Redondi et al. (2011) Hub and spoke networks are flights from different sources to the same destination. The authors also explain that hub and spoke are flights from the same origin to different destinations passing through intermediate nodes defined as hubs.

Button (2002) explains that a network of five cities would require ten routes to cities. When an airline adopts an E-based hub and spoke structure, for example, all cities can be interconnected by direct services on a connected network or without E-stop services (AE, BE, CE, DE).

Figure 1 exemplifies a hub and spoke consisting of four airports with a more concentrated configuration. Figure 2 represents a point-to-point network for four airports, which is characterized by being more distributed (Costa et al., 2011).

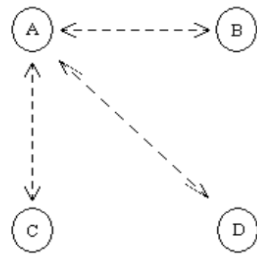


Figure 1. Hub and Spoke

Source: Costa et al., 2011

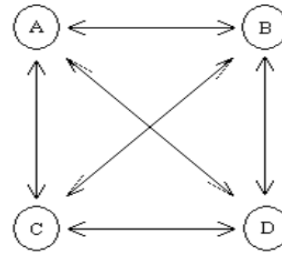


Figure 2. Point to Point

Source: Costa et al., 2011

Hub and spoke airport networks enable carriers to provide transportation services for many source and destination combinations with high frequency and low cost. For travelers, there is the disadvantage of making a detour through the central airport which implies an extra stop (Sugiyanto et al., 2015).

It is noteworthy that the air transport industry is highly competitive. So, to provide customers with different destinations, airlines offer many flights with connections using major Hubs airports (Wehner et al., 2018).

According to Babić and Kalić (2018), for passengers it would be ideal for airlines to offer non-stop services. However, many markets have no demand to support non-stop services. The authors point out that an ideal scenario would be to strike a balance between serving different markets and meeting the economic interests of airlines.

2.3. HUBs Airport in Brazil

For Costa, Lohmann, Oliveira (2010) with the air transport liberalization policy in the 90s, the rigid structure existing in Brazil reduced the regulation that used to control the sector. In fact, the liberalization policy has brought benefits such as lower air fares, greater operational efficiency and competitiveness due to further expansion of the market. For the authors, liberalization led to the concentration of aircraft movement at airports located in the city of São Paulo (Guarulhos and Congonhas) and at Brasília airport (BSB).

In Brazil, the southeast region, in economic terms, is the most important for the country, reflecting in air traffic. The region stands out for concentrating important financial decisions and the diversity of trade and services. In the southeastern region of the country, São Paulo (SP) stands out for being the largest and richest metropolis in the country, in addition to be a core for the national economy (Fernandes, et al., 2019).

On the other hand, the city of Brasília, located in the central west region and Capital Federal, is a powerful center for political management in the country. (Fernandes, et al., 2019). Thus, in this work, three HUB airports will be considered for study: Brasília International Airport, Guarulhos International Airport (SP) and Congonhas Airport (SP).

The main airlines in Brazil do not explicitly adopt the hub and spoke structure as in the United States. In the work of Costa, Lohmann and Oliveira (2010) an online survey was carried out with three hundred people, presenting seventy-nine responses from academics and air transport professionals. The results showed that the majority of respondents believe that only three airports are hubs in the country: the domestic airports of Brasília (BSB) and Congonhas (SP), both cited in more than 90% of the responses and the Guarulhos airport (SP) mentioned in over 70% of responses. Brasília airport stands out for its geographical aspects, as it has a centralized location. The airports of Congonhas and Guarulhos, in turn, serve the city of São Paulo, which is one of the largest cities in the world and a central element of the Brazilian economy.

3. Method

For this work, the literature review method was initially adopted. Noronha and Ferreira (2000) highlight that the literature review is a significant tool to monitor, identify and know the development of research in each area of knowledge.

After the literature review, an empirical research was conducted through 11 interviews with aviation professionals to assist in judging the selected criteria. The interviews were conducted from June 27 to September 27 in 2019. For the interviews, a semi-structured script was elaborated that addressed aspects proposed by Ashford (2015).

For Duarte (2004) well-conducted interviews allow the researcher to deepen and survey information that make it possible to understand the logic that permeates the relationships they establish within that group.

In a third moment, the Analytic Hierarchy Process (AHP) method was used and applied to highlight the factors that influence the choice of HUBs by the airlines. For the execution of the process, the criteria were compared, the data consistency was verified and the proposed alternatives were separately analyzed, seeking the one that represented the most plausible alternative. Calculations were performed using Excel software.

3.1. AHP – Analytic Hierarchy Process

The AHP method is a hierarchical process that assists decision making, planning in multi-criteria resource allocation and conflict resolution (Saaty, 1987). Technological advances have created increased information complexity by reducing the time available for decision making (Bhushan, Rai, 2004).

The AHP method selects one of several alternatives in a decision process using multiple criteria. The application of the method depends on a hierarchical structuring of the problem that demonstrates a relationship between criteria and alternatives (Saaty, Vargas, 1991).

Thus, to begin the analysis, three steps were followed: problem definition; identification of significant criteria and identification of alternatives. Figure 3 presents the hierarchical structure with the objective, criteria and alternatives.

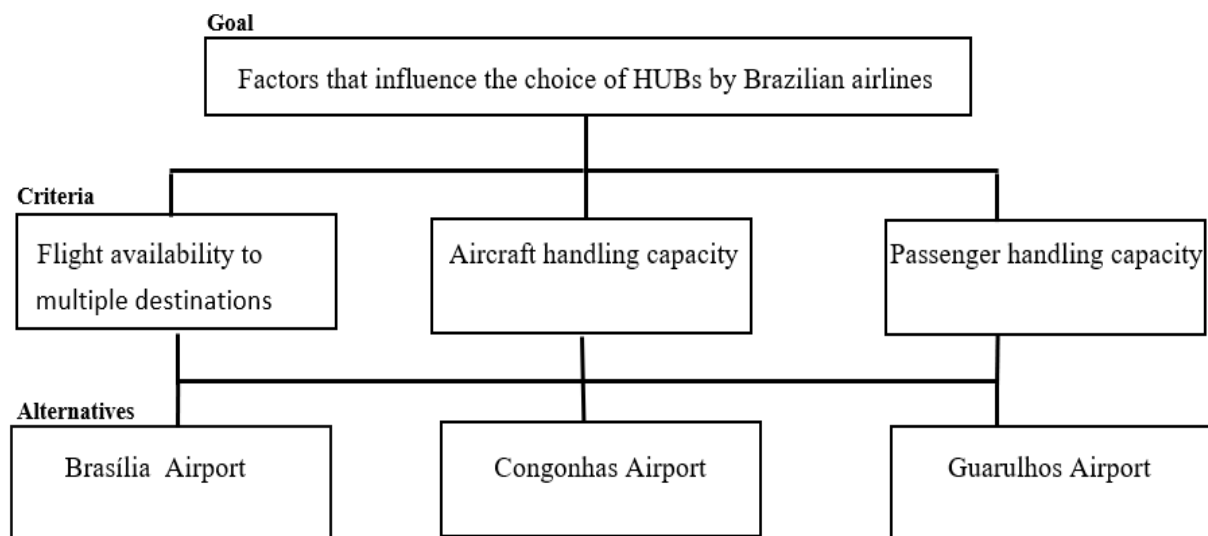


Figure 3. Hierarchical structure

Source: Authors' own

After the hierarchical construction, the pairwise comparison of the criteria between “n” elements of a given hierarchical level should be started. To make judgments of criteria evenly, the fundamental scale proposed by Saaty (1980) is used, as shown in Table 1. The scale uses numbers from 1 to 9 to compare each criterion and convert to quantitative numbers through normalization (Saaty, 2013).

Table 1. Saaty's fundamental scale

Intensity of importance	Definition	Explanation
1	Equal importance	Two activities contribute equally to the objective.
2	Weak or slight	
3	Moderate importance	Experience and judgment slightly favor one activity over another.
4	Moderate plus	
5	Strong importance	Experience and judgment strongly favor one activity over another.
6	Strong plus	
7	Very strong or demonstrated importance	An activity is favored very strongly over another; its dominance is demonstrated in practice.
8	Very, very strong	
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation.
1.1–1.9	When activities are very close a decimal is added to 1 to show their difference as appropriate.	A better alternative way to assigning the small decimals is to compare two close activities with other widely contrasting ones, favoring the larger one a little over the smaller one when using the 1–9 values.
Reciprocals of above	If activity <i>i</i> has one of the above nonzero numbers assigned to it when compared with activity <i>j</i> , then <i>j</i> has the reciprocal value when compared with <i>i</i> .	This is logical assumption.
Measurements from ratio scales		When it is desired to use such numbers in physical applications; alternatively, often one estimates the ratios of such magnitudes by using judgment.

Source: Saaty, 1980

The fundamental scale should not be arbitrary but justified and derived from basic principles about people's ability and sensitivity to make distinctions between possibilities (Saaty, 2013). After performing the matrix comparing the criteria and normalizing them, it is necessary to verify if the judgments made were consistent.

Saaty (2013) recommends calculating the consistency ratio (CR) to verify the consistency of the judgments made. The CR proposes the division between the consistency index (CI) and the Saaty factor (IR). The IR is a random value calculated for square matrices of order *n* and has standard values according to Table 2. CR and CI can be calculated using formulas (1) and (2):

$$RC=IC/IR \quad (1)$$

$$IC=(\lambda_{max}-N)/(N-1) \quad (2)$$

Table 2. IR values

1	2	3	4	5	6	7	8	9	10
0,00	0,00	0,58	0,9	1,12	1,24	1,32	1,41	1,45	1,49

Source: Saaty, 1980 - adapted by the author

According to Saaty (2013), if the CR is less than 10% it means that the judgments were consistent, the next alternative calculations can be continued.

4. Analysis and Results

4.1 Data Analysis

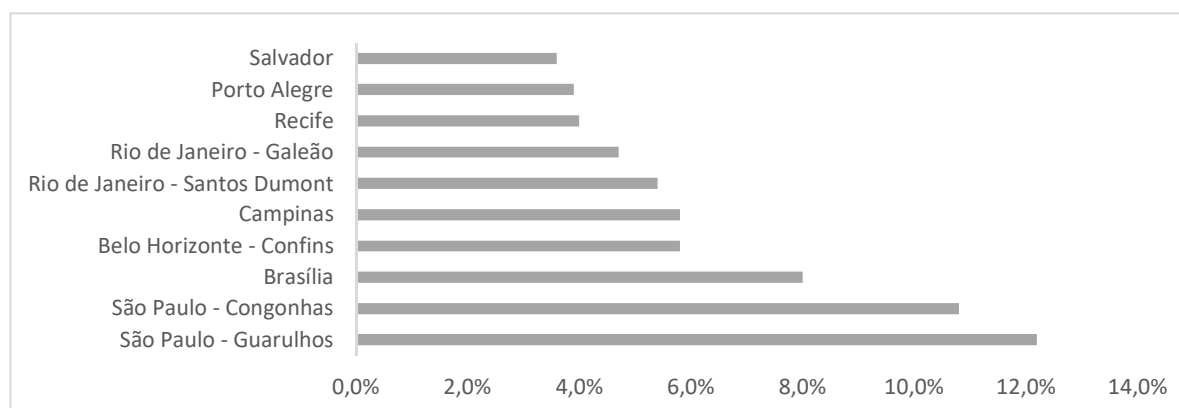
After defining the central question for hierarchy structuring, three criteria were selected according to the main parameters mentioned in the reference. The first criterion (C1) has the number of flights to different destinations. In the second (C2), the capacity of aircraft movement per hour for takeoff landings is pointed out. The last criterion (C3) shows the number of passengers in the three hubs in the year 2018. Table 3 presents the criteria used to calculate the most viable alternative indication for airlines to choose one of the three HUBs.

Table 3. Hierarchy criteria

Criteria/Hubs	Flight availability to multiple destinations (C1)	Aircraft Movement Capacity per hour (C2)	Passenger Movement in millions per year (C3)
Brasília	52	60	10
Congonhas	35	39	22
Guarulhos	104	55	27

Source: Research data

After defining the criteria, it was decided to analyze the Brasília, Congonhas and Guarulhos HUBs as an alternative to be considered in the calculations, as they presented the largest number of takeoff movements in 2018. According to ANAC (2019), the participation of the Guarulhos, Congonhas and Brasília Hubs airports, in the number of takeoffs to multiple destinations in the domestic market, were 12.2%, 10.8% and 8% respectively. Figure 4 shows the participation of the ten busiest airports in the number of departures for 2018.

**Figure 4. Participation of the ten airports in the number of takeoffs**

Source: ANAC, 2019 – adapted by the author

4.2. Consistency Analysis, Alternatives and Results

First, we proceeded to the pairwise comparisons of the criteria, using a square matrix, using the fundamental scale proposed by Saaty (1980). To make comparisons, the method considers the decision maker's preference. It is emphasized that through the criteria matrix it is possible to extract the normalized auto vector according to Table 4.

Table 4. Pairwise comparison

Criteria	C1	C2	C3	Auto normalized vector
C1	1	2	1/3	24%
C2	1/2	1	1/4	14%
C3	3	4	1	63%
Σ	4.5	7	1.58	100%

Source: Research data

After making the judgments of the criteria, the Consistency Ratio (CR) was calculated, which resulted in 1.58%, allowing to proceed with the calculations. The next step was to analyze each criterion against the three alternative HUBs.

To obtain the decision vector, the data from the initial matrix and the data from the previous tables were transposed in which each criterion was compared with the alternatives. We then performed the sum and product resulting in the final decision vector. Table 5 indicates the decision vector for choosing the HUB.

Table 5. Decision vector

Criteria/Alternatives	C1	C2	C3	Decision vector
Vector/Criteria	24.00%	14.00%	63.00%	
BRASILIA	27.23%	38.96%	26.00%	28%
CONGONHAS	18.32%	25.32%	33.00%	29%
GUARULHOS	54.45%	35.71%	41.00%	44%

Source: Research data

It appears that the AHP method aided decision making. The hub pointed by the AHP method was Guarulhos (44%), followed by Congonhas (29%) and Brasília (28%).

5. Conclusion

The research allowed defining the necessary and pertinent precepts for an airport hub. Three criteria and three alternatives were used to assist airlines in defining a hub. Through literature, interviews and researched data it was possible to identify the main points of each hub for later studies and planning that make them more competitive.

The use of the AHP method was timely to point out the most appropriate alternative, when choosing a hub, for airlines using the three study criteria. The method proved convenient for the research object and decision-making aid.

After performing the steps to find the decision vector through the AHP, it was found that the Guarulhos Hub excelled over the other airports in the three criteria addressed in the paper. Further research can be developed to strategically support airport actors to strike a balance between aviation agents.

It is also noteworthy that the study did not aim to exhaust the theme. Thus, for future work, it is suggested that other criteria be analyzed in order to assist airlines and airport administrators in the planning and allocation of resources.

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9. INTERDEPENDENCE BETWEEN MONEY LAUNDERING AND CIGARETTE SMUGGLING: EMPIRICAL EVIDENCE FROM UKRAINE

Abstract: Money laundering is one of the EU Policy Cycle priorities, Europol's priority crime area, under 2018-2021 EU Policy Cycle. Money laundering is an offence in its own right - but it is also closely related to other forms of serious and organised crime as well as the financing of terrorism. Smuggling of money laundering cigarettes is a strategically important area for any country seeking to reduce the risk of these phenomena occurring. The main aim of the article is to determine how money laundering is related to cigarette smuggling in Ukraine. Ukraine is one of the biggest official exporters of cigarettes among former Soviet Union countries. Smuggling of cigarettes is the basis of the shadow economy flow because, according to studies, the proportion of counterfeit tobacco products in circulation is only 0.1%. That is, the illegal turnover increases almost exclusively due to the smuggling of cigarettes. Ukraine is included in the US INCSR list of major money laundering countries. Money is often laundered through real estate, insurance, financial and non-financial institutions, shell companies and bulk cash smuggling schemes. The focus group survey has revealed that cigarette smuggling is linked to money laundering, although the links are not apparent. The results are in line with findings of previous studies: the money earned from cigarette smuggling in Ukraine is often used for personal needs, tourism clusters, acquisition of real estate, development of legitimate business and/or funding of corruption schemes.

Keywords: cigarette smuggling, money laundering, Ukraine.

JEL Classification: F19, K42

1. Introduction

Money laundering, or the process of hiding or disguising the unlawful origin of property and/or ownership of the money derived from particular criminal acts or transactions, has a number of detrimental macroeconomic, political and social effects, the most devastating of which are distortions in the demand for money, risks caused to the stability of financial systems, contamination of legal financial transactions, inexplicability of cross-border capital flows and exchange rates, infiltration of organized crime into strategically important economic sectors (commonly through investment which is made in an attempt to return dirty money back to the legitimate economy) and society, corruption in public institutions, and the threat to the rule of law (Poormazahaeri et. al, 2013; Hendriyetty, Grewal, 2017; FATF, 2019, etc.).

Being related to layered criminal proceeds and transactions, money laundering is recognized as one of the critical factors feeding transnational organized crime (McDowell, Novis, 2001; Billingslea, 2004; Rose-Ackerman, Palifka, 2018, etc.), including tobacco smuggling activities. Tobacco smuggling has already ceased being only the contraband of world-famous international tobacco brands (FAFT, 2012; TRACIT, 2019). Nowadays it leans on such three closely interrelated pillars as smuggling, counterfeiting and sales of tax-evaded products. Substantial profits and insufficiently

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strict penalties imposed on the agents involved make tobacco smuggling an attractive business for criminal organizations from Asia, the Middle East, the former Soviet Union (e.g. Armenia, Georgia, Moldova, Ukraine) and less developed European states (e.g. Albania, Serbia).

As money laundering is considered to be one of the major funding sources for almost all profit generating types of crime (FATF, 2019), it is purposeful to research how close the links between money laundering and tobacco smuggling are, and to determine whether money laundering is the main funding source for tobacco smuggling in some former Soviet Union and developing European states.

The main purpose of this article is to determine how money laundering is related to cigarette smuggling in Ukraine. The defined purpose was detailed into the following *objectives*: 1) to present the concept and basic stages of money laundering; 2) to review the results of previous studies on the links between money laundering and illicit tobacco trade; 3) to select and substantiate the methodology of the research; 4) to introduce the results of the empirical research on the links between money laundering and tobacco smuggling in Ukraine. *The methods* of the research include systematic and comparative literature analysis and Focus group methodology.

2. Money Laundering and its Basic Stages

When interpreting money laundering as a process, it is defined as processing a number of criminal proceeds that are undertaken to hide, obstruct or disguise the real origin and ownership of the money derived from particular criminal acts or transactions (FATF, 2012). In this respect, the process of money laundering is invoked in order to change the legal status of a property or property rights, to disguise existing property rights, to transfer a property that has been acquired through criminal activities, or to assist a criminal to escape the legal penalty for his/her offences.

Considering the rationale of this phenomenon, it can be defined as illegitimate activities enabling individuals or groups to earn undeclared and/or illegitimate profits (FATF, 2019) and/or gain a cover for their income and wealth (Gilmour, 2016; Hopton, 2016). In this case, money laundering is treated as a complex of illegitimate activities that are undertaken for gaining substantial material benefits.

Finally, the modern definition of money laundering, provided by Hopton (2016, p. 2), specifies that “money laundering occurs every time any transaction takes place or relationship is formed which involves any form of property or benefit, whether it is tangible or intangible, which is derived from criminal activity”. Such definition, in its turn, proposes that apart from the processing actions undertaken by agents, money laundering covers transactional and/or personal relationship that makes preconditions to generating material or non-material gains from illegitimate activities.

Literature (Hopton, 2016; Qureshi, 2017; Colladon, Remondi, 2017) distinguishes placement, layering and integration as three main stages of the money laundering process (Figure 1).

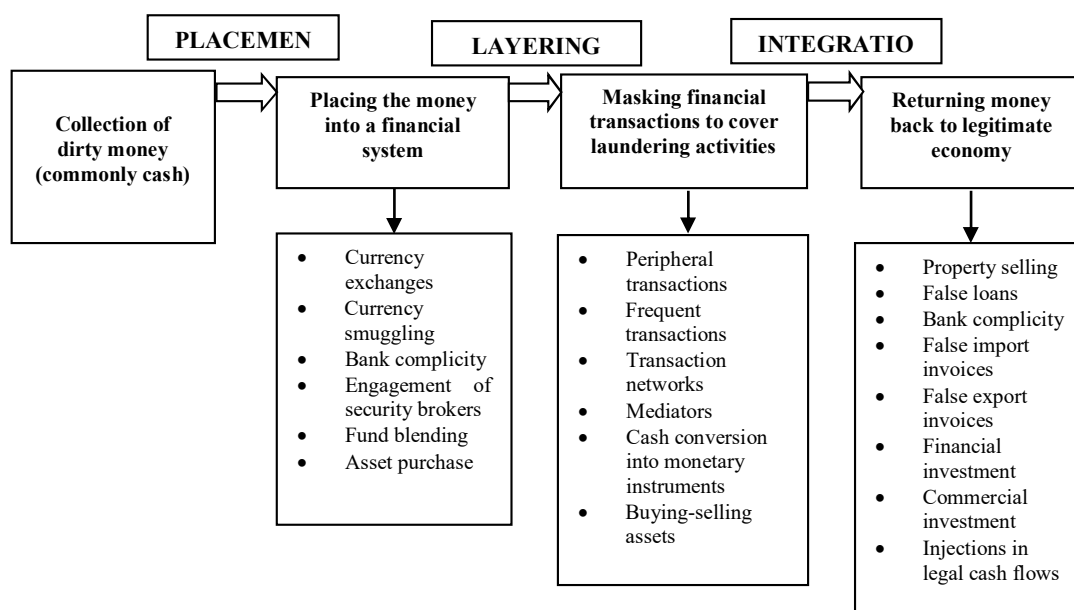


Figure 1. The scheme of a typical money laundering process

Source: compiled by the authors on the basis of literature analysis

Placement refers to direct or indirect placing of the financial funds possessed by an individual or a group into a particular financial system (for instance, placement of cash into a foreign bank, casinos, *bureau de change*, etc.). In other words, placement is putting the dirty money collected into the circulation through local or foreign banks, shops, casinos and other businesses. Placement stage commonly involves such methods as currency exchange and smuggling, bank complicity (involvement of bank representatives), engagement of security brokers, fund blending and asset purchase. For instance, Teichmann (2017) found that purchase of such valuables as gold, jewellery, raw diamonds, antiques, art, real estate as well as engagement of consulting firms, mergers, acquisitions, complicity banks, deposit boxes, private cash deals and currency exchange offices are extremely suitable tools for money laundering.

Layering means the process in the course of which criminal proceeds are separated from their source by engaging several masking layers of financial transactions (peripheral, more frequent financial operations, engagement of transaction networks, mediators, transactions in different economic sectors, banker's drafts, money orders, asset purchase and reselling, etc.) (Colladon, Remondi, 2017) to conceal the real origin of money and cover laundering activities by providing anonymity.

The ultimate - integration stage - signifies withdrawal of cash and returning it back into the legitimate economy so that it could represent regular business funds, earnings, legitimate investment, etc. In this stage, money is laundered by selling properties, taking out false loans (deposits), engaging fake international trade operations (issuing false import/export invoices, under-invoicing of goods, multiple invoicing of goods, over- and under-shipment of goods, falsely described goods), making fake financial, commercial or industrial investment, injecting illicit funds into the legal cash flows of high-turnover enterprises, establishing fictitious companies to declare the money as earned in a legal business, etc. (Thanasegaran, Shanmugam, 2007; Mohamed, Ahmad, 2012).

Apart from the above-mentioned ones, some other money laundering methods can cover legal or illegal cash exchange for checks, decomposition of deposits so that they would not exceed the amounts specified in legal regulations, giving bribes to bank clerks or other authorised persons for confirmation of customer identity, purchase of different valuables by specifying the price that is not subject for declaration, cash transfers to the accounts of bogus companies and relatives and many others, depending on the intended use of the money. Bjelajac (2011) also notes that traditional money laundering methods nowadays are increasingly being replaced by e-money transfers, abuse of money deposit cards, use of Internet banking, abuse of electronic cash, Internet gambling, WAP technologies and e-insurance transfer cards since contemporary IT systems "provide anonymity, international transfer, discretion and safety, quick transaction services, dematerialization, and most importantly, unlimited transaction size." (Bjelajac, 2011, p. 13).

To summarise, as it was noted by van Duyne (2003), some money laundering processes may be composed of more than three basic above-mentioned stages, but such classification makes it easier to understand money laundering as a complex process. Money laundering covers such a great variety of methods that it is hardly possible to discuss all of them, especially minding the fact that more and more money laundering options and schemes are becoming publically available due to the IT advancement.

3. Interconnections between Money Laundering and Tobacco Smuggling: Theoretical Background

First of all, it should be noted that the concept of illicit tobacco trade is not the same as the concept of tobacco smuggling: the former is much wider since it incorporates not only tobacco smuggling, but also illicit tobacco manufacturing and counterfeiting (Maftai, 2012), while the latter, according to Merriman (2002), refers to the action of contraband aimed at evading excise taxes by circumventing customs control and is a structural part of the former.

According to the Federation of American Scientists (FAS) (2000), tobacco smuggling is attributable to the category of nondrug contraband smuggling which also covers illegitimate export and import of alcohol, textiles and manufactured products. Previous findings indicate that the key reasons for tobacco smuggling include tax evasion (Antonopoulos, Hall, 2016; Antonopoulos, von Lampe, 2016; Prieger, Kulick, 2018), ease of illicit operating facilitated by weakness in governance and corruptive authorities (Ross, 2015; World Bank Group, 2019), poor prevention of organized crime

and inadequate punishments for illicit operation (Joossens, Raw, 2012; Alderman, 2012), bordering on the states with weak regulatory framework (Joossens, Raw, 2012; Calderoni, Rotondi, Favarin, 2013), social acceptance of illicit trade (World Bank Group, 2019), and availability of various transportation forms (ships, trucks, airplanes, goods trains, mules, border pedestrian crossings, etc.) and concealment methods (single passenger perspective, involvement of airline and ship crew members, gangs) as a part of distribution network (FATF, 2012).

Although it is the case that tobacco smuggling can generate sizable profits for criminal organizations, individuals and illicit manufacturers, it should not be overlooked that formation of a tobacco smuggling network as well as building and maintenance of smuggled tobacco delivery systems needs particular monetary funding. Some sources (FAS, 2000; von Lampe, 2011; FATF, 2012; Alderman, 2012; Maftai, 2012, Haysom, 2019, etc.) indicate that a substantial share of funds come from criminal organizations or corrupt authorities that are involved in various money laundering schemes. This brings up the question of to which extent money laundering is related to tobacco smuggling and whether money laundering is the main source of funding for tobacco smuggling.

Previous literature mainly focused on the relationship between money laundering and illicit tobacco trade (i.e. a wider approach was followed), while the studies addressing the relationship between money laundering and tobacco smuggling cross borders (i.e. a narrower approach) are scarce. However, minding the fact that tobacco smuggling is a structural part of illicit tobacco trade in general, we treat previous findings on the relationship between money laundering and illicit tobacco trade as the theoretical background for this research. The results of some previous studies addressing the interrelationship between money laundering and illicit tobacco trade are reviewed in Table 1.

Table 1. Review of some previous findings on the interrelationship between money laundering and illicit tobacco trade

Author(s), year	Research method(s)	Results
FATF, 2012	Questionnaire survey, critical assessment	Given its cash intensive and profitable nature, it is plausible that the illicit tobacco trade is also a vector for money laundering; nevertheless, only 6 from 18 respondents indicate that they could relate money laundering cases to the illicit trade in tobacco
Antonopoulos & Hall, 2016	Empirical data analysis, interviews with active criminal entrepreneurs, UK case study	Money laundering is a part of the financial management of the illicit tobacco business in the UK
World Health Organisation, 2003	Statistical data analysis, critical review	Illicit tobacco trade in Middle East is facilitated by money laundering schemes
Joossens, Gilmore, Stoklosa, & Ross, 2016	Statistical data analysis, critical assessment	The EU's illicit trade agreements with major transnational tobacco companies (TTCs) on annual and supplementary seizure payments promote involvement of TTCs in illicit tobacco trade
Boister, 2010	Law synopsis, critical assessment	The judicial measures taken against a complex of money laundering offences should also be effective fighting against the proceeds of the illicit trade in tobacco
Billingslea, 2004	Statistical data analysis, report analysis, critical assessment	The illicit sale of cigarettes has become a crucial part of terrorist funding activities.
Alderman, 2012	Law synopsis	Tobacco smuggling operations have been linked to numerous terrorist organizations globally, and evidence shows that cigarette smuggling profits have financed terrorism around the world
von Lampe, 2011	Literature analysis, statistical data analysis, critical assessment	The source funding for terrorist groups is one of the major aspects that describe the nature of illegal tobacco trade

Source: compiled by the authors

As it can be seen from table 1, most previous studies confirm the existence of the interrelationship between money laundering and illicit tobacco trade. Nevertheless, it should be noted that the relationship is not one-sided, but can go both directions, i.e. money laundering may constitute

a substantial part of the financial management of illicit tobacco trade (World Health Organisation, 2003; Antonopoulos, Hall, 2016), while illicit tobacco trade may serve as a vector for money laundering (FATF, 2012) and funding of the activities of terrorist and criminal organisations (Billingslea, 2004; von Lampe, 2011; Alderman, 2012). Boister (2010), who analysed the relationship between the Draft Illicit Tobacco Trade Protocol and the UN Convention against Transnational Organised Crime, proposes that the judicial measures taken against a complex of money laundering offences should also be effective fighting against the proceeds the illicit trade in tobacco, which proves the existence of the interrelation between money laundering and tobacco smuggling. Moreover, different money laundering schemes are linked to large-scale rather than small-scale illicit tobacco trade (tobacco smuggling) (von Lampe, 2011).

Finally, whatever striking it may sound, illicit tobacco trade can, in some cases, be funded by authorized institutions that pursue the initial goals to prevent, detect and control the scopes of this phenomenon. For instance, Joossens et al. (2016) introduce the study in which they assess the EU's illicit trade agreements with four major transnational tobacco companies (TTCs) - "Philip Morris International", "Japan Tobacco International", "British American Tobacco" and "Imperial Tobacco Limited". The authors note that annual and supplementary seizure payments, equivalent to 100% of the evaded taxes in the case tobacco products are seized, are foreseen in the above-mentioned agreements. However, they conclude that due to the lack of transparency in the area under consideration, the agreements of such type hardly help to alleviate the problem of the illicit trade in tobacco products; on the contrary, they mainly serve to the benefits of TTCs, promote their involvement in illicit tobacco trade, and thus impede an effective control of tobacco trade.

On balance, the majority of previous findings confirm the interrelationship between money laundering and illicit tobacco trade, which gives a presumption to believe that money laundering can be as well closely linked to tobacco smuggling. On the other hand, because some of the studies indicate that only a small part of the cases of illicit tobacco trade under prosecution are at the same time related to accusation of the perpetrators of the involvement in money laundering schemes, and that illicit tobacco trade can even be funded by authorized public institutions making payment agreements with major transnational tobacco companies whose products are the main object of smuggling, the issue of whether namely money laundering is the main funding source for tobacco smuggling still requires a deeper analysis.

4. Research Methodology

Focus group discussion is frequently used as a qualitative approach to gain an in-depth understanding of social issues. The method aims to obtain data from a purposely selected group of individuals rather than from a statistically representative sample of a broader population. Even though the application of this method in conservation research has been extensive, there is no critical assessment of the application of the technique. In addition, there are no readily available guidelines for conservation researchers. The focus group developed for this research involved five experts with at least 20 years of professional experience, working in the Institute of International Relations, Taras Shevchenko National University of Kyiv, Ukraine. The experts' main areas of interest cover smuggling, corruption, money laundering and organized crime. The participants of the focus group were asked the following questions: "How money laundering is related to cigarette smuggling in Ukraine?"; "What measures do you think would be most effective in reducing cigarette smuggling in your country?"; "What measures do you think would be most effective in reducing money laundering in your country?".

5. Empirical Results from the Research

The empirical research is aimed at identification of the links (if any) between money laundering and cigarette smuggling in Ukraine. Further in this section, the experts' answers and insights are provided.

How money laundering is related to cigarette smuggling in Ukraine??

According to the first expert, money obtained from cigarette smuggling is legalized and used to meet personal needs (to purchase cars, houses, summer houses, or other property) and they are very interconnected. According to second expert, smuggling operations are closely connected with development of the tourist clusters, especially in the western part of Ukraine. Third expert added that money obtained from smuggling is invested in property: in the first place, connected to tourist services, tourist infrastructure in Ukraine and close neighbouring areas. Fourth expert pointed out that

money obtained from cigarette smuggling is legalized and used to develop legal business, to finance corruption schemes, and stressed that cigarette smuggling and money laundering are different spheres, the major context of money laundering is not paying taxes properly. Fifth expert summed up the outcomes of the discussion and concluded that volume of the money laundering connected to cigarette smuggling is not extremely high. *The link between cigarette smuggling and money laundering exists, but it is not so evident.*

“What measures do you think would be most effective in reducing cigarette smuggling in Ukraine?”

The first expert pointed out that the approximation of Ukrainian legislation to the provisions of the EU Directive 2014/40/EU of 3 April 2014 on approximation of laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products will increase the price of cigarettes to the level similar to the EU and will also adjust standards for cigarettes produced in Ukraine to the EU standards. (On the other hand, it might encourage cigarette smuggling to Ukraine from Russia and Belarus). The second expert emphasized that the most effective means to reduce smuggling is to introduce centralized combined customs and tax service system aimed to make it impossible to circulate/sell any goods or commodities including cigarettes on the internal market without proper legal processing by Ukrainian customs. Third expert reminded that in the EU Directive adopted in 2014 produces most of the provisions regarding packaging and content of the cigarettes.

The fourth expert proposed to discuss drafting laws in the Parliament and the question of raising the excise duty rates. He said that higher prices will lead to smuggling from Russia, Belarus and other countries. If we have the higher prices than in other countries and that smuggling from Russia, Belarus and other countries is similar to the situation of the early 2000s, reminding that there were huge smuggling volumes (approximately 30% of the market volume in 2000) from Russia and almost all this market, especially for low price segment, was supplied from Russia.

It was also noted by the fifth expert that now Ukraine is one of the biggest official exporters of cigarettes among former Soviet Union countries. As of 2018, in the world ranking of cigarettes exporting countries, Ukraine ranks 16th with an export volume of \$ 340.3 million, Russia - 17 (\$ 301.3 million), Armenia - 18 (\$ 265.8 million) (Workman, 2019). He also pointed out that the question of jobs and social security is rather sensitive, and the criminal liability would not stop people from smuggling. He mentioned that the cigarette market is being divided and e-cigarettes, vapers and new types of e-cigarettes are the challenges for classic cigarettes market in general, and that the popularity of a healthy lifestyle among all age groups is growing in Ukraine. Such issues as raising excise duty rates and criminal liability were also discussed.

“What measures do you think would be most effective in reducing money laundering in your country?”

It was mentioned by the first expert that the National Bank of Ukraine and Ministry of Finance are very active now and that internal compliances of private banks and state-owned banks are working quite effectively. The expert pointed out that now Ukraine has problems with liquidity, but not with money laundering, although this partly complicated it.

The second expert discussed such issues as Ukraine and FATF cooperation, tougher regulation in the use of offshore jurisdictions, the functioning of so-called shell companies, the conduct of commodity-free operations; laws designed to abolish this problem and transfer pricing and all this excessive legal for tracing the links between the owner of the enterprise and its true beneficiary; amendments to Ukrainian legislation.

The third expert emphasized that Ukraine is much more open now than other countries. She reminded that in Ukraine you do not need even to pay for some business intelligence or business insight to look through the whole holding system, you could find the final beneficiary, the information is open to public.

The fourth expert continued the discussion, pointing out that Ukraine is more open in the context of public access to data on ultimate beneficiaries, affiliated companies, ownership structure than other countries in Europe in some way; measures implemented are successful in that area e.g. electronic declarations, financial control of the operations of all public servants, generally effective operation of the financial monitoring system, including its automatic mode. According to the fifth expert Ukraine has a list of measure to fight money laundering: a) application for FATF Membership

and approximation of Ukrainian legislation and implementing practices to FATF standards including CRS standard (standard of automatic exchange of financial information), which makes it mandatory for banking institutions, insurance companies and brokers to disclose information on their clients; b) adoption of criminal charges for money laundering as a result of serious crimes, which may depend on the amount of “laundered” money, the duration of criminal activity, etc.; c) introduction of special procedure for financial institutions in order to identify their customers and proper record keeping; d) appropriate procedures for controlling and supervising the activities of financial institutions.

6. Conclusion

Literature analysis has revealed that the links between money laundering and illicit tobacco trade can be of different character in different states. In the case of Ukraine, the links between cigarette smuggling and money laundering also exist, but they are not so evident because cigarette smuggling and money laundering are different spheres. The money earned from cigarette smuggling in Ukraine is often used for personal needs, tourism clusters, acquisition of real estate, development of legitimate business and/or funding of corruption schemes. The main expert recommendation in the fight against cigarette smuggling is development of the centralized customs and tax service system. Raising excise duties is considered a risky alternative because it can promote cigarette smuggling into the country from Russia and Belarus. It is thought that stricter reinforcement of criminal liability would not deter agents from smuggling, while promotion of healthy lifestyles may have a greater impact on reduction of the scopes of cigarette smuggling. The efficient implementation of the National Bank regulation rules, the development of an effective system of financial monitoring, and introduction of a simple and transparent tax system may serve as effective measures against money laundering. The practical applicability of the study is obvious, revealing areas where anti-money laundering and cigarette smuggling would be most effective.

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10. INSTRUMENTS FOR TRANSFER AND STORAGE OF PROJECT KNOWLEDGE: A QUALITATIVE STUDY

Abstract: Modern organisations willing to be competitive in the market increasingly often choose project organisation structure and way of working. Despite flexibility, teamwork, engagement, and other positive attitudes, this type of organisation faces many challenges as well with the project team turnover being one of the most important. New projects encounter the “reinventing the wheel” problem. This means that the organisation searches for ways to solve the problem, whereas the problem has been already solved. Successful knowledge transfer inter- and intra-projects can help avoid “reinventing” and save more time. Nevertheless, project organisations often make the same mistakes due to ineffective knowledge capturing and storage. Although scientists have paid a huge attention to knowledge and project management in the past decades, there is still a gap of scientific knowledge on how to preserve knowledge effectively in a project organisation. The aim of this paper is to identify instruments for the transfer and storage of project knowledge. The qualitative research has shown that explicit knowledge must be transferred and documented from the planning stage to the completion of the project using a case-based solution. Tacit knowledge is transferred and saved through mentoring, informal communication, meetings, brainstorm, stories, and training. It was established that the “expert interview” method was not suitable for the project completion stage and the “video” method was critically evaluated as well.

Keywords: instruments, knowledge management, project, project knowledge.

JEL Classification: O30, M10

1. Introduction

In recent years, increasingly more organisations have changed their business models and structure from permanent to project based, thus adopting temporary organisational forms to deal with complex projects (Popaitoon, Siengthai 2014; Lindner, Wald, 2011). In project organisations, human resources are constantly changing seeing that projects and programmes are temporary. Every time a new project starts, human resources are reconfigured for the new project, and thus the project organisation must be able to change (Huemann et al., 2007; Koskinen, 2012; Harvey, 2012; Hanisch et al., 2009; Nuhn, Wald, 2016). When they change staff, they “pull” out the knowledge created during the project with them at the same time. Organisations are faced with the challenge of keeping their knowledge current and efficient (Pourbabaei, 2015; Wijk et al., 2008). Moreover, the end of a project, in most cases, is the end of group learning. After that, the project team is divided into new projects, which adapt their knowledge to new jobs (Koskinen, 2012). If their specific knowledge from the previous project is no longer needed and knowledge is not applicable, “project amnesia” begins (Schindler, Eppler, 2003). The risk of knowledge loss at the end of the project is a serious problem in project organisations with

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high knowledge flows, for example, services and high technology. In order to avoid the loss of valuable knowledge, it is a necessity for instruments for the knowledge transfer and storage that would provide practical project experience and could be easily used for future projects (Jugdev, 2012; Bakker et al., 2011; Yeong, Lim, 2010; Harvey, 2012).

Hence, the aim of this paper is to identify and evaluate the instruments for transfer and storage of project knowledge.

The paper consists of three parts: the first part provides theoretical background of project knowledge management, the methodology of the paper is described in the second part, and findings are presented in the third part. Conclusions and discussion end the paper.

2. Theoretical Background

Knowledge is an extremely important asset for an organisation that derives from individual values, beliefs and minds and creates value that improves the competitive advantage of a design organisation (Sokhanvar et al., 2014; Lopez, Esteves, 2013). Project organisations, which manage their knowledge, become more competitive and superior to other project organisations, which “reinvent the wheel” (Jucevičienė, Mozūriūnienė, 2009), being able to use their saved knowledge. Saved knowledge helps solve the problems, use the best practices of implemented projects, reduce the expenditures, and save time.

However, knowledge management in projects is a very complicated process and the ability to successfully integrate project knowledge into an organisation is one of the important strategic objectives of a project organisation (Poh, Erwee, 2004; Lopez, Esteves, 2013). Project as a temporary form of organisation has specific characteristics that determine different challenges for knowledge management (Lindner, Wald, 2011). First of all, the uniqueness of the project hinders the development and expansion of organisational processes, creates challenges for organisational learning and the creation of “memory”. Furthermore, projects often have short-term goals, and knowledge management requires long-term goals. Projects are different in scope and team, whereas the need for knowledge is not stable and uniform, as is the case in traditional organisations. It is unclear when saved knowledge will be reused; a frequent change of project staff results in unpredictable use and storage of knowledge, so sometimes people do not search for the saved knowledge, but just create the same knowledge again. A non-regular team creates fragmentation and individual knowledge is poorly integrated into the organisation’s knowledge base and knowing. With even greater challenge in integrating knowledge, there are virtual teams that are geographically distant.

Projects by their very nature do not have the routines and other mechanisms necessary for knowledge transfer and storage, because they are unique and take place for a very limited time (Koskinen, 2010; Stenholm et al., 2014). A new staff member of the project organisation faces a lack of knowledge and therefore uses the organisation's knowledge to convey the information expressed – explicit knowledge, for example, past project report, instructions, methodological instructions. Project participants, as a rule, do not have the possibility to teach and transfer knowledge to each other because they are no longer working in same teams, so it must be possible to find the saved knowledge easily according to the agreed parameters and it must be presented in a very clear manner.

Knowledge generated by the project can be explicit or tacit (Pourbabaei et al., 2015, Jucevičienė, Mazūriūnienė, 2009, Hartmann, Doree 2015). Project knowledge is created by an individual’s working in a team; therefore, the project success depends on teamwork. The project team usually consists of representatives of different specialisations, who have very different knowledge, for example, technical, design, managerial, or legal. Thus, in parallel with the project success, the team success depends on how well these different individuals will be able to cooperate with each other and develop team knowledge (Sense, 2008). In this aspect, based on scientific insights, knowledge is transferred on three levels: individuals, teams (groups) and organisations (Bellini et al., 2016).

All projects are characterised by a life cycle, also referred to as project stages – initiation, planning, execution, completion, and control. Throughout the project, a knowledge-based lifecycle takes place: knowledge is acquired/ created, transferred, applied, and stored by the organisation (Beiryaei, Vaghefi, 2010; Lindner, Wald, 2011). The SECI model illustrates the knowledge management process in a project organisation. It starts with socialisation between individuals, externalisation groups, goes to organisations through a combination, and returns to individuals during the period of internalisation (Kassem et al., 2015). Knowledge creation in an organisation does not occur in a vacuum (Stover,

2004; Sense, 2008). Knowledge is transferred and stored through other individuals, thus transferring knowledge through interaction with the project team can help translate the tacit knowledge into explicit and store it (Nonaka, Krogh, 2009; Bojnord, Afrazeh, 2006; Lievre, Tang, 2015; Harvey, 2012; Poh, Erwee, 2004).

From the structural project organisation point of view, different effort must be made at each level to transfer and store the knowledge: individuals have to be taught and encouraged to practice the management of personal knowledge, teams have to be told about their work (using narratives), and the organisation has to create the conditions to facilitate the knowledge sharing for employees (Jarche, 2012; Schilcher, 2009) are the main ways of storing the knowledge of the past (Yeong, Lim, 2010; Jones, Leonard, 2009; Prusak, 2015; Wiewiora, Trigunarsyah, 2010; Hartmann, Doree, 2015; Whitaker, 2016; Moud, Abbasnejad, 2012; Gordon, 2008; Gasik, 2011).

Some scholars argue that knowledge must be managed in all stages of the project, but retained only at the final stage of completion (Beiryaei, Vaghefi, 2010; Sokhanvar et al., 2014). The survey data has confirmed this and emphasised that knowledge retention is the most important process in knowledge management, and it can only be implemented together with the knowledge creation and transfer process that are included in the SECI model. Other researchers see the prospects for knowledge storage at every stage of the project (Bojnord, Afrazeh, 2006). At all stages of the project, some knowledge is created: the project, product, process, etc.

Scientists offer different ways of knowledge transfer and storage, because it is easier to store the explicit knowledge, and it is usually suggested to express the tacit knowledge, if it is possible, and then to store it in the organisation (Nonaka, Krogh, 2009). The following are the most commonly used ways of knowledge storage in project organisations (Table 1).

Table 1. Instruments for knowledge transfer and storage in project organization

Project stage	Knowledge level	Knowledge type	Transfer and storage techniques	Indicator	Authors
Initiation	Individual to individual	Tacit	Mentoring	Experience sharing, communities of practise Help	Yeong, Lim 2010; Jones, Leonard 2009; Prusak 2015
			Informal communication	Meetings after work Talks during work breaks Informal seminars	
				Meetings	Experience sharing, communities of practise Discussion
Planning	Individual to group	Tacit	Brainstorm	Ideas Problem solving	Whitaker 2016
			Stories	Personal experience Attitude	Moud, Abbasnejad 2012; Gordon 2008
				Case-based problem solving	
		Explicit	Case-based problem solving		Form filling Case description
				Tacit	Meetings
Stories	Personal experience Lesson	Schindler, Eppler 2003; Prusak 2015			
	Course		Learning by listening Learning by doing	Prusak 2015; Jarche 2012	
Explicit		Case-based problem solving	Fulfilling a form Case description		Dorn 2016; Xu, Avila 2008
	Closing		Group to organization	Explicit	
Expert interview		Expert interviews Documentation			Hartmann, Doree 2014; Prusak 2015; Bednar 1999
Case-based problem solving		Form filling			

Source: own elaboration

3. Research Objective, Methodology and Data

This qualitative study is based on interviews with junior and senior project managers because they are an important information source and experts in the process of project management, knowledge transfer and storage (Littig, 2013). Qualitative study was chosen due to the possibility to reveal how knowledge is transferred and stored during the whole project implementation process as well due to typology of knowledge (especially for tacit). Generally, in studies related to knowledge management, qualitative research method is applied. Face-to-face, structured interviews were considered the most suitable primary data collection tool to access this knowledge and to enable flexible, in-depth exploration of the issue.

Selection of Informants and Sampling

Sixteen project managers from construction sector were selected for the study. Purposive sampling was chosen as a sampling strategy and experience of at least three years was the main selection criterion.

Table 2. Demographics of informants

Experience	Percentage
3-5	44.7
6-10	22
More than 10 years	33.3

Source: own research

Data Collection and Analysis

Each interview consisted of two parts: the first – explanatory part – about the definition and concepts and the second – the main part of interview. Research questions were related to the constructed model and informants were asked following questions:

- a) With whom did they share knowledge in each project management stage:
 - individuals,
 - team members.
- b) What kind of knowledge transfer and storage techniques did they use in each project management stage:
 - Transferring an storing tacit knowledge,
 - Transferring and storing explicit knowledge.

Each interview lasted from one hour to an hour and a half. After analysing the gathered data, the informants were asked to review the findings and provide comments.

4. Results and Discussion

Answering to the first research question “With whom did the project managers share their knowledge” project managers paid significant attention to the team – throughout the project, the knowledge is transferred to the team.

“The project result is achieved by the hard work of the entire team. Teamwork, knowledge creation and sharing are the most important issues achieving the project aim. So we have a lot of meetings for attitude and experience sharing, problem solving, various discussions and idea creation...” (I3, I4, I6, I7, I9, I10, I14, R15, I16).

At the completion of the project, all informants indicated that they shared knowledge with the team, and only one informant (I12) did not share knowledge with the team in planning and execution stages. Project managers shared knowledge with the individuals mostly at the initiation stage (I1, I3, I4, I5, I11, I13, I14, I15, I16), and at each following stage this process was decreasing. Only I3, I4, I11 and I13 shared their knowledge in the final closing stage.

“... For me it is very important that all members of my team should have a clear vision and expectations of our project. So I have a lot of individual talks. In such a way I can manage clearly information, understanding. Especially it is important at the initiation stage...” (I5).

Interesting data was gained at the organisational level. Only a half of all informants (I1, I3, I4, I5, I6, I13, I15, I16) shared and stored their knowledge at the organisational level. Even in the final stage of closing, the organisation did not receive exclusive attention and did not gain more knowledge. This shows the problem of maintaining knowledge in a project organisation because project managers are not interested or obliged to save knowledge. Knowledge remains at the team/group level, and when the team breaks down - at the level of the individual. Answers to the question why do they pay less attention to knowledge storage at the organisational level were the following:

“... I am responsible for my team and our result – achieved aim of the project. So I give priority to project management process from the beginning in order to achieve the aim, and at the end of the project usually there is a huge amount of tasks to be finished, so knowledge storage is not the first task on the to-do list.” (I2)

“... In my whole working experience (almost 8 years as a project manager) just a few organisations had some policies for knowledge storage, documentation etc. We do use the practice of “lessons learnt” and we document the knowledge gained but usually just mistakes, but not all knowledge gained...” (I10)

Answering to the second question “What kind of knowledge transfer and storage techniques do they use in each project management stage” in the process of initiation, 11 (I2, I3, I5, I6, I7, I9, I10, I12, I14, I15, I16) project managers sometimes used informal communication (“...It is a necessary method at the beginning of the project...”, I2, I5, I12). I4 mentioned “irrelevant” methods, because all knowledge should be shared during all formal meetings. Project managers did not use videos to record the knowledge and were sceptical about the importance of this – there were no informants who thought that this was a necessary method and only for 3 project managers it was a useful tool (I2, I3, I13).

“... I really like video. We all post and watch different videos on Facebook, Instagram every day, it is the most popular form of knowledge, experience, emotions sharing. It is much easier to learn from videos, because you can repeat them as many times as you wish...” (I13).

A lot of experts did not even document the knowledge (I4, I6, I11, I12, I16) and stories were hardly ever used. Just one third of all informants said that they documented the knowledge acquired in the projects themselves. Another third never did it and the remaining third documented just some knowledge.

“...Usually I always document the project results, contact information. If organisation requires, I document the lessons learned, but it is more an exception than a rule...” (I11)

The level of knowledge storage in the documents is low; therefore, the other stages of the project are analysed, because knowledge can be captured throughout the project. Brainstorm is a favourite technique among project managers; it was used by one third of all informants (I1, I2, I5, I6, I14, I15). The storytelling method was used much less frequently than brainstorm or interview with experts. Just one fourth of project managers quite often shared their experiences through storytelling. During the project, forms for knowledge storage are filled slightly more often than in the implementation phase; however, as in the final phase, low level of knowledge documentation prevails. Three informants (I1, I3, I5) did not document their knowledge at the planning stage and six informants (I1, I3, I5, I9, I10, I16) did not do that at the execution stages; 8 informants (I2, I4, I6, I7, I8, I11, I12, I14) did this only occasionally. However, those who document knowledge provide a more detailed description of the situation, which is why project managers see it as an integral part of the process of knowledge saving.

Project managers stated that it was important to document knowledge during the entire process of project implementation, but usually they did not do it themselves (I1, I3, I5, I9, I10, I13, I15).

Based on the research and using the SECI model, the most commonly used ways of knowledge transfer and storage were identified based on the type of knowledge (tacit or explicit) and the project phase. The methods for transfer and storage of tacit knowledge included expert interviews, meetings, videos, stories, knowledge maps, brainstorms, training, mentoring, and coaching. The methods for transfer and storage of explicit knowledge included lessons learned, expert assessment of project knowledge generated, copy of project documents into a centralised system, completion of documents (overview), knowledge maps, inventory of knowledge, project history, organisation intranet news, and mentoring.

5. Conclusion

Based on the results of the analysis of the theory, instruments for transfer and storage of project knowledge has been identified under the approach of knowledge type, knowledge level and project cycle. The idea is that in order to transfer and save project knowledge, storage should be done at every stage throughout the project life. The stage includes certain levels of organisation knowledge accumulation. The project stages are parallel to the transfer and storage of knowledge levels: in particular, individuals share knowledge with each other, and then, when planning and implementing the project, knowledge is transferred from the individuals to the project team, and then the team transfers the knowledge to the organisation. Each stage identifies the type of knowledge and uses a different way of knowledge transfer and storage. The stored knowledge of the organisation can be used for future projects and supplemented with new knowledge. Explicit knowledge must be stored from the planning stage to the completion of the project using a case-based solution. Tacit knowledge is transferred and stored through mentoring, informal communication, meetings, brainstorm, stories, and training. The “expert interview” method is not suitable for the project completion stage seeing that the “video” method was critically evaluated as well. The author evaluates whether the aim of the paper was fulfilled and presents the main findings of the research.

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11. CENTRAL BANK RESERVE REQUIREMENT MANAGING – SELECTED ASPECTS

Abstract: The achievement of the objectives of presently operating central banks is conditioned by their use of specific mechanisms called “monetary policy instruments”. The aim of this article is to show the most important information illustrating the scale of application of the National Bank of Poland's mandatory reserve in the years 2009-2018, as well as to draw attention to the way in which the decisions of certain central bodies of the National Bank of Poland, which are related to the management of the mechanism described herein, affect, among others, the volume of M3 money supply or the volume of receivables from the non-financial sector, which constitute the most important component of all loans granted by banks. The realization of this intention is conditioned by, first of all, a set of values (nominal or percentage) of selected data of the National Bank of Poland (NBP) and the Polish Financial Supervision Authority (PFSA) concerning reserve requirements and other economic measurements, on which this instrument (according to the literature review) has a significant impact, and, secondly, analyzing the medium-term rate of changes in these values, allowing to determine not only the direction and dynamics of their “transformations”, but also mutual relations between the measurements. The results obtained from the conducted research procedure allow us to claim that the reasonable management of the reserve requirement makes it possible for the instrument to effectively fulfil its tasks during the period covered by the analysis including, first of all, the macro-prudential and monetary control objectives.

Key words: central bank, National Bank of Poland, reserve requirement, reserve requirement management.

JEL Classification: E51, E52

1. Introduction

Reasonable management of the tools at the disposal of central banks of individual countries is one of the most important factors determining the implementation of monetary policy and social and economic development of countries. The reserve requirement, which is a mechanism of the so-called “classic triad of monetary policy instruments”, should by its very nature pursue the following objectives: macro-prudential, monetary control and liquidity management. The National Bank of Poland, which is the central bank of the Polish state, has a wide range of powers to manage this instrument. Therefore, through the use of reserve requirement, it can, among other things, control the money supply or the level of credit activity of the banking sector. Therefore, it seems appropriate to draw attention in this article, first, to theoretical issues concerning reserve requirement (including, among others: definitions of the described term, its objectives, as well as the National Bank of Poland's powers to manage this instrument), and, secondly, empirical issues related to the management of the described mechanism (showing, among others, management decisions concerning the use of reserve requirement and their effects). It is believed that thanks to such an approach to the issues undertaken, it will be possible to achieve the priority objective of the article, which is to show the most important information illustrating the scale of application of the National Bank of Poland's reserve requirement in the years 2009-2018, as well as to draw attention to how the management decisions of the central bank bodies related to the modelling of the described mechanism affect the amount of money in the economy or the level of receivables from the non-financial sector.

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2. Reserve Requirement in Doctrine and Legislation – Literature Review

2.1. The Concept and Substance of Reserve Requirement and the Characteristics of its Structural Element

In addition to open market operations and deposit and loan operations, reserve requirements are a tool within the so-called 'classic triad of monetary policy instruments' (Szyszko, 2018). The history of this instrument dates back to the interwar period, or more precisely to 1933. At that time, after the end of the "Great Depression", a number of legal regulations were introduced, aimed, among others, at increasing the security of individual financial systems and creating a comprehensive system of supervision over banks. Therefore, banking supervision institutions were established and the existing prudential standards for banks were improved (Olszak, 2011). As a result, in the United States an instrument called "reserve requirement" was introduced for the first time in order to secure deposits made by bank customers. After the Second World War, following the "forerunner of banking innovation", this tool has been used by central banks of Western European countries. In 1946 it was first "put into use" in the UK, a year later a similar step was taken in Italy, the following year in Germany, and in 1967 the instrument was introduced in France (Przybylska-Kapuścińska, 2002). The painful experience of the "Great Depression" made it an increasingly common phenomenon for subsequent countries to apply a noticeably wider range of macro-prudential mechanisms (Cuaresma et al., 2019). In Poland, due to the very turbulent situation in the country, the tool called "reserve requirement" started to be used much later. Under the system transformation, which was initiated in the Republic of Poland in 1989, a number of actions were taken, which resulted in the reform of the then existing banking system. The "modernised" banking system took on the character of a "two-level structure", headed by the National Bank of Poland, which was responsible, among others, for: issuing money, managing monetary policy of the country or maintaining the security of the entire financial system (Węclawski, 2015). Through its bodies, it undertook actions aimed at making the functioning of the banking system more effective, and one of their manifestations was the introduction of a reserve requirement in 1989 (Leszczyńska, 2010), whose importance, as C. Glocker and P. Towbin (2012, 2015) and C. Bustamante and F. Hamann (2015) emphasize, is particularly crucial especially for developing countries or those struggling with the effects of financial crisis or other "adverse events".

The reserve requirement is an instrument whose characteristics are crucial, among others, for the Act on the National Bank of Poland. According to Article 38 of this normative act, the term "reserve requirement of banks" should be understood as "part of cash in PLN and foreign currencies accumulated on bank accounts, funds obtained from the issue of debt securities and other repayable funds accepted by the bank", but, what is important, the reserve is not calculated on the following: funds accepted from other domestic banks (banks having their registered office in Poland) or foreign banks (banks having their registered office in the territory of a country which is not a member of the European Union), cooperative credit/savings banks and the National Credit Union (co-operative financial entities operating in the Polish financial system), acquired from abroad for a period of at least two years, obtained from the sale of mortgage bonds, mortgage backed securities with maturity of more than five years as well as those acquired on the basis of agreements concerning the maintenance of individual pension accounts and individual pension security accounts within the meaning of the relevant provisions (Act, 1997).

Of course, attempts are also made by the scientific community to formulate defined terms for reserve requirement. In the literature, the described here tool of central bank interventionism is most often defined as a part of the funds which banks are obliged to maintain in the central bank; what is important, these funds consist of contributions of non-banking entities (Polański, 2008). Reserve requirement defines the minimum capital (percentages or amounts) that deposit institutions are required to contribute to the central bank (Yueh-Yun, O'Brien, 2007). Due to the fact that the specifics of this mechanism vary from country to country, the instrument is treated as a tax in many non-Polish literature sources (Hein, Stewart, 2002). Interest-free reserves are applied, for example, by the Bank of England or the Bank of Japan (Kamela, 2018). In Poland, since the funds of the reserve requirements are subject to interest, this mechanism is not currently referred to as a "tax".

Studies on this monetary policy instrument most frequently focus on three main objectives to be pursued through this mechanism. The idea of the macro-prudential objective boils down to the original

concept that the reserve requirement was supposed to improve the security of financial systems in the world - by keeping in banks a certain (defined in percentage) amount of liquid assets as a kind of security buffer. However, according to S. Gray, due to the increased importance of supervisory regulations, this concept is nowadays very depreciated, not to say that it is even anachronistic in its nature (Gray, 2011). However, among others: C. Chang et al. (2019), do not agree with such a stance and prove in their research that the People's Bank of China rational management of reserve requirement is very effective in influencing the macroeconomic stability of the People's Republic of China, whose reserve requirement ratio is among the highest in the world. Another objective of reserve requirement, namely monetary control, concerns the possibility of shaping money supply (as well as regulating the money creation multiplier) and influencing the lending volume of the banking sector through the development of the reserve requirement ratio (Revenda, 1999). The objective of liquidity management, in turn, as the name suggests, is related to the possibility of regulating the liquidity situation by means of reserve requirements (Hoffmann, Loeffler, 2017; OECD, 2018), as well as limiting the negative effects of the liquidity risk of the already mentioned banking sector (Satria et al., 2016).

The reserve requirement is a mechanism of relatively complex design. It consists of seven elements, whose characteristics (in respect of the National Bank of Poland's reserve requirement) are presented in Table 1.

Table 1. Characteristics of the National Bank of Poland's reserve requirements construction elements

Name of the element	Characteristics of the given structural element
Basis of calculation	Arithmetic mean of the cash balance of deposits taken and debt securities issued (except for the funds indicated by the legislator in Article 38 of the NBP Act) at the end of the month.
Period of calculation	The reserve requirement is calculated on a monthly basis.
Method of calculation	Two main ways of calculating reserve requirement are most frequently identified: averaged and unaveraged. In accordance with the applicable laws, an averaged method is used in Poland (the arithmetic average at the end of the month is determined on the basis of the deposits underlying the calculation of reserve requirement).
Maintenance period	Reserve requirement (according to the Polish legislation in force) shall be maintained from the last day of the month (or the first business day after that day) following the month for which the reserve is calculated until the day before the next reserve maintenance period.
Maintenance manner	The most commonly used method of maintaining reserve requirement is the so-called system of averaged reserve requirement, which consists of maintaining the required amount of cash on a central bank account on average over a month.
Ratio between the calculation period and the maintenance of reserves	Three possible solutions to this issue can be identified, namely: parallel (the calculation period is the same as the reserve requirement maintenance period), partly delayed (the maintenance period starts during the time of reserve requirement calculation) and delayed (the maintenance period starts after the end of the time of reserve requirement calculation). In Poland, the delayed method is applied due to the postponement of the reserve requirement maintenance period in relation to the reserve requirement calculation.
Differentiation of rates	In accordance with Article 39 of the Act on the National Bank of Poland, the rate of reserve requirements may be differentiated according to statutory criteria, but the sum of reserves may not exceed: 20% of the sum of cash on term deposits or 30% of the sum of cash on demand deposits. Moreover, entities calculating the reserve requirement shall reduce its amount by the equivalent of EUR 500,000 (determined according to the average exchange rate announced by the NBP on the last day of the month and constituting the basis for calculating the reserve requirement). At present, the reserve requirement rate in Poland is 3.50% and 0.00%, depending on the type of contribution constituting the basis for calculating the reserve.

Source: Own elaboration based on: Skopowski, Wiśniewski, 2014; Przybylska-Kapuścińska, 2002; Act, 1997; Announcement by the President of the National Bank of Poland, 2018

Given the fact that in the case of the Republic of Poland, the National Bank of Poland is the entity having the power to model the reserve requirement, it seems appropriate to present the scope of these powers.

2.2. The National Bank of Poland's Powers to Manage Reserve Requirement

The National Bank of Poland, under the provisions of the Constitution of the Republic of Poland, is the central bank of the Polish state, which is responsible, inter alia, for the implementation of monetary policy (Constitution, 1997). The possibility of performing this duty is conditioned by the use of specific mechanisms, called "monetary policy instruments". One of them is the reserve

requirement, for the management of which the NBP bodies have a number of powers. The initiatives or actions taken by these bodies, related to issues concerning the central bank's accumulation of the reserve requirement, are, in their essence, aimed, as the legislator emphasizes, at shaping the money supply and credit activity (Act, 1997).

The President of the NBP, being a "single-person NBP body", may indirectly manage the reserve requirement. The Monetary Policy Council (MPC) and the NBP Management Board, with the NBP President as its chairman, have direct powers in this respect.

The tasks of the Monetary Policy Council (MPC) include, among others, the determination of the reserve requirement rate for banks and cooperative savings and credit unions and the determination of the interest rate on the funds constituting the reserve (Act, 1997).

The Management Board of the National Bank of Poland has the widest range of powers to manage the reserve requirement, among all the bodies of the National Bank of Poland. The Management Board is responsible for determining, firstly, the rules and procedures for calculating and maintaining the reserve requirement, secondly, the types of funds for which there is no obligation to maintain the reserve requirement, and, thirdly, the rules for determining the interest rate on the reserve requirement and the issues concerning the transfer of funds due on account of that interest rate. The body also has the power to grant exemptions from reserve requirement. In the case of a bank, such a situation may take place during the implementation of the bank's recovery plan, while the National Credit Union (KSKOK) and the Credit Unions (SKOKs) may be exempted from the obligation to maintain the reserve during the recovery proceedings. Among all the bodies of the National Bank of Poland, the Management Board of the National Bank of Poland has the widest range of powers to manage the reserve requirement; first of all, it is responsible for determining the rules and procedures for calculating and maintaining the reserve requirement, secondly, the types of funds for which there is no obligation to maintain the reserve requirement, and thirdly, the rules for determining the interest rate on the reserve requirement and the issues concerning the transfer of funds due on account of that interest rate. The body also has the power to grant exemptions from reserve requirements. In the case of a bank, such a situation may take place during the implementation of the bank's recovery plan, while the National Credit Union (KSKOK) and the Credit Unions (SKOKs) may be exempted from the obligation to maintain the reserve during the recovery proceedings. In addition, the Management Board of the NBP may also determine the amount of cash reserves, the maintenance of which at the cash at hand of entities obliged to transfer the reserve requirement will be the same as the maintenance of the reserve requirement at the central bank. In the event of non-compliance with the obligation to maintain reserve requirement by such institutions, the NBP Management Board shall decide on the amount of interest that these entities are obliged to pay to the NBP for the undue fulfilment of their obligation. It is also important to note that the Management Board may abandon the collection of such interest if the entities described herein are in liquidation, suspension or bankruptcy (Act, 1997).

Of course, the Act on the National Bank of Poland also draws attention to other issues concerning reserve requirement. Nevertheless, this study focuses mainly on the competence of individual NBP bodies in the management of the described mechanism, which, as to be presented in the empirical part, affects various economic measurements.

3. Research Methodology

The theoretical part of the study shows that reserve requirement is one of the most important monetary policy instruments. Skilful management of this mechanism allows national central banks to fulfil their tasks. The purpose of this article is to present the most important information showing the scale of application of the NBP's reserve requirements (resulting from management decisions of the competent central bank bodies). The research period covers the years 2009-2018. Due to the fact that the detailed scope of empirical data necessary to conduct the research is collected and published by the NBP and the Polish Financial Supervision Authority (PFSA), the study is based on secondary data from the reports of the aforementioned institutions. The empirical part of the article presents by means of a graphical method (graphs), the values (nominal or percentage) of selected measurements illustrating, first of all, the decisions of the NBP bodies related to the management of reserve requirement (these measurements are: basic reserve requirement rate, interest rate of the reserve requirement funds and total amount of the reserve requirement at the end of specific research periods) and, secondly, the level of selected economic measurements (such as: M3 money supply, deposits

from the non-financial sector, receivables from the non-financial sector, net profit from the analysed research period). The further part of the study is based on the use of the method of analysis of the dynamics of previously presented data. Thanks to the quantification of the medium-term rate of change and the graphical presentation of the obtained results, it is possible not only to determine the direction and dynamics of "transformations" of the measurements illustrating the scale of application of the NBP reserve requirement and other economic values indicated here, but also to determine the relations between these groups of indicators. It is believed that such a course of action should contribute to gaining better knowledge and understanding of the essence of the reserve requirement and the influence that the central bank bodies may exert on economic processes through skilful management of the mechanism.

4. Research Results and Their Explanation

As already indicated in the theoretical part of the article, the bodies of the National Bank of Poland have a wide range of powers in the field of reserve management. Figure 1 illustrates the issues concerning: the average annual base rate of the reserve requirement (it is paid on term and demand deposits in PLN and foreign currencies; since 30 June 2004, it does not include funds obtained from the sale of securities under repurchase agreements, including funds obtained from repo and sell-buy-back operations; on 1 March 2018, its scope does not cover funds acquired for at least two years), the average annual interest rate on the reserve requirement funds and the amount of reserve requirement paid by the banking sector and the system of credit unions (constituting part of the Polish financial system).

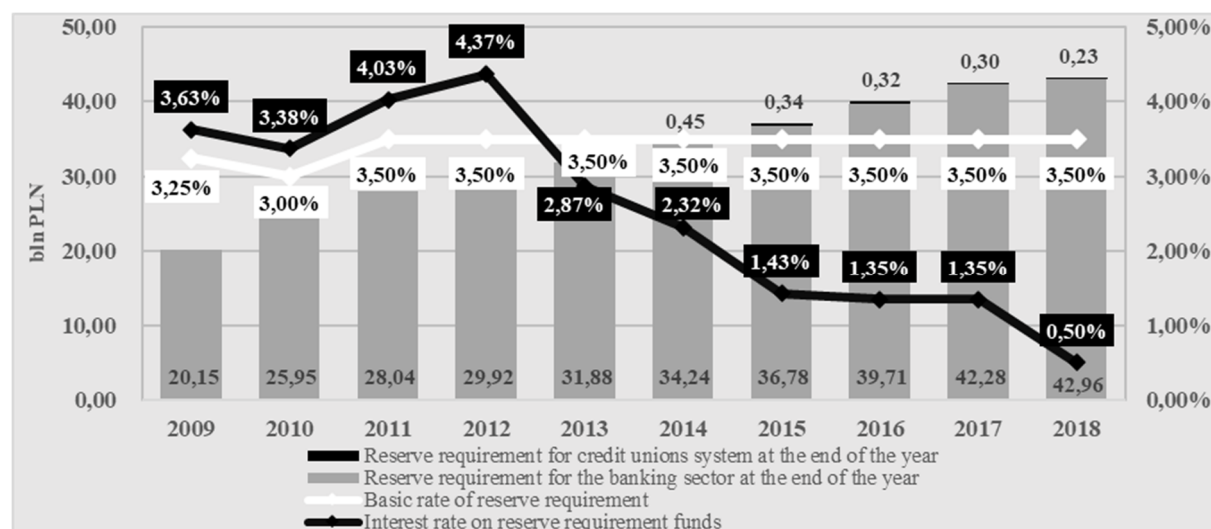


Figure 1. Application of the National Bank of Poland's reserve requirement in 2009-2018

Source: Own study based on National Bank of Poland data

As shown in Figure 1, the MPC has been subject to a certain degree of inactivity in the context of the management of the basic rate of reserve requirement during the period under research. Modifications of this measurement took place only twice. On 30 June 2009, it was decided to lower the reserve requirement rate from the level of 3.50% to 3% and on 31 December 2010 a decision was taken to return to the situation before the change. Until then, this measurement has not been increased even once, which should be regarded as a relatively common phenomenon in the world, which, as Di Giorgio emphasizes, is motivated mainly by the development of financial markets (Di Giorgio, 1999). The MPC decided much more often to change the interest rates on the reserve requirement funds. From 1 May 2004 to 8 October 2014, the basis for its determination was the equivalent of 0.9 of the rediscount rate for bills of exchange. From 9 October 2014, 90% of the reference interest rate became this basis. Therefore, in the years 2009-2017 any changes in the interest rate on the reserve funds resulted from the MPC's management decisions concerning the modification of the indicated interest rates. As of 1 January 2018, the funds which are subject to reserve requirement have interest rate of 0.50%, which represents a decrease of 3.13 percentage points compared to the reference period (2009). The MPC's decisions on lowering the interest rate on the reserve funds directly translated into a deterioration in the profitability of financial resources paid by certain entities to the NBP account.

The data presented clearly indicate that there has been a continuous progression in the level of reserve requirements over the period 2009-2018. In 2018 in relation to 2009, they more than doubled (from PLN 20.15 billion to PLN 42.96 billion). However, the direct reason for this state of affairs was not the management decisions concerning the extension in 2014 of the scope of entities obliged to maintain the reserve requirement by the previously indicated cooperative union institutions operating in the Polish financial system (i.e. SKOKs and KSKOK), but a very dynamic increase in non-financial sector deposits (Figure 2), which constitute an extremely important component of the total funds for which there is a reserve requirement. While describing the decisions of the central bank bodies concerning the management of reserve requirements, it should be noted that in the period covered by the analysis, the NBP applied exemptions from the obligation to hold reserve requirements. In 2016-2017, one bank, which was then undergoing resolution proceedings, was exempted from this requirement. In the following year, four banks were already exempted. These decisions, however, had little impact on the total funds held on account of the reserve, but the very fact of the collapse of the largest cooperative union bank in 2015 and, secondly, the implementation of the resolution process by other banking entities, directly translated into a decrease in net profit in 2015-2018 compared to 2011-2014 (Figure 2). As a result, this measure was the only one of the indicators shown in Figure 2, for which no steady upward trend was recorded in the period under examination.

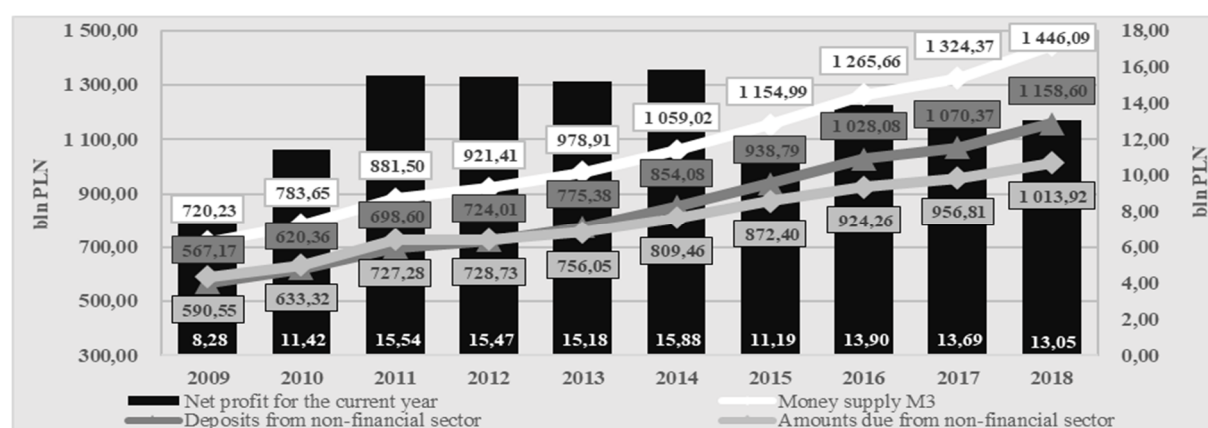


Figure 2. M3 money supply and selected balance sheet items of the Polish banking sector (including foreign branches) in 2009-2018

Source: own study based on data from the Polish Financial Supervision Authority and the National Bank of Poland

In the period under research the favourable economic situation in Poland was conducive to a continuous increase in the level of: M3 money supply, non-financial sector deposits and receivables from the non-financial sector. In the last analysed year, compared to the base year, the progression of these indicators was 101%, 104% and 72% respectively, which should be considered a positive phenomenon.

When we compare the medium-term rate of change of the measurements characterized in this article (Figure 3) we can see an interesting relation. Namely, the annual growth of deposits placed by non-financial sector entities (i.e. companies, households, non-profit institutions) at the level of 8.26% was accompanied by a simultaneous increase in loans granted to this sector, and the progression of these loans was more than 2 percentage points lower than in the case of funds constituting the basis for calculation of the reserve requirement. At the same time, in the period under research, the reserve requirement increased on average by 8.78% per year, i.e. by 6.3% and by 41.84% more dynamically than deposits from the non-financial sector and receivables from the non-financial sector respectively. Therefore, this situation indicates that the specific inactivity of the MPC, mentioned at the beginning of the empirical part of the report, in the context of managing the reserve requirement rate, with an annual dynamic growth of the funds constituting the basis for calculating the reserve, translated into a lower growth of loans granted primarily to businesses and households than in the case of deposits from non-financial entities. Thus, it can be concluded that through reasonable management of the reserve requirement, the National Bank of Poland, on the one hand, significantly contributed to a noticeable (albeit moderate, one should even say "controlled") increase in money supply and credit activity; on the other hand, it contributed to the improvement of the security of the banking sector (by controlling the said credit activity, and, consequently, limiting the potential credit risk).

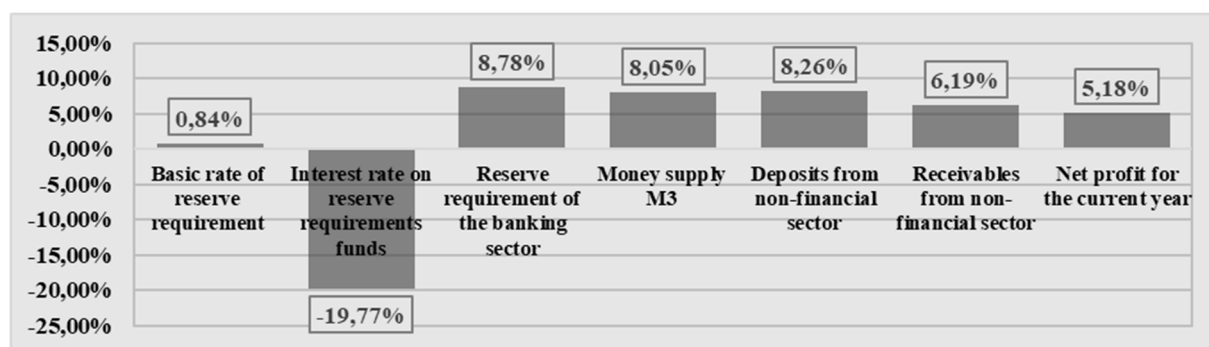


Figure 3. Medium-term rate of changes in the reserve requirement and selected data of the Polish banking sector (including foreign branches) in the years 2009-2018

Source: Own study based on Figures 1-2

5. Conclusion

The national central banks are responsible for the process of management of reserve requirements. A skilful "use" of this monetary policy instrument should contribute to the achievement of the objectives pursued by the main actors in the national banking systems, while the reserve itself should by its very nature pursue macro-prudential, monetary control and liquidity management objectives. Research carried out for the purposes of this study indicates that in the years 2009-2018 the National Bank of Poland rationally managed the reserve requirement. The favourable economic situation of the Republic of Poland, manifested, among other things, by the continuous progression of all money in circulation (money supply M3), also translated into a dynamic increase in the credit activity of the banking sector, which in turn was determined by an intensified increase in deposits from the non-financial sector, constituting the basis for calculating the reserve requirement. As a result, in the period covered by the analysis, the level of the reserve requirement funds more than doubled, which, among other things, due to the management decisions taken by the NBP to lower their interest rates, did not influence the net profit increase of the banking sector. It is also important to note that the specific passivity of the Monetary Policy Council in terms of managing the basic rate of the reserve requirement (since 31 December 2010 it has remained at the unchanged 3.50% level) in fact had a significant impact on limiting the "excessive" growth of the amount of money in circulation. The results obtained in the course of the conducted research also indicate that in the analysed period a more dynamic growth of deposits both from the non-financial sector and the reserve requirement of the banking sector than in the case of receivables from the non-financial sector was recorded. Therefore, it can be concluded that the decisions taken by the NBP bodies related to the management of the reserve requirement contributed to the reduction of potential credit risk of the banking sector, thus also improving the security of the national economy. An undoubted advantage of the conducted research is the fact that it unequivocally indicates that reasonable management of the mandatory reserve has a real impact on the condition of the national economy, and therefore it may be particularly useful for the central bank bodies or economists and scientists. A synthetic approach to the issue should be considered as their main limitation: among others due to "editorial constraints", this article only addresses general issues of reserve requirement management. Therefore, the results of the research should serve as a starting point for further reflection on reserve requirement management and the importance of this process for the modern economy.

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12. THE ANALYSIS OF SOCIAL AND ECONOMIC FACTORS AND FINANCIAL INSTRUMENTS FOR THE FORMATION AND MANAGEMENT OF CLUSTERS' ENVIRONMENT IN THE SLOVAK REGIONS

Abstract: The creation and development of clusters in regions depend on several factors. The main factors are presented by social and economic situation in regions, as well as of financial instruments that contribute to the management of cluster's environment. The main objective of the paper is to evaluate the social, economic and financial situation by selected indicators in Slovak regions that represent the basic precondition for improvement of clusters' environment management. To achieve the main aim, the construction of composite indicator, Beta Convergence will be used. The results of this paper pointed out the main shortcomings of cluster policy as the important factors of clusters' environment development and showed an inadequate convergence in the case of Slovak regions except for the Bratislava region. The paper contributes to the useful information for the practical fine-tuning of the policy aimed at cluster' environment management. The contribution of the paper to management theory and practice rests in using specific indicators for analysis and provides the proposal for a procedure that could be used for other indicators.

Keywords: cluster regional management, economic indicators, financial instruments, social indicators.

JEL Classification: L23, L26, R51, R58, O18

1. Introduction

In the current dynamically developing economic and political situation, we are increasingly encountering the participation of various actors in achieving the goals through mutual cooperation, especially in the regional dimension. Clustering is one form of such participation. It is a process of connecting of geographically (locally) concentrated interconnected companies, institutions and other entities. The regional stakeholders expect of this phenomenon various benefits not only in the area of the competitiveness increasing, but also in case of cost reduction for production or marketing, access to a specialized workforce, attracting new customers, as well as penetrating new markets, increasing the company's image, but also in the area of better promotion, access to the latest but also verified information, increasing the potential for innovation, raising awareness of the entity or the region in which they operate. We see benefits not only on the side of the involved entities (cluster members) but also for the region itself. For the effective clusters' work, it is necessary to create and manage a suitable environment in regions for them. Nowadays, the regions are part of a truly global economy and they become the bearers of national competitiveness. The issues of decision-making and the selection of factors that influence regional competitiveness come to the fore.

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This paper evaluates the socio-economic situation in eight Slovak self-governing regions in the context of cluster cooperation through selected indicators that are important for development and management of cluster environment. Management science helps people making better decisions. Some of the decisions will be long term and strategic and some of them will be short term and operational. Clearly decision making is at the centre of cluster representatives' activities. Get the right decisions depends on several factors. One category of them presents the conditions for clusters' environment creation and development. The main conditions are the financial support of clusters and the social and economic environment in regions. The participation of firms in a supportive program implemented by the government lead to firm growth (Belas et al., 2019). Both attributes belong to cluster policy, which is in economies where clusters play an important role holistically processed. Although the meaning of cluster cooperation is important, this issue there, in Slovakia is still elaborated at low level. This paper will contribute to the widespread of information that are necessary for cluster policy creation and management in regional context

2. Literature Review

Clusters have become a major phenomenon around the world, from the reason, that they have a great potential to positively influence the economic growth of companies, sectors, regions, but also of countries. It is a relatively long known concept of potential economic development, at the beginning of which was the Ricardo's theory of comparative advantages and specialization (Kramarova, 2016). There are various definitions of the clusters in the literature, but the most used is the definition of Porter (1990) that was actualized in 1998 and presents clusters as the local concentrations of interconnected companies and institutions in a particular field. Clusters include a group of interrelated industries and other competition-relevant entities. They include, for example, suppliers of specialized inputs such as components, machines and services, and providers of specialized infrastructure. Many clusters also include governmental or other institutions - such as universities, regulatory agencies, research teams, or business associations that provide specialized training, education, information, research and technical support (Porter, 1998). From the scientific literature, the classic definition of Porter has moved into state programs and the normative legislative framework. For example according to OECD, the clusters are the local associations of horizontally or vertically related firms specializing in similar areas of trade, together with support organizations (OECD, 2007).

Many researchers have examined clusters from multiple perspectives. As stated Ivanová and Kordoš (2017), by means of clusters and other involved parties in the region, the socioeconomic differences can be narrowed in the regions. For this reason clusters became an integral part of regional policies intended to build and strengthen competitive advantages within specifically identified geographical areas. They are still considered crucial for economic development and employment. (Elexa et al., 2019). Parrilli and Blažek (2017) researched new trends, problems and drivers of the evolution and competitiveness of clusters in globalized markets in general and global value chains in particular. Stojčić, Anić and Aralica (2019) found that participation in clusters means that firm members will have higher revenues, wages and productivity than nonclustered firms, which means that clusters also contribute to the upgrading of the quality of human capital. Melnyk et al. (2018) argue that clusters stimulate innovativeness, high productivity, accessibility to production factors and financial resources, and harmonization of interests of all economic entities.

Clusterization as a phenomenon characterizes obvious and structural processes, which will relegate in companies; they can get economic benefits and achieve a business expansion effect. New workplaces, increased tollage, and infrastructure development – these are just a few of the basic clusterization influences for macroeconomics factors. A cluster's activity rebounds for all countries as competitive, because increasing a country's knowledge level emerges as an opportunity to position it as a particular commodity producer (Navickas, Svazas, 2017). The cluster concept represents a specific form of economic organization of different economic entities to take advantage of common beneficially cooperation. Besides the cooperation, business clusters are linked with innovation, innovation capacity, technology development, transfer of knowledge, technologies and capital, skill formation and other positive spillovers, from which may benefit not just collaborating entities, but also customers, hosting region and the national economy, too (Kramarova, 2016). 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 (Kordos, 2016). Sterbova et al. (2015) consider clusters as the innovation networks representing an effective system for promoting innovations based on the principle of synergistic effect. Participation of a firm in the cluster has a great importance and brings many benefits. By the constant contact with each other, companies are able to get very quickly a lot of information about evolving technologies, available parts, machines, new services and marketing concepts. There can be more enterprises working together in innovation creating process and they can also share the costs necessary for the development of new products and technologies. This creates strong networks between the firms and scientists, researchers and developers.

Clusters of firms and related organisations in a range of industry specialisations are a striking feature of the economic landscape in all countries. Their growth and survival depends on internal processes of specialisation, co-operation and rivalry, and knowledge flows that underpin the competitiveness of the firms within them. Cluster building is now among the most important economic development activities in OECD countries and beyond (Möhring, 2006). The cluster structure can be influenced by the general state of cluster culture in the country. Other factors, such as financial state of the business, scale of cooperation, and level of corruption, create the conditions for facilitating or complicating the development of clusters (Svazas et al., 2019). The important issues are also the road transport (Ližbetinová et al., 2017) and foreign direct investments (Fabuš, Kohuřár, 2010).

An existence of a relevant policy based on clusters constitutes an inseparable element of an optimal development of business clusters. Support for clusters and a cluster concept development varies across countries, which have been adjusting their cluster-based policy approach accordingly to their individual country-specific industrial and economic conditions (Bialic-Davendra et al., 2013). The creation of condition for effectiveness cluster cooperation provides also the regional management, which can be characterized as a process cooperation of regional actors in order to promote development concepts and create conditions for a successful position of the corresponding territory. One of crucial issues of managing organization is achieving balance between securing present revenue streams and ability of creating new value for customers (Mielcarek, 2019). Regional management is focused on creating of conditions that are necessary for the functioning and development of a region, which operates and develops in a competitive environment. The scientific literature is addressing the reader with new theoretical models, practical solutions, case studies and best practices (Bencsik et al., 2019) also in context of regional management and cluster cooperation.

In accordance with the main aim of paper the impact and benefits of clusters in regions should be considered. Modern state support for the process of clustering is based on the fact that the advantages that arise in the territories in connection with the development of clusters. This is an increase in the regional gross product, an increase in tax revenues to the regional budget, an increase in the competitiveness of the region and national industries, development of cooperation within the region, which increases production efficiency, increased investment in the region's economy, creation of additional jobs, and the growth of innovative regional developments (Romanova et al., 2019). Some authors investigate the industrial symbiosis based on three different aspects (Taddeo et al., 2016): physical preconditions and possibilities, economic and environmental effects, central conditions and mechanisms behind the development of industrial symbiosis networks. Each category could be evaluated by using indicators that provide the information about level and development of region.

3. Materials and Methods

Each region is characterized by specific conditions for the development of regional actors (clusters among them). The future development depends on system of regional management, while special methods, techniques and access are used. For the main aim of this paper achieving, we evaluate the level and differences of Slovak regions from several points of view. As first, the analysis of regional differences was evaluated by using an aggregate indicator known as the Composite Indicator (*CI*). A detailed methodology for its construction was published by the OECD in 2008 (OECD, 2008). As the second, the beta convergence was used. The traditional approach of beta convergence analysis uses relatively simple statistical tools. The beta convergence occurs when the poorer region grows faster than richer (Grmanová, Kostrová, 2019; Wójcik, 2017). This method is followed by the development of convergence of regions from the perspective of the constructed composite indicator. As third we analysed financial instruments focused on support of clusters in Slovakia.

3.1. Properties and Construction of Composite Indicator

When assessing regional differences, into account shall be taken of the objective pursued, the choice of method, indicators, integrated into a single indicator and subsequent interpretation. For this paper, following indicators for analyses were used: Regional Gross Domestic Product per capita (EUR) - y_1^r , Economic activity rate (%) - y_2^r , Employment rate 15-64 (%) - y_3^r , Average nominal monthly wage (EUR) - y_4^r , Foreign direct investment per capita (thousand EUR) - y_5^r , The R&D expenditure per capita (EUR) - y_6^r , Net money income in euro (per household member) - y_7^r , Road network density [km/thousand km²] - y_8^r , Density of motorways and expressways [km / thousand km²] - y_9^r , Labour productivity (thousand EUR) - y_{10}^r . Indicators must be regularly measured and officially published. When assessing the development of the region, there is a logical need for an integrated view of the issue under consideration. This is related to the CI design (Michálek, 2012).

There is no uniform approach for aggregating individual indicators into one aggregate indicator. Saisana and Tarantola (2002) list several basic types of aggregation techniques that they consider to be the basic methods of aggregation. These methods are divided according to the way of inclusion of sub-indicators into the calculation into linear, geometric and multicriteria. In case of this paper, we used Min-Max method for standardization, equal weighing method and linear aggregation method.

The input data were subjected to statistical analysis. Data consistency and multicollinearity were excluded. Given the different unit of data examined, they were normalized by the Min-Max method, in the case of a positive scope, according to the formula:

$$I_{i,t}^r = \frac{y_{i,t}^r - y_{\min,t}}{y_{\max,t} - y_{\min,t}}, \quad (1)$$

where $y_{i,t}^r$ is value of i -th indicator in year t (2006; 2017) for region r , y_{\max} is a maximal value of i -th indicator and y_{\min} is a minimal value. Using equal weighting method, the equal weight is calculated for each indicator by formula $w_{1,i} = \frac{1}{Q}$, where Q is number of indicators. The principle of using the above method was that the values of the indicator were compared with each other I . The worst region was assigned a value of 0 and the best value was 1. Subsequently, a composite indicator C_t^r was calculated for each region r in year t using a linear aggregation method based on the following formula:

$$CI_t^r = \frac{\sum_{i=1}^n I_{i,t}^r \cdot w_{1,i}}{\sum_{i=1}^n \sum_{t=1}^T I_{i,t}^r \cdot w_{1,i}}, \quad (2)$$

where R is number of analyzed regions (7 or 8).

3.2. Beta Convergence

The comparison of the regions' development is then carried out using the concept of beta convergence. Convergence processes can be seen, for example, to reduce the differences between several variables over time to a level where the difference converges to zero (Beyer, Stemmer, 2016). For the analysis of regional disparities, a growth rate model is used.

$$\frac{1}{T} \ln \left[\frac{y_{i,T}}{y_{i,0}} \right] = \alpha + \beta \ln[y_{i,0}] + \gamma X_i + \delta C_i + \varepsilon_i, \quad (3)$$

where i indicates the region of interest, 0 and T is the base and end periods, y is monitored output per capita, X_i is the vector of i -th region, which contains some structural variables, C_i is a vector of variables that characterize regional disparities in steady states, ε_i is a random component, $\alpha, \beta, \gamma, \delta$ are the parameters of the regression model. The described model is adapted to the following form:

$$\frac{1}{T} \ln \left[\frac{y_{i,T}}{y_{i,0}} \right] = \alpha + \beta \ln[y_{i,0}] + \varepsilon_i, \quad (4)$$

removing the vector from the model of i -th region, which contains structural variables and a vector of variables indicating regional disparities in steady states. The β parameter expresses the extent to which regions are approaching steady state. If $\beta < 0$, then convergence occurs, otherwise it can be stated that regional disparities are increasing. Using this model, the development of economic levels can only be analyzed retrospectively. The model does not work with future values in the vector explaining the variable. Thus, the model can only be applied ex post.

3.3. Analysis of Financial Instruments

The analysis of financial instruments is realized from two points of views: (1) of programming periods (2007-2013, 2014-2020), (2) of type of support (structural funds, state budget).

4. Results

The comparison of regions based on observed indicators, was realized within two ways. In the first case we realized regional comparison with inclusion of Bratislava region (Table 1), in the second, the Bratislava region was excluded (Table 2) due the results that in general are achieved mainly by capitals. For the needs of analysis by beta-convergence, it is necessary to know initial and final state of composite indicator. The years 2006 and 2017 are chosen as input values of monitored indicators. The value $CI > 1$ characterizes the region as above average, the value $CI < 1$ as below average.

Table 1. Composite indicators for all regions

Regions	Bratislava	Trnava	Trenčín	Nitra	Žilina	Banská Bystrica	Prešov	Košice
CI_{2006}	3	1.45	1.03	0.64	0.55	0.51	0.31	0.5
CI_{2017}	3.06	1.31	1.04	0.75	0.57	0.58	0.28	0.4
Diff.	0.06	-0.14	0.01	0.1	0.02	0.08	-0.03	-0.1

Source: Own computing

The highest progress within observed period was achieved by Nitra region (0.1). The highest decrease achieved Trnava region (-0.14), Prešov region (-0.03) and Košice region (-0.1). From the point of view of indicators, in Nitra region we observed the growth of GDP per capita, the improving of labour market situation, the improving of road density, as well as growth of labour productivity. On the opposite side, the Trnava region was lagging due to the decline in FDI per capita, with the smallest increase in employment rates, R&D expenditure per capita, and the lowest increase in road density, and the low increase in case of labour productivity in this region. The Košice region was lagging behind in several indicators: the lowest rate of economic activity and employment rate, only a slight increase of FDI per capita and a relatively low increase of R&D expenditure per capita. The Bratislava region has been above average a long time. The value of composite indicator was three times higher in comparison with other regions.

The next part of paper presents results of composite indicators from which the Bratislava region was excluded. Table 2 presents the results of composite indicators with differences between years 2006 and 2017.

Table 2. Composite indicators for all regions without Bratislava

Regions	Trnava	Trenčín	Nitra	Žilina	Banská Bystrica	Prešov	Košice
CI_{2006}	1.97	1.41	0.89	0.86	0.7	0.24	0.92
CI_{2017}	1.79	1.49	0.94	1.03	0.75	0.26	0.73
Difference	-0.18	0.08	0.05	0.17	0.05	0.02	-0.19

Source: Own computing

The results above average was obtained by region Trenčín and Trnava. In the Trnava region we observed the decrease of composite indicator (-0.18). In 2006, the Žilina region was assessed as below average. Over the period under review, there was an increase of 0.17, mainly due to an improvement of situation in the labour market, the increasing of FDI inflows, the improvement of level of road density and the growth of labour productivity. An increase was also occurred in the regions of Nitra, Banská Bystrica and Prešov. The Košice region recorded a significant decline. The Prešov region has been the worst in the long term, as it shows the worst results in most of the monitored indicators, but its distance from other regions is decreasing in several indicators, which was also reflected in a slight increase of the composite indicator.

Beta-convergence analysis was used to monitor the development of regional disparities. There are the results for both groups of regions (with Bratislava and without Bratislava) in the figure 1. In the first case, the divergence between regions is indicated, but it is not statistically significant ($p = 0.8$). After the excluding of the Bratislava region (second graph), there is a clear tendency towards convergence. The regression coefficient is not statistically significant ($p = 0.6$). The coefficient of determination $r^2 = 0.11$ does not reach a value higher than 0.8. We can conclude that that in the monitored period of 11 years the regions converged in terms of monitored indicators.

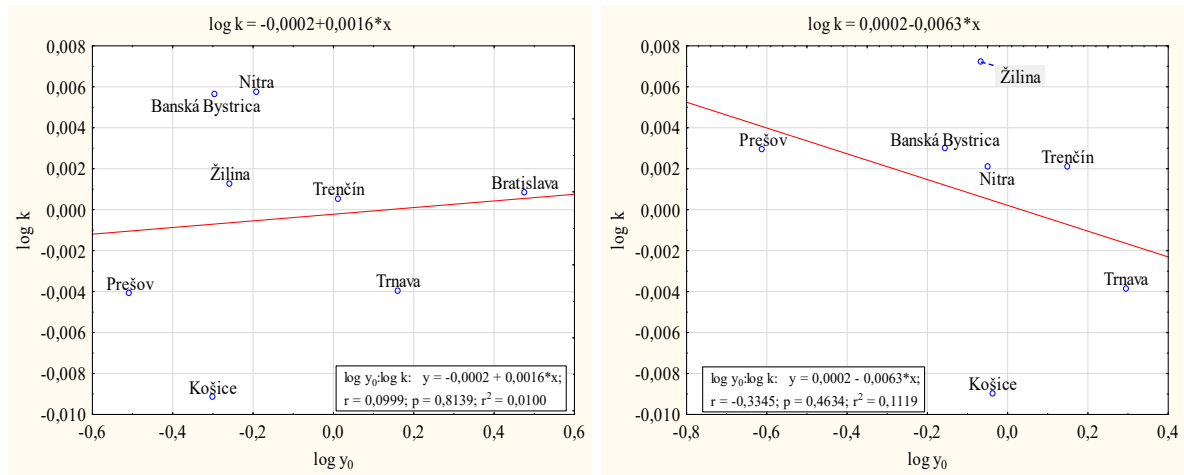


Figure 1. The analysis of all regions using beta convergence

Source: Own processing

4.1 The Analysis of Financial Instruments for Clusters' Support

At present, the concept of cluster policy in Slovakia is still at low level. There was established first cluster in Slovakia in 2004 in Košice region (BITERAP). Figure 2 presents the differences in numbers of clusters in Slovak regions in observed periods.

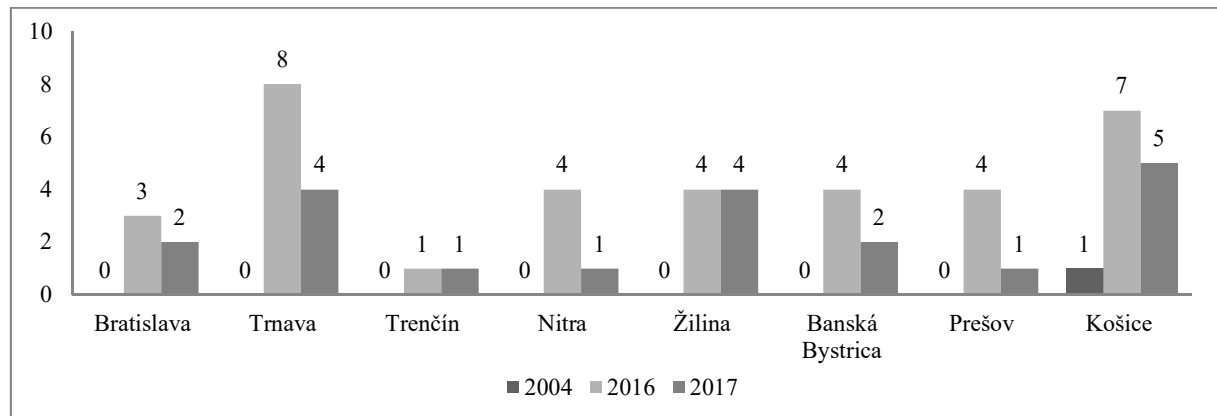


Figure 2. The number of clusters in Slovak regions

Source: Own processing

The first financial instruments for clusters support in Slovakia were provided within the programming period 2007-2013. Within this programming period, the cluster concept was supported from programmes: Operation Programme Competitiveness and Economic Growth, Regional Operational Programme and The Scheme of aid de minimis DM 3/2013. Table 3 presents the financial instruments focused on clusters' support within the programming period 2014-2020. Although, there are dozen clusters in Slovakia at present, the financial instruments at appropriate level are missing. As we can see from table, the level of provided financial instruments in Slovakia is still low. Although, there are several supporting schemes, the real funding was not provided.

Table 3. Cluster support in Slovakia within years 2014-20

Cluster supporting program	Allocation (in thousand EUR)	Min.-max. budget per project (in thousand EUR)	No. of applicati ons	No. of supported cluster projects	Total amount of support (in thousand EUR)
SADMIO* DM18/2014	113.0	min: 10.0 max: 20.0	7	7	Cost in total 184.3 70% of state budget: 127.5 Own sources: 56.8
SADMIO DM18/2014 as amended by amendment no.1 (in Commercial Bulletin 20/2015)	130.0	min: 10.0 max: 20.0	12	7	Cost in total 199.1 70% of state budget: 130.0 Own sources: 69.1
SADMIO DM18/2014 as amended by amendment no.2 for 2016	245.0	min 10.0 max 50.0	10	7	Cost in total 354.6 70% of state budget: 242.2 Own sources: 112.4
SADMIO DM13/2017 for 2017	-	-	-	-	-
SADMIO** DM13/2017 for 2018	-	-	-	6	160.6
The Scheme to support innovation performance of business entities and clusters DM 10/2017	32000.0 (6000.0 estimated annual volume)	Max 100 depends on the type of enterprise	-	-	-

*SADMIO - The Scheme of aid de minimis for support of industrial organizations, ** based on the data of Slovak Business Agency

Source: own research,

5. Conclusion

The results of clusters' environment analysis showed the dynamic development of number of clusters in Slovakia. The clusters were established on the principle bottom-up. It means, that their establishments and next development doesn't depend on concrete supporting programs. The result from countries with direct support for establishment and following development showed positive results. From this reason, also the Slovak Republic should focused on better using of support schemes and the structural funds and improved the clusters' environment management. The results of realized analysis based on the socio-economic indicators showed the differences among Slovak regions within observed periods. The results showed statics as well as dynamics of regional development that presents one of conditions for clusters' environment management. Building on realised research, we present a taxonomy of knowledge contributions to the clusters' environment management, and we also emphasise the problematic aspects related to regional analysis. The results of this paper extend and compressed the studies focused on regional analysis and the studies focused on clusters' environment, with aim to create a new area of synthesized knowledge, mainly in the case of clusters' environment management. This research has mainly data limitations. We can evaluate the conditions for clusters' environment development by many indicators, but many of them are not available at the regional level. A significant problem of Slovak clusters is also the fact, that clusters do not show any internal data that could improve realized analysis. To summarize stated above, the directions of future research could be seen in subsequent fields: the clusters' members and their interactions, regional and national institutions and their interactions with clusters' representatives and the suggestion toward necessary indicators for analysis suggestions. As recommendations from the analysis carried out in this paper, we recommend to policy makers in the Slovak Republic to focus on the development of a holistic cluster policy, which would include defining powers and responsibilities for specific bodies that would manage financial instruments. The current system is set up inappropriately and despite the development of the regions in which the clusters operate; cluster potential is not being exploited at the appropriate level.

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13. THE CIRCULAR ECONOMY APPROACH: TRANSFORMING PLASTIC WASTE INTO PAVEMENT BLOCKS IN GHANA

Abstract: Plastic pollution has become a major development challenge worldwide and developing and least developed countries in Africa does not have a good culture of waste disposal. Its negative effects are clogging street drains, littering seabed and polluting the environment, and causing havoc to the ecological system. Circular Economy has been found to offer a solution to this global challenge particularly, in the developed world. Circular economy has gained the world's attention because it emphasizes on effective utilization of resources and also gives priority to urban and industrial waste to attain sustainable development and clean environment. Although some African countries introduced recycling of plastic and other forms of waste (which is part of circular economy), but the concept needs more attention in Ghana. The purpose of this article is to show how circular economy's theories and methods could be applied in practice, how to design an applicable business model for companies, which may be used in a sustainable way. Therefore, this paper describes how to design and implement Business Model Canvas for an existing plastic waste recycling company, Nelplast Ghana Limited, which transforms plastic waste into pavement blocks in Ghana, as a solution and a means of emphasizing the importance of the introduction of circular economy to solve the problem of proliferation of plastic waste in Ghana.

Keywords: Business Model Canvas, circular economy, pavement blocks, plastic waste.

JEL Classification: M21, Q50, Q53

1. Introduction

Plastic waste pollution is a critical developmental challenge in most countries across the globe. According to UNDP stakeholder conference report (UNDP, 2019), Ghana generates up to 1 million tons of plastic waste annually, 2-5 percent of this plastic waste is recycled. The rest end up on landfill sites (38%), land (28%), sea (23%), or burned (11%). According to Ghana's Environmental Protection Agency, about 2.58 million metric tonnes of raw plastics are imported into Ghana annually, of which 73 percent effectively ends up as waste, while only 19 percent is re-used. This means that a huge percentage of plastic waste ends up in the environment (Climate innovation Centre Ghana, s.d.).

The problem of plastic littering in Ghana is compounded during heavy rains. The rains wash the plastic bottles, bags, sachets and other objects into roadside choked drainage systems and water bodies leading to urban floods and spread of vector-borne diseases such as cholera and malaria. Furthermore, plastic littering has severe consequences on agriculture, water sources as well as human and marine lives (UNDP, 2019).

A Dutch expert committee survey (Keesman, 2019) provided a deep insight into the waste management facts and practices in Ghana. The emphasis in Ghana is on collection and transport of the waste and less on waste treatment and disposal. Over the past 10 years, there has been a strong increase in the amount of flexible plastics being recycled in Ghana, and many people are engaged in the collection and washing of the recyclable waste. These activities are often community based where waste pickers are organized into cooperatives.

The main purpose of this paper is to give a basic situation analysis about the waste management in Ghana, and to design a Business Model Canvas through the case of an existing company, which transforms plastic waste into pavement blocks. This business model could be use as a suitable and sustainable solution for the company's value proposition development.

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2. Study Background

According to Ritchie and Roser (2019), the first synthetic plastic was produced in 1907, marking the start of the worldwide plastics industry. Nonetheless, rapid growth in global plastic production was not realized until the 1950s. Over the next 65 years, annual production of plastics rose overwhelmingly to nearly 200-fold to 381 million tonnes in 2015. Plastics are largely made up of a long chain of molecules containing repeated units of carbon atoms and because of these chemical components, plastics do not easily break down into simpler components. Hence, soil microorganisms that decompose things like wood and other materials cannot break the strong bonds common to most plastics. This depends on the type of plastic and the environment to which it is exposed (Kortei, Quansah, 2016).

In Ghana, plastics are used for packaging, as carrier bags, for drinks, water bottles, water sachets and in other forms. Plastics are the cheapest and convenient source for packaging. Sachet drinking water is considered as clean and affordable because water from the municipal line is sometimes undrinkable. Plastics from sachet water and carrier bags are usually put in bins at home or public waste containers or left to litter the environment.

From the World Bank report on plastic waste (World Bank Group, 2019), many countries including advanced ones lack the capacity to process plastic waste. Europe, for instance, in 2017 exported one-sixth of its plastic waste, mostly to Asia. The report again suggested that plastic waste could be reduced or put to productive use if industries can alter manufacturing processes to reduce the amount of material needed, use recycled materials as inputs, or design new materials that can be degraded or more easily recycled, by this process, circular economy is being employed.

Morrissey and Browne (2004), Al-Zaidi et al. (2016), Aguilar-Hernandez et al. (2019) 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.

There are city and urban authorities whose responsibility is to manage waste in their jurisdiction. They focus on collection and transportation of waste to landfilled sites and not so much on treatment and disposal of generated waste, however ASIP (Accra Improvement Sewerage Project) sometimes treat the sewer before disposing the final effluent into the sea near Korle Bu, a suburb in the Greater Accra Region (the capital of Ghana). Waste collection cooperatives, companies and individuals who use tracks, tricycles and three-wheeled tractors move from house to house in communities to collect waste.

According to Keesman (2019), for the last decades, the private sector (including waste pickers) had become more and more involved in waste management operations in which about 80% of waste services in the 254 Metropolitan, Municipal and District Assemblies (MMDAs) of Ghana are provided by the private sector. The shift towards the private sector has effectively improved waste collection services in the major cities.

Collected plastic waste is bought by recycling companies, then washed and processed for use. Over the past decade, awareness for recycling of flexible plastics has become topical issue for governments. Waste pickers have been organized into cooperatives (example is Plastic Waste Collectors Association), though there are also street waste pickers, who collect the plastic waste, clean them and transport them to emerging recycling plants for a fee.

According to Keesman (2019), recycling of plastic waste is gaining momentum in Ghana and many companies are interested in upgrading their plastics processing technologies. There are about 25 small and medium plastic recycle companies in Ghana that process waste plastics into carrier bags, dust bins, shoe soles, car and door mats etc.

The issue about banning of plastic use came up strongly in Ghana in 2017, however, the government has been reluctant in banning plastic usage. The reason is that plastics is of economic value to Ghana's economy; its ban may have serious consequences on the economy. This justifies what Tuffour (2016) said that an outright ban of plastics would increase the cost of production of plastics and worsen the unemployment situation in Ghana. The government had initiated plans to levy importers of plastics into the country towards the management of plastic waste and also to draft and implement a National Plastic Management Policy that would leverage the comprehensive management of plastics to drive sustainable development, green job creation, and environmental

protection in the country. An initiative of having multi-stakeholder waste recovery platform that would facilitate data and information exchange on recycling would also be created the implication is that, the government is heading towards circular economy.

Many countries have started transforming waste plastic into pavement blocks and other building materials thereby promoting recycling by different raw materials and technologies (Khan et al., 2016, Kumi-Larbi et al., 2018; Ngugi et al., 2018; Allam, Jones, 2018).

Circular Economy is fairly new in Ghana although some activities have been initiated that could be classified as circular. One such circular economy initiative is the transformation of plastic into pavement blocks. This initiative was started in Ghana by Nelplast Ghana Limited (an SME) in 2017. According to Chiappetta Jabbour et al. (2019) circular economy has seen considerable growth in many areas with the increase awareness of prevention of environmental pollution, efficient management of waste by reuse of secondary materials. It is worth noting that circular economy is adopted to suit the specific conditions of a country and its implementation is far advanced in developed countries.

Horvath, Mallinguh and Fogarassy (2018) state that circular business models centred on remanufacturing and recycling lead to significant cost savings linked with drastic reductions in environmental impact; the models are possible means for businesses to profitably achieve a significant boost in resource productivity. One of such business models is the Canvas Business model.

The Business Model Canvas is a detailed description of a number of elements that show the values of an organization. It can be used as a strategic tool for the development of a new organization or to analyse the business situation of an existing business. It illustrates the logic of how an organization creates, delivers, and captures value (Osterwalder et al., 2005, Osterwalder, Pigneur, 2010). Joyce and Paquin (2016) define Business Model Canvas a practical tool for coherently integrating economic environmental, and social concerns into a holistic view of an organisation's business model. Fritscher and Pigneur (2014), considers this model as a visual modelling method that is used to capture the business model of a company. Illés et al. (2017a, 2017b), Seroka-Stolka et al. (2017) presented some practical and agile applications shifting towards sustainable models.

3. Methodology

Secondary information was used for this study by reviewing literature on how Ghana manages its plastic waste, vis-à-vis that of other African countries, looking at the challenges and methods used to recycle and reuse plastic waste. For literature sources, a systematic search was conducted in the topic of circular economy, Business Model Canvas and its applications in different industries. In addition, a document search was conducted to find an appropriate African company for which a sustainable business model could be formulated.

Accordingly, the study is narrowed down into designing a business canvas model that would promote an already established business that transforms plastic waste into a stone-like pavement blocks by adding sand and red oxide. The rationale is to advance the promotion of circular economy in Ghana.

Nelplast Ghana Ltd. was chosen for the analysis as a case study. Nelplast Ghana is a Ghanaian company that turns waste plastic bags, water bags, plastic containers and packages into pavement blocks, which are stronger than ordinary pavement blocks. Plastic waste is transformed through an innovative recycling process to produce new construction materials such as stone-like pavement blocks which can be used to build new roads (Inhabitat, s.d.).

4. Sustainable Business Model: a Case Study

4.1. Business Model Canvas

This study adopts the use of business model canvas as a business strategy to help the already existing entrepreneurial pavement block factory (Nelplast Ghana Ltd.) because Business Model Canvas (BMC) looks at all aspects of a company at a glance, exploring the developments of each of the nine categories of the model by fine-tuning its value proposition and structurally improving its strategy.

Value Proposition is central to the business model. Embracing this model would have many benefits not only to the company but also to Ghana. On the environment, as indicated by (Horvath, Mallinguh and Fogarassy, 2018), recycling plastic waste would reduce dependency on virgin raw materials ultimately reducing extraction of natural resources as well as minimizing floods during the

raining season which is a good model for government to support the scaling up to other municipalities and districts in Ghana. This is one useful way to manage waste effectively and efficiently. Having a clean environment and reduction in emissions would improve health of citizens.

Economically, implementation of this model would lead to job creation; scaling up means more plastic waste pickers, tricyclers and waste collection companies would be engaged. There would be constant supply of raw materials (plastic waste) because households, industries and government continue to use and generate waste plastics and enhance revenue generation for the company. It can also generate revenue for the government when these companies honour their tax obligations.

Key Activities and Resources: Three key activities must be carried out to ensure the success of the BMC. These are dumping of plastic waste, recycling, and remanufacturing. The waste plastics (with exception of PVC) are delivered to the factory site by plastic waste pickers, cyclers and other waste collection companies. The plastic waste is recycled by shredding and melting them, sand and red oxide are added to the melted plastic to manufacture pavement blocks that would last for more than 100 years.

The company already has machines it uses to process the materials but would be the need for an industrial technology to increase production to achieve the aim of reducing plastic waste in the system and meet the growing demand for the product to generate more profit. These three key activities demand constant supply of plastic waste and other materials which also requires funding and support from government and interested investors, possibly for expansion. The main resources needed are finance, human resource expertise, capital equipment and land for further expansion.

Key Partners: Every business needs key partners and stakeholders to thrive thus, for business model canvas to achieve its purpose, the critical stakeholders are:

- Financial institutions that focus on construction (example, Investment Banks like Ecobank, Stabic Bank etc.) to invest in this all-important project.
- The government through Ministry of Environment, Science, Technology and Innovation, Municipal and District Assemblies to formulate policies and by-laws that would regulate the activities of plastic waste management and encourage employment. For instance, in 2017, the Minister of Environment, Science, Technology and Innovation (MESTI), visited the production site of Nelplast and promised the entrepreneur government soft loan under Ghana Government Flagship Industrialization Plan to provide Nelplast soft loan to buy more machines for the manufacturing of pavement blocks.
- Another key stakeholder is the waste pickers' cooperatives and other waste management companies. They would ensure constant supply of raw materials for manufacturing.
- Ghana Chamber of Construction Industry who may need constant supply of the end product is also a key partner.

Customer Relationships and Segments: Customer relation is simply an interaction between a company and its current and potential customers. Nelplast must build and retain clients by provision of high-quality pavement blocks. These clients include government, construction companies, estate agencies, general public and individual builders. Whilst the company strives to meet demand of its clients, creating cordiality, government should also support the company to achieve its target. As (Horvath, Mallinguh and Fogarassy, 2018) mentioned, Ghana government should provide enabling environment that would bring about good relations to promote financial support that would aid expansion through the introduction of new technology, and even boost investors' confidence in the company. It is also important for the company to maintain good relationship between the company, its employees and suppliers.

The market segment for pavement blocks are the government, Ghana Chamber for Construction, Estate developers, individual builders, churches and the general public. These markets are already available and may opt for these durable blocks if it is given the much-needed adverts. More so, the output cost of recycled pavement blocks is expensive because of the cost of the raw materials. The government can make it attractive and affordable by giving companies who are into plastic waste recycling some level of tax exemption.

Distribution Channels: According to (Coes, 2014), channels is about how to reach the customer or have effect on a customer. Advertising through social, print and other electronic media about the uniqueness and durability of the pavement blocks. Collaborate with building contractors, real estate developers and the government for direct supply and distribution to the development and building

sites. The company has a unique product which would have existing customers and should work on cheap distribution channels that could also be utilized to improve sales. Furthermore, the company can use its website as a platform for advertisement and sales.

Cost Composition and Revenue Flows: There are cost and financial implication for this model as well as revenue generations. Although the cost consequences may be enormous, the expected revenue may outweigh it. Areas of costs elements include payment of plastic waste providers, salaries for employees, introduction of new technology for expansion, maintaining of website/online platforms, the use of electric energy and channels for distribution. Revenue generation would stem from sales of final products, government subventions and level of tax exemptions.

4.2. Waste Management at Nelplast Ghana

Nelplast Ghana Limited was established in 2017 by Mr. Nelson Boateng, an Engineer Entrepreneur in Ashiaman Municipal District of the Greater Accra Region of Ghana. He has built an innovative machine that processes any type of plastic waste (with exception of PVC) into pavement blocks. The pavers are made up 70 percent plastic waste and 30 percent sand and they are molded into one-square foot pavement blocks. The company gets its raw material (plastic waste) from the communities in the district. The work of Nelplast allows for the collection and recycle of large plastic waste. The plastic waste is shredded into fine threads before they are mixed with ordinary sand to manufacture new alternative material to traditional asphalt. Small amount of binding agents and red oxide are added to make it resilient and durable. The canvas model of Nelplast is illustrated by Table 1.

Table 1. Business Model Canvas for Nelplast, Ghana

Partners Specific financial institutions Interested investors and stakeholders Suppliers: Plastic waste pickers Waste pickers cooperatives Waste management companies Ghana Chamber of Construction Industry	Key activities Delivering of waste plastic materials to manufacturing site. Recycle of polyethene bags and pure water sachets (secondary material) by washing and melting them Processing melted plastic materials with sand and red oxide to produce pavement blocks	Value Proposition Green environment: Clean environment, no choked gutters, no floods, improved health and plastic waste management Reduction of plastic waste Economic: Job creation, constant supply of raw materials, Provision of durable and lasting pavement blocks Assure suppliers of regular payment to ensure constant supply of plastic waste.	Customer relations Advertising through social, print and other electronic media. Using the company's website as a platform for sales and advertise the product Using the company's website to advertise the product	Customers Entrepreneurs, Estate developers, Contractors Individuals builders Ghana Chamber of Construction Industry The government of Ghana
	Key resources Startup capital: financial, equipment, land and human resource. Reuse of secondary materials		Channels Retain clients by provision of high-quality pavement blocks Delivery of blocks to customers' sites	
Costs Cost of equipment for expansion Payment of secondary materials from suppliers Salaries for employees Marketing and advertisement		Revenues Sales of durable pavement blocks Tax exemptions Government subventions		

Source: own analysis using BMC method

The pavement blocks manufactured are used for paving roads, towns and villages at lower costs compared to costs incurred with traditional asphalt and reducing maintenance costs (Design Indaba, s.d.).

Nelplast produces close to 200 blocks a day using 800 kilos of plastic waste and employs 60 workers directly. The production chain as a whole has created employment for 230 people (Nelplast, s.d.). This productive capacity is too low for the demand of the national market, which expresses an interest in using these innovative blocks. The company is carrying out numerous initiatives to upgrade

the plant, through new machinery, equipment and spaces, in order to expand the production of plastic blocks, to deal with the national market. The activities of Nelplast fall under circular economy and needs support from government and investors to expand the business since it's not only helping in creating jobs but also, improving the environment.

5. Conclusion

The overwhelming increase of plastic waste worldwide has called for global action to combat the menace. Circular Economy has employed steps which effectively put into practice could solve urban and industrial waste in both developed and developing countries because it seeks to enhance the effective and efficiency use of resources. It promotes the use of secondary instead of primary materials by encouraging recycling and reuse of waste. This reduces negative pollutions in the environment and as Ghisellini, Cialani and Ulgiati, 2016 stated, circular economy has the ability to recognize and execute completely new patterns and help society reach increased sustainability and wellbeing at small or no material, energy and ecological costs.

Sustainable models like circular economy involve innovative concepts and ground-breaking actors of the society who have the capacity to link and create suitable collaboration and exchange patterns which are solutions to replace the linear economic systems that are having negative impact on the ecosystem. Its implementation requires support from innovative designers and agents who provide services and designs towards appropriate revolutionary changes in both practices, policies and decision-making tools. Circular economy although has not seen major promotion in Ghana, aspects of it is already being practiced in Ghana. This is what precipitated the use of business model canvas to plan for the proposed business transformation of plastic waste into pavement blocks in Ghana.

If government could have a flagship promotional programme to support the concept of circular economy in the area of plastic waste management, it would serve as a solution to Ghana's plastic waste management problems and also create employment and business opportunities for the teaming unemployed youth.

A main limitation of the study is that it is related to only one enterprise. But it provides a case study using a sustainable business model concept, so it could be generalized and used in practice for other companies as well.

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14. A COMPARATIVE STUDY OF THE IMPORTANCE OF TOURISM AND HOTEL SECTOR IN GHANA AND AFRICA

Abstract: The purpose of this study is to analyse the importance of tourism and the hospitality sector in Ghana and Africa. The paper relies on secondary information to discuss the significant contribution of tourism and its benefits to Ghana and Africa as a whole. It was revealed that the tourism sector that embraces both tourism and hospitality is one of the fastest growing sectors in the service industry and has contributed enormously to the economies of the African continent. For instance, in Ghana, tourism was the fourth foreign currency earner in 2017 aside gold, cocoa and remittances. In 2017, tourism contributed 6.2% to the country's GDP and brought about 1.3 million tourists to the country. On a larger scale, tourists who visited Africa shot up from 26 million in the year 2000 to 56 million in 2014. Tourism and the hospitality industry have also contributed immensely to employment in Ghana and Africa in General. In 2017, the sector generated 682,000 jobs in Ghana. Hotels make significant contributions to the gross domestic product (GDP) of Ghana. In spite of the impacts made by this sector, there is more room for improvement in the entire region because Africa's tourism is only 2-5 percent of the worlds. Africa must concentrate on developing its infrastructure linking to tourist locations and improve on tourists' sites to attract more foreign tourists. Ghana should also consider revising its stringent visa requirements and reduce the cost of doing business to encourage more investors to this industry.

Keywords: tourism, hotel/hospitality, Ghana, Africa, economic growth.

JEL Classification: L83, M10, O4

1. Introduction

The purpose of this study is to analyse the importance of tourism and the hospitality sector in Ghana and Africa. The paper relies on secondary information to discuss the significant contribution of tourism and its benefits to Ghana and Africa as a whole. Literature review summarizes the relevant research background based on the related, African and international studies and publications. The results of the desk research are summarized focusing on the importance of tourism of Ghana and other Sub Saharan African countries.

Tourism and hotels form part of the hospitality industry. The United Nations World Tourism Organization (UNWTO, 2014) defines tourism as a collection of activities, services and industries that deliver a travel experience comprising transportation, accommodation, eating and drinking establishments, retail shops, entertainment businesses and other hospitality services provided for individuals or groups traveling away from home. According to (Cooper, 2008; Holloway, Taylor, 2006) tourism includes the movement of people for all purposes, including day visits or excursions. From the above definition, hotels form integral part of the tourism sector.

Like other African countries, Ghana's tourism sector is growing at a fast pace and it is contributing its quota towards economic development. In 2017, Bank of Ghana lists this sector as the fourth-highest foreign currency earner aside gold, cocoa and remittances. In the same year, the sector contributed

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GHS12.58bn (\$2.7bn), or 6.2%, to national GDP (Oxford Business Group Report, 2019). A total of 1.3m international tourists visited the country that same year, representing a 6% increase compared to 2016. In terms of employment, the World Travel and Tourism Council reported that tourism supported 682,000 jobs, which represent 5.3% of total national employment, in 2017.

Hotels are also developing rapidly in response to the growing tourist trade and the opportunities offered by prudent macroeconomic policies. Majority of its patronage is from international travellers and investors who come to Ghana for potential investments, meetings and training, as well as the growing middle class in Ghana. According to (International Finance Corporation Report, 2016), hotels make significant contributions to the gross domestic product (GDP) of Ghana. For instance, in 2014, Mövenpick Hotel, one of the big hotels in Ghana's capital, Accra, contributed just under \$24 million to Ghana's GDP and \$2.4 million in taxes. In the same year, Azalai Grand Hotel in Mali capital, Bamako also contributed \$3.23 million to the country's GDP and paid \$494,000 as tax revenue to the Malian government.

The report further indicates that hotels promote local economic activity through guest spending particularly, guests who use goods and services outside the hotel turn to help other local businesses and transportation. In addition, hotels create and support a huge number of employments, especially ancillary and induced jobs through purchasing of goods and services, and jobs supported by consumer spending of hotel and supply chain employees.

Another area boosting the tourism sector which is worth mentioning is the growth of the mining industry in Ghana. Most of the Ghanaian mines are manned by foreign nationals who patronize hotels, restaurants etc. Ghana has seen new construction of hotels by both government and private hotel developers. About two decades ago, multinational hotels have sprung up in Ghana and there is evidence of significant increase in such hotels in the urban cities particularly, its capital, the Greater Accra Region. In early 2018, the World Bank provided \$50 million grant to the Ministry of Tourism, Art and Culture to fund developmental project and training of human capacity in the sector (Oxford Business Group Report, 2019.)

Tourism is one of the Africa's most promising sectors as far as development is concern. Tourists who visited Africa shot up from 26 million in the year 2000 to 56 million in 2014. Moreover, tourists' receipts amount to US\$ 36 billion or 7% of all exports in the continent (UNWTO, 2015). The World Travel & Tourism Council estimates that 3.8 million jobs (including 2.4 million indirect jobs) could be created by the tourism industry in Sub-Saharan Africa (SSA) over the next 10 years.

Africa has the advantage of utilizing its tourism potential to foster economic development and increase its participation in the global economy. Travel and tourism contributed 8.5% to Africa's GDP in 2018; equivalent to \$194.2 billion (Jumia Report, 2018). Most African countries can take the opportunities that tourism offer to display their unique cultures and tourists' attractions to the world. The objective of this study is to examine the importance of tourism and hotels in Ghana and compare it with that of Africa as a continent.

2. Literature Review

Worldwide, tourism has played pivotal role in the economic sector by enhancing the quality of life through job creation in both formal and informal sectors and attraction of foreign exchange. It again serves as an alternative form of export, the improvement of a country or region's balance of payments and a general increase in economic activities. For these reasons, most developing countries including Africa have focused on tourism as an alternative for economic growth (Khalil et al., 2007, Alammari et al., 2019).

Many African countries have managed to grow their economies with increased economic participation through the development of tourism. Tourism is seen as a regional development tool to assist in the creation of new local economic activities (Vaugois, 2000).

According to (UNWTO, 2015), globally, and particularly in Africa, tourism is seen as an important instrument for economic development promotion and poverty alleviation. 67 million tourists visited Africa in 2018, representing a rise of 7% from 2017, making Africa the second-fastest growing region, after Asia Pacific.

Studies in developing countries show that a positive relationship exists between economic growth and tourism development, allowing for the establishment of new businesses, especially small businesses (Durberry, 2002). Africa's private sector is increasingly attracting investment from the United States and Europe, with China, India and others also investing heavily in the region. Private

capital flows are higher than official development assistance and foreign direct investment is higher than in India. Returns to investment in Africa are among the highest in the world. The public sector has set the conditions for the exponential growth of information and communications technology (ICT), which could also help to transform the continent (World Bank, 2012).

Some African countries have introduced policies that would increase investments in tourism and make their countries more attractive as destinations for tourists. For instance, Ethiopia has relaxed on visa restrictions and improved flight connectivity which, has made its capital, Addis Ababa a transportation hub. This has resulted in Ethiopia becoming Africa's fastest growing travel country, growing by 48.6% in 2018 (Jumia Report, 2019). Kenya, Rwanda and South Africa have undertaken initiatives to position themselves as locations for conferences and exhibitions.

In the mid-90s, the government of Ghana committed itself to a planned approach to develop the tourism sector through the implementation of an Integrated Tourism Development Programme which led to the preparation of a 15-Year National Tourism Development Plan (1996-2010). The Plan was to position the tourism sector as a consistent driver of growth and development as evidenced by increases in public and private sector investments in tourism facilities, arrivals and receipts, employment and contribution to Gross Domestic Product (GDP) (National Tourism Development Plan, 2013-2027).

Building on the success of the first 15-Year National Tourism Development Plan, the Ministry of Tourism with financial and technical support from UNDP, UNECA and UNWTO, has articulated a successor National Tourism Development Plan (2013-2027) to provide stakeholders in the public and private sectors, a guide to the long-term development of the tourism sector. This is against the backdrop of successes achieved, the challenges that continue to impact negatively on the sector, as well as competition from other sectors and countries.

This new Plan (2013-2027) assesses how tourism can contribute to national and local economic development and enhance its role as a leading sector for employment creation, revenue generation, environmental conservation and national cohesion and overall economic growth. The Plan has, therefore, been prepared with the aim of positioning tourism in the national development agenda, as well as achieving the core objectives of the Ghana Shared Growth and Development Agenda (GSGDA) and the Millennium Development Goals (MDGs) (National Tourism Development Plan, 2013-2027). This plan is evident in the success Ghana has chalked as far as indicated in the Oxford Business Group Report, 2019.

Tourism has provided a multitude of benefits for governments, including attracting outside investors, creating jobs and earning foreign currency to help with a country's trade balance. Chen and Myagmarsuren (2012) highlighted that improving market orientation may stimulate value offering, which may increase successful performance of tourism sector.

Governments also benefit when tourism enhances an area's international, national and regional reputation, which in turn can attract additional investment while fostering a sense of pride of place, culture and history among their citizenry (Asamoah, 2013).

The tourism sector has enormous economic and social importance. Given Ghana's outstanding wealth of natural reserves and rich cultural heritage, the country stands in a good position to use this opportunity further to its advantage, and despite the growing significance of tourism development to economic growth, Ghana's tourism development has not featured prominently in literature (Asamoah, 2013). Some few scholars on the subject have focused their studies on the broader context of development. Extensive work has not been done on tourism development in Ghana.

In the budget statement of 2012, the Ghana Tourism Authority that aimed at promoting sustainable tourism development was established by the enactment of the Tourism Act 817. The Act made provision for the establishment of a Tourism Development Fund to provide Funding for tourism and tourism-related projects and programmes. Consistent with the goal of making Ghana the preferred tourist destination in Africa, the Ministry of Tourism participated in seven (7) international tourism exhibitions in key markets overseas. The Ministry also organized four (4) major events that boosted international and domestic tourism in the country namely; the National Chocolate Day Celebration (this is held every Valentine's day - February 14th), the 5th Okwahu Hang & Paragliding Festival, Emancipation Day Celebration and the World Tourism Day to promote domestic and international tourism in the country. The international tourism investment forum was also organised to facilitate investments in the sector by the National Development Planning Commission. The first three events are held annually in Ghana.

According to the Ghana Tourism Authority (GTA), international tourist arrivals rose from 580,000 in 2007 to 980,141 in 2017, driven mainly by the growth of business tourism. International tourism receipts also increased from US\$879 million in 2007 to US\$1,800 million in 2017, with tourists spending on average US\$1,892 per visit in 2017 (World Bank, 2018). Tourism, particularly, high-end leisure and ecotourism, is already having a positive impact on jobs and income of communities where they are located (for instance, Kakum Park in the Central Region and Mole Park in the Northern Region). It has shown economic benefits for Ghana's coastal areas, for example, Elmina and Takoradi. The World Travel and Tourism Council (WTTC, 2019) reports that tourism directly contributed 3 percent (US\$1,000.3 million) of Ghana's GDP in 2016 and directly employs 287,900 people (or 2.4 percent of total employment) and indirectly employs two to three times this many. Additionally, because tourism depends on good environmental health and sanitation, the sector has provided positive externalities for communities living in destination areas currently challenged by sanitation (World Bank, 2018).

Ecotourism, cultural experiences and nature-based adventure tourism demand are increasing at a very fast rate not only in Ghana but Africa in general. Nature-based tourism is estimated to account for 20 percent of international travel, or about 240 million trips per year. The Adventure Travel Trade Association noted that ecotourism had the highest level of demand of all travel activities in 2017 - about 35 percent of all travel booked in 2016. These global trends are also evident in Ghana (World Bank, 2018).

The international diaspora market for tourism is also important to Ghana because of the high number of forts associated with the transatlantic slave trade. Domestic tourism is also expected to show significant growth in the next decade as middle-class Ghanaians start to travel regularly on weekends and holidays to coastal and park locations. The GTA reports domestic tourist numbers increased from 522,608 in 2015 to 577,273 in 2016 (World Bank, 2018).

The principal generating Markets in Ghana are; USA, Overseas Ghanaians, West African countries (Nigeria, Togo, Cote D'Ivoire) European countries (UK, Germany, France and The Netherlands).

According to (Meyer, Meyer. 2015), some challenges with tourism development in developing regions include the lack of skills, poor cooperation between stakeholders and safety conditions in the area (UNWTO, 2006). For them, to ensure sustainable tourism development that assists in economic growth, the following key strategies are proposed by the International Monetary Fund (IMF) (2006) and Honey and Gilpin (2009):

- Identify and protect natural and cultural resources that give comparative advantage in tourism for a particular region.
- Make sure local participation and ownership in tourism development.
- Build capacity in institutions and infrastructure.
- Formulate a broad and integrated tourism development strategy as part of the local economic development strategy including aspects such as marketing.
- Reduce crime and corruption.
- Promote domestic tourism.

Specifically, key challenges confronting Ghana's tourism industry were identified in the 2017 World Bank Ghana Tourism Scoping Diagnostic Report. The absence of public sector strategic intervention and resources has collectively contributed to the sector's low competitiveness, even though the government of Ghana has a National Tourism Plan (2013-2017). The report cited weak implementation of the Plan and lack of institutional coordination between government and private sector, impeding efficiency and accuracy of tourism data collection, promotion, and development.

3. Methodology

Literature review means analysing books, academic articles, and any other sources relevant to an issue, area of research, or theory to provide a description, summary, and critical evaluation of these works in relation to a research problem being investigated (Fink, 2014). Literature reviews are designed to provide an overview of sources being explored while researching a particular topic and demonstrate how your research fits within a larger field of study (Fink, 2014).

This paper relied on literature to discuss the importance of tourism and its benefits to Ghana and Africa as a whole. For literature sources, a systematic search was conducted in tourism-related websites, reports and scientific literature sources. In this way, the main professional, tourism-related governmental and professional documents were assessed.

For data gathering and related analysis, secondary data were used from UNWTO and documents of governmental organizations in Ghana. Statistical analyses were not conducted at this stage, it will be deepened in the further stage of the research.

The paper represents the initial stage of the scientific research conducted in relation with a doctoral (PhD) discussing the performance of the tourism industry of Ghana from HR, economic and competitiveness aspects in a Sub-Saharan Africa comparison.

4. Importance of Tourism in Africa

Africa has the opportunity of utilizing its tourism potential to foster development and increase its participation in the global economy. Most African countries can take the opportunities that tourism offer to highlight their unique cultures and tourists' attractions to the world.

Africa has a major advantage to harness the potential of tourism to foster development and increase its participation in the global economy. In addition, tourism creates opportunities for millions of host communities in Africa and provides revenues for cultural and environmental preservation.

Building capacity in Africa to develop and manage a competitive tourism offer is fundamental. Tourism products are a crucial pillar in the development of any tourism destination. The range and quality of the tourism product offering defines the competitiveness and attractiveness of tourism destinations and the visitors' experience.

As tourism to Africa evolves to become an increasingly important socio-economic sector, it is important for African countries to adopt effective strategies for tourism product development; strategies that promote a more competitive Africa tourism offer in the marketplace and comply with the need and desires of prospect visitors. UNWTO Regional Programme for Africa and UNWTO Affiliate Members Programme joined forces, with the support of Casa Africa, to develop the present report, which aims to provide African destinations with the appropriate tools and techniques to assist them in increasing their competitiveness in the current rapidly changing marketplace (UNWTO, 2018). Table 1 summarizes the main data of Ghanaian tourism sector.

Table 1. Tourism trends in Ghana, 2007 - 2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arrivals thousands	580.9	672.4	668.3	746.5	27.5	903.3	994	1,093	897	932.5	980.1
Annual change (%)	14.3	15.8	-0.6	11.7	10.9	9.2	10	10	-1.8	4	5
Receipts (\$, millions)	879	1,052.1	1,211.2	1,400	1,634	1,704.7	1,877	2,067.1	819	1,766.4	1,854.8
Annual change (%)	18.8	19.7	15.1	16.1	16.2	4.3	10.1	10.1	-60.0	116.0	5
Receipts per arrival (\$)	1,510	1,560	1,820	1,880	1,970	1,890	1,890	1,890	913	1,894	1,892
Direct contribution to GDP	—	—	—	2.87	2.87	3.42	3.11	3.32	3	3	3

Source: National Tourism Development Plan, 2013 (for 2007–11 figures); Ghana Tourism Authority (for 2012-14, 2016-17); UNWTO (UN World Tourism Organization, 2015; Compendium of Tourism Statistics, 2015).

The tourism sector now accounts for 10.4% of global GDP. Projections from the World Travel & Tourism Council, (Travel and Tourism Economic Impact and Issues, 2018) indicate that 72 million jobs will be added to the tourism and hospitality sector over the next 10 years, and the industry itself will grow 10%.

Tourism again generates revenue for local economies directly when tourists spend money in hotels, restaurants and visit tourist attractions, buy cultural artefacts. Furthermore, the development of tourism has led to the development of infrastructure in many developing countries. Deichmann and Frempong

(2016) analysed the main purposes of tourists in Ghana: 46% of their sample indicated business purposes, 13% visiting family and relatives, 12% transit, 9% conference, 8% education and 12% other (holiday, health issues and missions).

Furthermore, important economically are the jobs created by the industry. The World Tourism Council's data stated that tourism supported 682,000 jobs in Ghana in 2017. The tourism sector also offers a rewarding career path for professionals. It provides a range of job opportunities; event planners/managers, hotel and facilities asset.

Hospitality provides essential services tourists and other travellers. Parks, restaurants, hotels and other recreational centres have seen a tremendous boom in recent years due to the influx of travellers both locally and internationally.

Jaensson (2014) states that tourism in Africa is only 3% of the world's tourism and that the Africa Group did a study that shows that tourism in Africa has the potential to generate \$250 billion, hence the market size is small compared to its potential (Richter 2011). International tourism is a huge problem in countries without peaceful circumstances, but when conditions are safe, tourism may contribute to stabilization and economic growth (Becken, Carmignani, 2016).

From international perspective, tourism development is quite low in some African countries. This could be due to slow infrastructure development, lack of capacity building, poor service quality and branding in the sector. Alnawas and Hemsley-Brown (2019) hotel performance is assessed indirectly, via customer relationship, branding and service innovation capability.

According to report on the World Bank Tourism Development Project (World Bank, 2018), Ghana's Tourism Development Plan (2013-2027) is over ambitious in its development suggestions and the implementation of the plan has been slow. This is accounted by the weak capacity of major tourism institutions, their lack of coordination with the private sector, which has hampered efficiency and precision of tourism data collection, promotion and development.

Another challenge facing Ghana's tourism sector development is high cost of doing business – high energy tariffs and high tax levies (21 taxes with fees coming from environmental protection agency, food and drugs authority, metropolitan and municipal assemblies, fire service, police service, town and country planning property rate etc.). There has been an existing ban on tourism incentives and tax concessions to private sector investors (Ghana Web, 2019, January 26)

Ghana's visa requirement is quite difficult and cumbersome. Studies show that visa facilitation can increase international tourist arrivals of affected markets by 5 to 25 percent (WTTC, 2019). Senegal does not charge for visas, and 125 countries do not require a visa. The Gambia exempts 104 countries from visa requirements. Kenya exempts 39 countries and charges US\$51 for visas. Ghana charges US\$60 for single entry and US\$100 for multiple entry visas and ranks 122 of 136 countries on the World Economic Forum's 2017 visa requirements ranking (World Bank, 2018).

5. Conclusion

The main aim of this study is to examine the importance of tourism and hotel in Ghana and Africa by reviewing related literature. The findings show that the tourism sector plays an integral role in both micro and macro economies of both Ghana and Africa in general. It has helped in economic development and growth by projecting the rich culture in Africa, provided employment to thousands of people and reduce the levels of poverty in developing countries.

It came to light that most contributions and challenges of the tourism industry are parallel in most African countries including Ghana. These common challenges are visualized by Figure 1, which highlights the main pillars of requirements for development. Accessibility should be developed in different ways, which represent legislative issues and infrastructural developments. Promotion is the second pillar of these processes, which should be conducted in an integrative way. These developments will require for the increase of human resource factors at different levels: education, fostering small and medium enterprise sector, and sometimes it may need highly educated and employees from abroad, in order to host and guide groups from their compatriots visiting the given country. This supporting activity will require for an international network and will need a special infrastructure. A wide range of tourism-related services represents fourth pillar of development of tourism in African countries, where the wider value proposition should be targeted as focus point.

Accessibility	Promotion	Human resource	Tourism-related services
<ul style="list-style-type: none"> • transportation • public transport • simplified and cheaper visa process • improved tourism attractions 	<ul style="list-style-type: none"> • integrated and consistent marketing • tourism information offices • public relations • attendance at international exhibitions 	<ul style="list-style-type: none"> • education and trainings for local people • skilled workers • local/rural entrepreneurship • tour operators/guides 	<ul style="list-style-type: none"> • accommodation • higher quality • package tours • wider value proposition

Figure 1. Pillars of tourism-related developments – suggestions for Ghana

Source: own compilation

It is therefore recommended that African countries should develop pragmatic policies and strategies to further develop the tourism sector. Governments should invest heavily, in infrastructure development, building capacity of the human capital in the sector, in the case of Ghana, minimize restrictions on visa requirements to attract international travellers into the country, and encourage domestic tourism.

A main limitation of the paper is the short time of research, as the research period covered only the first semester of the first author's doctoral studies, these conclusions are drawn based on the findings of the literature review and the wide practical experiences of the authors.

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15. IMPACT OF COMPETENCE DEVELOPMENT ON SALES PARTNER MOTIVATION

Abstract: Main concern of the paper is to identify correlations between the management of the sales force and the performance, respectively efficiency or motivation of sales partner. Both topics are crucial for company success, its turnover and the presence on the market, which is why a deeper analysis of its direct and indirect implications is seen as necessary. Additionally, there is a marked lack of empirically based research on competence development in companies and other organizations. Sales force management as a managerial tool is depending in its execution on organizational structure, values and its goals. Depending on industry type and organizational structure, companies are using different methods how to attract their potential customers and they are using different channels as well. Some keywords in this field will be leadership style, organizational culture and behavioral economics. Competence development, as part of Salesforce Management, shall be seen as the company's duty to properly educate their sales force in a way, that allows the sales partner to independently act in the name and in the interest of the company. This paper does not provide conclusions on this topic but provides a literature review only.

Keywords: sales partner, principal agent conflict, Salesforce Motivation.

JEL Classification: M54

1. Introduction

In our nowadays business environment, companies are quite transparent in terms of products, solutions and services. The business world has witnessed an unparalleled surge in transnational and cross-cultural commerce (Gu et.al., 2016), the internet allows to have a deep insight into companies just by clicking on their website. Most companies do not have the financial capabilities to establish subsidiaries all over the world in order to serve potential markets, also human resources to visit potential markets on a very regular basis are limited. The solution which is very common in today's machine manufacturing industry is to work closely with Sales Partners, often also called Representatives, Agents, Consultants or others.

Performance of Sales Partner in the machine manufacturing industry varies dramatically, even though Sales Partner structure and principals might be very similar. differences in the use of inter-firm collaboration should affect a firm's management practices and performance (Liu, 2013), which means, that even in case a cooperation works well in case 1, in case 2 the same or a very similar setup is not successful at all.

The intention to work with sales partners is quite logical and an easy approach to take care of the markets. Finding a proper sales partner that is of interest for the supplying company is not the most difficult task – the challenge is to transform a potential partner into a successful and motivated sales partner, which is doing the sales job on the local market in the interest of the supplying company resulting in a win-win situation for both parties. Sales Partner are often undervalued and have the potential to achieve export success as due to their experience and in-market knowledge. This point is the main reason for a machine manufacturer to nominate a Sales Partner in a specific reason.

The novelty of this paper is the clear scientific approach to find impacts, that give an overview about the relation between sales force development, in particular Sales Force Competence Development, and the motivation of the companies' sales partner. In the literature studied this relation is not highlighted enough – research is rich when it comes to the disciplines Competence development and sales force efficiency, but poor when considering the interaction between. According to Ellström et.al. (2008), there is a marked lack of empirically based research on competence development in companies and other organizations

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2. Methods

The theoretical model related to the research question is shown here below in Figure 1 and visualizes the indicators and the subsequent variables used. The indicators will be proven upon its relevance and significance, and further validated in an empirical qualitative interview study with industry experts. Goal of this interviews is to identify and specify the indicators in depth, and to find potential stronger indicators that require consideration.

The results and opinions of the qualitative interviews will also influence the questions asked in the following empirical quantitative study with corresponding sales partners. The data collected from the empirical quantitative study will be analyzed by scientific methods, the results will lead to the conclusion and to a conformation or neglection of the stipulated hypothesis.

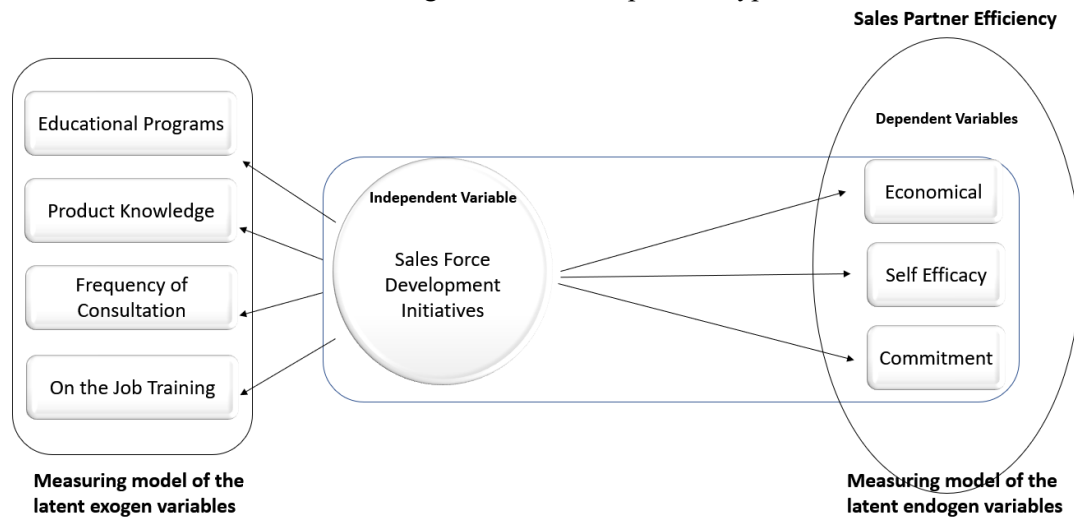


Figure 1. Structural model

Source: own elaboration

The dissertation focuses on German and Austrian machine manufacturers in the plastic industry only, means that the results might not be applicable on other organization in other industries, as indirect sales channel might vary.

Primary scientific data on Sales Partner – Principal relation is so to say non-existence, which makes it quite difficult to research on past data. Due to the nature of this study and the economic behavior background, this is on the one hand an obvious fact, on the other hand a potential risk because of the variety of different highlighted organizations.

German and Austrian machine manufacturers work with Sales Partner that are positioned completely different. In the paper we will read about so called “one-man-show” Sales Partner, on the other extreme we will have big companies with similar size or human force compared with the principals. The cooperation approach will vary which might lead do results that are not applicable for organizations that are not “typical”.

Applied research methodology contains of the research design, operationalization of theoretically influencing effects, information collection and evaluation respectively interpretation of the found data. The research design includes the planning of required actions in order to collect suitable information from primary and secondary data, the analysis of it and the interpretation and clarification in relation to the stipulated hypothesis. The primary and secondary data will be collected by surveys, both qualitative and quantitative. Main focus for testing the hypothesis will be put on the primary data, which will be collected by questionnaires. Collecting the secondary data will be done by using publicly available sources, however it will be questionable how appropriate the previous findings are for the research questions of this dissertation.

3. Impact of Competence Development for Sales Partner Efficiency

Main concern of this work is to identify correlations between the management of the sales force and the performance, respectively efficiency of sales partners. Competence development has been mostly studied in large or medium-sized firms (Yazdanfar et al., 2014), however both topics are

crucial for company success, its turnover and the presence on the market, which is why a deeper analysis of its direct and indirect implications is seen as necessary. Additionally, there is a marked lack of empirically based research on competence development in companies and other organizations (Ellström et al., 2008).

In a business environment, characterized by extended structural dimensions and organizational complexity, it is often very difficult to define and identify the competencies of people involved in business processes (Russo, 2016).

Sales force management as a managerial tool is depending in its execution on organizational structure, values and its goals. Depending on industry type and organizational structure, companies are using different methods how to attract their potential customers and they are using different channels as well. Some keywords in this field will be leadership style, organizational culture and behavioral economics. Competence development, as part of Salesforce Management, shall be seen as the company's duty to properly educate their sales force in a way, that allows the sales partner to independently act in the name and in the interest of the company, but also to motivate them, while motivation is defined as purposeful behavior that is ultimately directed toward the fundamental goal of inclusive fitness (Bernard, 2005). Means, when considering sales force management, and even more specific sales partner management, it should be of crucial interest for the company to educate, teach, motivate and develop their sales partner in a way, enabling the sales partner themselves to develop its competences.

Sales partner as an integral part in many companies sales force structure, significantly influence the market view of company they are working with and how it is seen on the markets abroad. In our nowadays quite transparent business environment, where information exchange is easily done within seconds over the internet, basic information or knowledge transfer often is not the main purpose of using sales partner, as the companies might inform themselves about such basics. However, market penetration, market development and customer care are still done via personal interactions, either with the company directly or with a company's representatives in a local market around the globe.

The machine manufacturing industry in the plastic sector, which is of main focus of this work, is a very competitive industry with several players on the market and one of the fundamental question in the field of strategic management is how firms achieve and sustain competitive advantage (Teece et al., 1997).

Very well experienced players, existing since decades and often coming from same regions, compete with other newcomers from different regions or try to find synergies by vertical integration. The machine manufacturing business is a quite international business, as potential clients are situated all around the globe. None of the companies that want to have a certain market share can restrict themselves to certain regions, and as per Bronder et al. (1992), it is a necessary in many cases to enter markets only with a strong partner. He clearly states additionally, that "this more focused on strategic partners, but also valid for sales partners as a sales partner somehow also is a strategic partner".

The logical consequences for all of them is to sell their products and services international. A sales partner thereby can be a cheap and fast market entry strategy, one potential precondition is the view the potential client sees the sales partner, as a sales partner also represents the company he is working with in its behavior, its mentality and its manners. Developing this behavioral aspect of this competences is key to a successful market penetration, using this sales approach.

The Independent Variable Competence Development

As highlighted already in previous parts, competence development of sales force is the topic of interest. Unfortunately, the concept of competence is often poorly defined in the literature (Ellström et al., 2008). In order to operationalize a cause-effect relation, a proper independent variable must be formulated, that also allow an empirical proof. The independent variable in this work is competence development, as a part of sales force management.

Sales Force management as a variable would have probably been a variable that is too wide to find a sound correlation to the sales partners efficiency. Several indicators influence the sales force management, which could be summed up again in variables. Because of that, from literature point of the view the most interesting and less researched on variable competence development was chosen. In addition, the author is the opinion that competence development and all its implications have one of the most significant influences on the sales partners efficiency.

According to Dingle (1995), competence is taken to be a combination of “knowledge”, plus “skill”, plus “awareness”. In the context of this work, knowledge would represent the understanding of the technical features and the basics of the product to sell. Skill refers to the ability, how to transfer the understanding to the potential client, while awareness represents the right use of the skill. This explanation of sales competence seems quite appropriate, as it not only includes the hard facts like product knowledge, but also communication style, negotiation skills and behavioral tactics, which is an integral part of any sales process.



Figure 2. Conceptual model of the relationship between salesforce competence development and marketing performance

Source: own elaboration

The figure above, originally created by Asiegbu et al. (2011), illustrates the relation between Competence Development and the marketing performance, which can be set equal to Sales Partner Efficiency in our case. Competence Development thereby has a direct influence on the Salesforce productivity, which is again directly influencing the marketing performance. Brandi et al. (2017) explain the learning strategies in enterprises as followed – Learning Systems and Incentives, work design and the organization of work will have an influence on the Competence Development of the work force. An interpretation can be that the organizational setup, as well as methods and processes influence the Competence Development of the whole organization.

Definition of Competence Development

In the literature, Competence Development as a managerial process is not really defined and the interpretations are quite wide, additionally the literature offers little guidance on how to motivate sales reps (Hohenberg et al., 2015). Some interpretations see Competence Development as an attribute of the employee, which leads to a greater performance (Ellström et al., 2008), Drejer (2000) defines competences as a system of technology, human beings, organizational (formal) and cultural (informal) elements and the interactions of these elements.

This means on the one hand, that Competences can be attributed to individuals and seen as an asset of the employees. Those competences can be individually developed and trained in order to achieve greater performance or other desired outcomes - lack of knowledge is very high among some customers, small firms or organizations (Awuah, 2006). On the other hand, competences can be seen as an outcome of a collective system, where employees gain or develop competences based on their formal or informal properties. Competences are individually acquired, based on collective experiences and organizational values.

There is today a widespread belief in the importance of devoting resources to education and other forms of competence development as a key factor behind productivity development, innovative capacity and competitiveness (Ellström et al., 2008). On the nowadays markets, finding good and loyal employees is difficult and keeping them motivated crucial for the company success. Internet allows an easy access to job offers; social media goes even further by addressing employees directly with new job opportunities. Organizational education, as one part of the rather technical side of competence development, enables to bind employees to the company, and increases the efficiency of the employees in terms of the exemplary productivity and competitiveness.

Kock et al. (2007) give some example of the consequences of organizational education, respectively competence development and identified the following types of effects of education:

- increased skill in terms of being better able to handle the present tasks;
- increased interest in learning something new in the job, i.e. increased motivation for learning;
- a better overall view of the job;
- greater responsibility;
- greater job satisfaction.

These results show that, besides various types of cognitive effects in the form of increased knowledge and skills, one can expect various types of effects related to motivation, which represents a critical driver of job performance (Fu, 2015), interest and satisfaction, resulting in an increased technical knowledge of the employee, as well as in an increased soft-skill knowledge and emotional intelligence of the employee.

In the literature studied there is a common sense that education increases knowledge, but also motivation and job satisfaction. Additionally, education is assumed to act as a mechanism for such things as (Nordhaug, 1991):

- selection and mobility on the internal labor market in the company;
- socializing and social control of employees;
- legitimization of goals and decisions;
- improved decision-making ability in the organization:
- development of participative decision-making and work environment;
- development of the organization's readiness for change;
- better motivation and learning environment.

Consequently, competence development or organizational education both improves the employee's efficiency, as well as it enhances employees to improve themselves and the organization, they are in, as the main objective with competence development is to create development of individuals, groups/teams or whole organizations (Jönsson et al., 2016):

Competencies required for a Sales Partner

An unprofitable customer relationship is defined as a relationship that does not contribute to a supplier's profitability (Geersbro, et al., 2013). Therefore, it is essential that sales force knows the needs and worries of the potential clients. The differentiation between an employed sales manager or sales staff, compared to a nominated Sales Partner in our context can be done quite easy. A sales manager or sales staff is employed by the company and acts in the name of the company. A sales partner on the other hand, might follow other interest as a sales partner is usually working with multiple principles. This, as one of the main and obvious difference between the parties, is not only inherent in the communication with each other, it is also reflecting different competencies the parties need to have in order to fulfill their expected goal on the market. A sales manager typically reports to the head of sales or to the CEO in his company, it is important for the sales manager to have a profound technical knowledge, to a certain extent leadership quality but also negotiation skills and emotional intelligence.

A sales partner might have a direct supervisor, but in machine manufacturing industry the sales manager often directly interacts with the owner of the partner company. The sales partner company on the other hand, might have a different view on the market, a different goal how to penetrate the market or just different priorities among the principals it is working with. The sales partner knows the local market best, knows the market players and the hidden and underlying operations in his market. Depending on cultural, regional or political circumstances in the sales partners area of interest, different competencies might be necessary in order to fulfil the sales partners, but also the principal's goal in that market.

Several different competences and behavioral related actions focusing salesforce in general can be found, additionally Khusainova et al. (2018) state some fundamental changes in sales force motivation strategies, which calls for a better and more detailed understanding of individual salesperson motivation.

When thinking about the findings from Asiegbu (2011), there is a lack of coaching in this concept. In his findings, it is clearly visible that leadership issues like coaching, mentoring and team staffing is required to reach a sustainable competence development in the salesforce. With regards to customer relationship and market orientation, an effective salesforce endowed with well-developed competences is a treasured resource and constitutes a competitive advantage in adapting and responding to the demands of the competitive and dynamic worlds (Desimone, 2012). Developing and transferring competences in such dynamic markets in order to create competence advantages and consequently competitive advantages is key, as statically strategic planning might not be adequate in moving company environments (Proff, 2005). However, within firms there is a large degree of uncertainty regarding how competencies should be developed over time in order to ensure sustainable competitive advantages.

4. Characteristics of Sales Partner

A sales partner, or in literature often referred to as sales agent, sales representative or sales rep, is a company (in seldom cases a single person) which acts in the name of its principal in a certain region as the official representative of a company and as the faces of the selling firm to buyers, a crucial link between buyers and sellers in business-to-business markets (Shi et al., 2017). The sales partner typically is an international sales specialist who represent several noncompeting firms and is especially useful for small and medium-sized firms engaged in global marketing activities (Rosenbloom et al., 2008). The sales partner usually cooperates with multiple suppliers, that are operating in similar business activities, but not competing with each other's. Managing such types of sales force can be challenging, as the sales partner might prioritize efforts on those principal suppliers who provide the greatest financial rewards or those who provide unique offerings that easily sell (Chakrabarti, 2014).

Companies nominate a specific sales partner as they strive for sales or market share in the sales partner region, in order to avoid direct participation just like setting up an own subsidiary. Levin et.al. (2016) state that Job openings for nonscientific business-to-business sales professionals will increase over the next 10 years, which again highlights the importance of this occupation. The reasons for nominating a sales partner can vary, from too high market entry barriers for an own subsidy to cultural differences, nevertheless it is one of the most preferred market entry options for addressing international territories (Aylward, 2006). According to Webster (1975), it would be an economic impossibility for the manufacturer to provide the necessary local inventories and service organizations for reaching end-users. In any case, it represents an international market approach and the implicates the goal to sell products or services abroad.

Efficiency in organizational structures often is key to success and developing human resources an integral part of an organization's approach in implementing strategies (Ross, 2014). Companies strive for the most efficient structure, the most efficient staff, the most efficient ways to sell their products. A very efficient way how to sell the products is using a sales partner in a foreign region. By using a sales partner, it is not necessary anymore to create subsidies or participating in joint ventures in order to have a sales office in a foreign market. It is quite easy for a company to name a sales partner as their official representative, and immediately have the benefits of market knowledge, customer knowledge and potential existing sales data bases – and companies value and worship the support by their sales partner, whose importance is still increasing. Even Webster in 1975 already highlighted the importance of this relation.

However, a sales partner is not the ultimate key to success, just like in all other business relations or in all human resource management decisions, there is a potential risk of nominated the wrong person, the wrong company, believing that the nomination of a sales partner is enough to gain market share, but forgetting about the necessity to teach the partner, educate and bind them and thereby develop the partners competences in a specific field, the one that might be the most interesting for the company, however Alves and Meneses (2015) are indicating that the success of mutually beneficial business relationships depends firstly in a good selection of partners.

A sales partner, although it is always used as a singular, typically is an independently owned business (Webster, 1975) consisting of one or more participant, whereas the size of the sales partners company usually is depending on different factors like region, number of companies the sales partner is working with, and others. Means it is different companies working together, trying to achieve similar goals, for example increasing sales volume, increasing market share and so forth. Two companies achieve a fundamental fit when activities and expertise complement in a way that increases value potential (Webster, 1975) – in our case, a principal typically seeks sales partners working in the same industry, with other companies in order to create synergy effects.

A sales partner can, product and company knowledge provided, boost the sales and leads immediately and thereby pay back the initial investment of the company in his abilities immediately or soon – depending of course on different organizational, situational, regional and industry specific settings and thereby represents an international alliance which is defined as a formal and mutually agreed commercial collaboration between companies from different countries (Beamish, 1999) and as an as an open-ended cooperative agreement between legally separable organizations (Vazquez et al., 2014)

Having, developing and maintaining a stable sales partner relationship requires motivating the sales partner. As motivation is the psychological feature that arouses a person to action toward a desired goal and elicits controls and sustains certain goal directed behavior (Ogunnaike et.al., 2014), it is the principal's duty to motivate the sales partner in a way, which is beneficial and desired for the principals company goals. Competence development, mainly considering product knowledge training methods are additionally required to keep the sales partner motivated, it also has been shown that the structure of inter-organizational partnerships influences knowledge transfer (Hutzschenreuter, 2010), which consequently improves the development on the one hand, and also the motivation on the other hand.

Though, it is not only economic consequences a company will face when working with sales partner, it is also socio-psychological outcomes. When companies work with partners, this partner somehow will be the face of the company in the specific region or country. Consequently, the sales partner will be the direct link, the company itself in the eyes of potential or existing clients in the specific region or country. Depending on the performance of the sales partner, this can have a positive, but also a negative impact in terms of market presence, market penetration and market share at the end of the day. Therefore, it is essential to train and develop this valuable sales force by modern methods, as corporations need to understand that the training programs that were developed years ago simply may not apply in the modern and highly competitive marketplace (Manna et.al., 2004)

5. Conclusion

As of now, the findings in the research field are limited as the author just started with some theoretical parts. However, the literature review shows that the topics sales force development and sales force efficiency are strongly linked. In the current case, sales force development mainly means competence development and the sales force efficiency is mainly related to socio-psychological facts like motivation and commitment, rather than economical facts.

The author is the opinion that sales partners are of crucial importance for machine manufacturing companies, therefore stronger efforts should be made from company side to keep the sales partner, develop and motivate them. This sales force development might work best when the principal is offering programs or initiatives, which result in the personal and knowledge development of the sales partner, ending ultimately in an increased motivation and commitment of the sales partner to the principal because of increases self-efficacy.

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16. ANALYSIS OF OWN-SOURCE REVENUE OF WEST-POMERANIAN MUNICIPALITIES AS AN ELEMENT OF LOCAL DEVELOPMENT MANAGEMENT

Abstract: For the financial foundation of local governments to be stable, own-source revenue must be the primary revenue stream. Ideally, the share of own-source revenue in total revenue structure should be as large as possible. Own revenue reflects the economic situation of municipality's residents and locally based businesses, therefore revenue analysis and forecasts should be perceived as an element of local development management process. The paper explores the importance of municipal own-source revenue as the basic source of financing local development. The author's research goal was to analyze and forecast municipalities' own revenue with the use of econometric models. Based on empirical data for the years 2015-2018, own-source revenue of West-Pomeranian municipalities was analyzed and future trends were projected. Analysis of the actual financial situation of local governments revealed severe disparities in own revenue raising capacities across West Pomerania. Point and range predictions were made with the use of trend function extrapolation. Prediction errors were below 10%. In conclusion, to ensure efficient management of local development processes, continuous monitoring of municipalities' own-source revenue levels coupled with demographic data is recommended.

Keywords: local development, management, own-source revenue.

JEL Classification: C010, O130, R110

1. Introduction

Before undertaking the analysis of local government budget structure, it is necessary to formulate substantive questions: What is the aim of the analysis? Who will be its recipient of the analysis? What information should it provide? And finally, what questions should it answer? Answers to these questions are relevant to the scope of the analysis and the way it is conducted.

Analysis of municipal budget structure is not only a useful, but indispensable element of the decision making and finance management processes (Dylewski, Filipiak, 2004). It is important for the analysis to be conducted in both static and dynamic contexts, as only then certain trends and dependencies between phenomena can be observed. To conduct a proper analysis, input information must contain financial data that enable experts to analyze the allocation and distribution of public funds. Such analysis also facilitates the monitoring of public funds in various aspects: their spending purpose, the timeframe and consistency between planned and actual spending. Research should contain both ex post and ex ante analyses to ensure that the findings give stable grounds for stimulating local development and creating conditions in which local businesses can thrive (Owsiak, 2014).

Two main approaches local development planning can be identified: diagnostic and prognostic prediction models. The prognostic method is based on an ideal model and in fact is no more than a utopian blueprint. On the other hand, the diagnostic method approaches development planning in a different way, with assessment of the actual situation being at the center stage. Following the findings, a desired situation is defined in form of goals, and then the ways and means to achieve it are identified. The aims of a socio-economic diagnosis can actually be narrowed down to one goal

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which is an accurate, reliable analysis of locally significant issues. Such an analysis enables municipal officials to formulate relevant development programs and take appropriate actions. Therefore, the importance of this stage should not be downplayed in the overall strategy development. Omissions, shortcuts and errors with regard to diagnosis may result in misformulation of goals (Dziemianowicz, Kierkowski, Knopik, 2003).

Management of municipal finance can be defined as a very complex process which encompasses a wide range of interrelated decisions and actions taken by municipal decision makers which are aimed at maximizing socio-economic effects, in accordance with strategic and current goals adopted by the municipality. Shaping of budget and allocation of funds result from “quantitative and qualitative needs raised by local communities in close relation to the municipality’s current and forecasted financial situation, in line with the principles of rational management” (Misiąg, 1996, Wieczorek, 2016).

Finance plays a key role in municipal strategic management. Each and every decision taken, irrespective of whether it regards the municipality’s current or future operations, has a financial dimension. It is thus the municipality’s financial capacity along with the quality of municipal management that are crucial to the success of municipality’s strategic goals and overall development.

The aim of the paper was to apply econometric models to analyze and forecast municipal own-source revenue, and on a more pragmatic level, to offer tools that support the management of local development. The author assumed that the specific character of municipalities affects the size and pace of own-source revenue growth, therefore municipalities were classified into urban, rural and urban-rural groups. Data regarding own-source revenue of West-Pomeranian municipalities over the period of 2005-2018 were analyzed. Econometric models were used to make short term projections of municipal own revenue (Drejerska, 2010).

2. Own-source Revenue as an Element of Financing and Managing Local Development

The way revenue is formed and allocated is a consequence of “quantitative and qualitative needs raised by local communities in close relation to the municipality’s current and forecasted financial situation, in line with the principles of rational management” (Misiąg, 1996). The definition emphasizes that municipal financial policy and budget administration must be focused on actual management and not just administration of finance (Sochacka-Krysiak, 2003). Revenue raising capacity of local governments determines whether public tasks are implemented and economic development is sustained on a local and regional level (Wojciechowski, 2012).

The formal classification of local budget revenue is based on their source. It identifies two types of revenues: own-source revenue and supplementary revenue. Own-source revenue indicates the ability of a municipality to finance the exercise of the authority and determines, among other factors, the success of the implementation of local autonomy. Therefore, local government units (LGU) should treat own-source revenue as the key source of their finance, which naturally implies own revenue share in total revenue structure should be as large as possible. After a closer look into specific local government budgets, it must be concluded that own revenue should be the key source of their funds (Marks-Bielska, Kozajda, 2018).

The concept of own-source revenue is a normative concept, though as of today, it hasn’t been properly defined by the legislator. Although the existing law allows to roughly classify municipal revenue as own-source revenue, it is very hard to tell what prompted the legislator to classify revenues of different legal nature as own source revenues, or to identify overlapping areas that are crucial for the classification. Identification of characteristic attributes, an in consequence a methodical classification into the own revenue category turns out to be a challenging task. Indeed, it is not easy to pinpoint attributes that are specific to the entire own-source revenue category and treat them as the main classification criterion. A more thorough analysis of municipal own-source revenue structure leads to the conclusion that aside from being formally classified as own revenues, they differ one from the other in terms of both their legal nature and functional justification (Kowalczyk, 2019).

Reference literature offers a plethora of overlapping definitions of “own-source revenue”. In short, own-source revenue (OSR) is the revenue that local government raises from all local sources, and passes to municipalities under the governing law, in whole and indefinite period of time. Sources of municipal own revenue include:

- income and property taxes, proceeds from municipal property;
- transfer of property rights, donations to LGU;

- revenue from monetary penalties and fines defined in regulations;
- interests on loans granted by LGU, unless provided otherwise by specific provisions;
- interests on overdue liabilities classified as LGU own revenue;
- interests on money deposited in bank accounts, unless provided otherwise by specific provisions, and others.

Within the meaning of the Act, a share in personal and corporate income tax revenue constitute local government own-source revenue (Act of 13 November 2003 on Revenues of Local Government Units).

Own-source revenue ensures that municipalities have autonomy in decision making, are able to satisfy the needs of local residents and enhance the standard of services provided they provide (Sobczyk, 2011). In a modern understanding of the functions of local government, their most important task is to create conditions conducive to the satisfaction of the needs of local community member. Economic development of a municipality is thus understood as development that translates into, i.a., increased income for companies and people residing in the locality through increased employment rate. The pace of socio-economic development changes depends mainly on the source and size of revenue generated by the total of municipalities. To finance developmental needs, in particular in specific social and economic areas, it is necessary to acquire additional revenue from available sources of finance. It is in the best interest of every municipality to make use of all available sources to finance its key tasks, in particular relating to technical and social infrastructure, environmental conservation and battling unemployment. There are two major factors in municipal finance management that capture well the municipality's development potential. First, it is municipality's own source revenue which speaks to the financial intelligence of officials employed by the municipality, entrepreneurship of local residents and their wealth (taxes and local duties). Second, it is the investment expenditure that proves municipality's eagerness to increase its wealth and wellbeing of its residents, as well as intent to boost the overall socio-economic development (Sobczyk, 2010). Obtaining accurate revenue forecasts, including own-source revenues, is not an easy task for local government units. The main challenge here is that the revenue is dependent on the economic situation and so it varies, including the share in PIT, CIT and civil law transactions tax revenue, with the latter gaining importance in recent years. Municipal own-source revenue is thus directly dependent on the economic and financial situation of enterprises and households (Batóg, 2009).

3. Characteristics of Selected Factors

Local policies and economic development programs are becoming a well-established part of national government policy (Hughe, 1991). There are models of local development that take into account individual sectors of the economy and provide, at minimum, a partial description of them. (Collinge, 1992). Development potential of a region or municipality depends on many factors. Among the most important are the demographic potential, total budget revenue and own source revenue.

As of the 31st of December 2018 the population of the West-Pomeranian Province was 1 701 030 persons. In comparison to 2005, the population grew by 6 852 persons. Changes in the total population of West Pomerania over the period 2005-2018 are presented in Figure 1. A sharp increase in total population observed in the years 2008-2009 was the result of the global economic slowdown that prompted a reversal of migration flows and return of many work migrants to Poland.

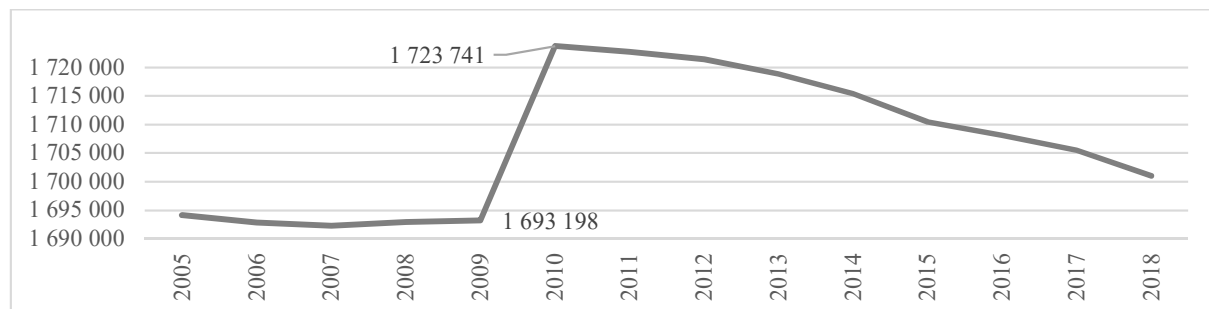


Figure 1. Total population of the West-Pomeranian Province over the period 2005-2018

Source: own study based on data from the Central Statistical Office (GUS)

The total population increased in only 39 municipalities of the province. In other West-Pomeranian municipalities a decrease in the number of residents was observed.

Analysis of the actual financial condition of LGU shows a big variance in the share of own-source revenue in total revenue between municipalities. There are municipalities in which the share of own revenue in total revenue is more than half of total revenue. A similar situation can be observed in municipalities in which own source revenue is the primary source of revenue, although their share in total revenue structure falls below half of their total revenue. The median value of own revenue in total revenue in West-Pomeranian municipalities was 45.5% in 2018. In the research period 40 municipalities (35% of all municipalities of West Pomerania) noted a decrease in own revenue to total revenue in 2018 as compared to 2005. As it comes to own revenue structure, the three major components were: personal income tax (PIT) revenue, property tax (PT) and proceeds from municipal property. As it transpires from the analysis, personal income tax constitutes an increasingly bigger source of municipal own revenue. The findings are presented in Figure 2.

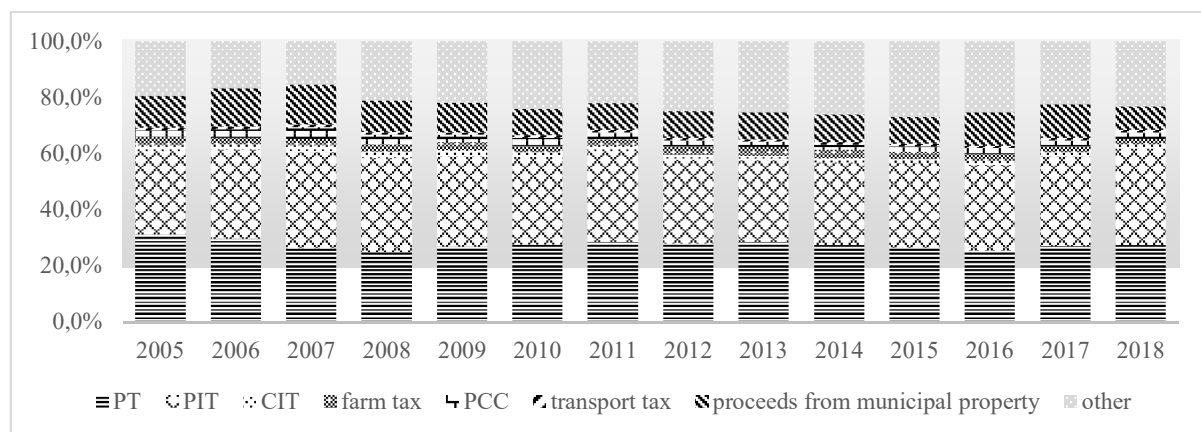


Figure 2. Structure of own-source revenue of West-Pomeranian municipalities over the period 2005 – 2018

Source: own study based on data from the Central Statistical Office (GUS)

Since taxes are the major source of municipal own revenue and they depend on how well local population is doing, in this paper the following region-specific variables were adopted as indicators per citizen residing in a given municipality (per 1 resident): farm, forest and transport taxes, CIT, PIT, property tax PT, tax on civil law transactions, self-employment tax. The selected research period of 2005-2018 was dictated by Poland's period of membership in the EU after the country's access in 2004. EU membership has had a significant impact on Poland's demographic, in particular in West Pomerania due to the geographic location of the province.

4. Research Methods

Forecasts were made based on historical data for 2005-2018. Trend function models were used in the forecasting. Generally, the choice of prediction models depends on the nature of forecast, information available, questions to be answered and nature of predicted variable. There are two types of prediction: point and range prediction. Prediction errors are an inescapable element of predictive analytics and all forecasts for the future are burdened with such error. Evaluation of how accurate the predictions are expected to be is a very important part of the prognostic process. Evaluation of the accuracy of predictions and a follow-up analysis is helpful in the selection of a prognostic method that is most relevant to a specific forecast situation, and thus, most appropriate. Moreover, such evaluation also allows to measure the size of prediction errors and the uncertainty of prediction. Measuring prediction errors also provides valuable input and contributes to development of prediction methods to be used in specific forecast situations and their further refinement.

Point prediction was determined based on the trend function:

$$\hat{y}_T = f(t) \quad (1)$$

where t time variable.

In case when the trend function didn't meet the extrapolation criteria, the model of exponential smoothing:

$$y_T^P = m_n + h(m_n - m_{n-1}) \quad (2)$$

was used where h denotes the number of years into the past and m_n denotes trend evaluation. Mean prediction error for the linear trend was estimated as follows:

$$S_T^P = \sqrt{\left(\frac{(x_T^P - \bar{x})^2}{\sum (x - \bar{x})^2} + \frac{1}{n} + 1 \right) \cdot S_e^2} \quad (3)$$

$$\text{where } S_e^2 = \frac{\sum_{i=1}^n (y_i - \hat{y}_i)^2}{n - k - 1} \quad \text{residual variance} \quad (4)$$

Prediction error in the exponential smoothing model was calculated in this way:

$$I = \sqrt{\frac{\sum (y_i - m_i)^2}{\sum y_i^2}} \quad (5)$$

Admissibility of predictions was determined by percentage share of prediction error in the forecast made. The boundary value assumed was 10%.

$$\eta_i = \frac{S_i^P}{y_T^P} \cdot 100\% \quad (6)$$

(Zeliaś, Pawełek, Wanat, 2003; Welfe, 2003; Gajda, 2001; Clements, Hendry, 1998; Makridakis, Wheelwright, 1978).

5. Results of Analyzes

Based on the trends analyzed, point and range predictions were made for overall municipal own-source revenue. In addition to prediction of average values, projections were also made for extreme values (maximum and minimum). The latter point to growing discrepancies between the richest and poorest municipalities (Table 1).

Table 1. Forecasts of municipal own-source revenue per 1 resident of West-Pomeranian municipalities

Municipalities	Forecast Year			
	2019	2020	2021	2022
Point predictions				
Average				
Prediction	2860.2	2982.8	3105.4	3228.0
Prediction error	5.03%	4.85%	4.70%	4.55%
Maximum				
Prediction	5876.4	6350.5	6862.9	7416.7
Prediction error	10.01%	9.33%	8.70%	8.11%
Minimum				
Prediction	2005.2	2097.0	2188.9	2280.7
Prediction error	6.41%	6.17%	5.95%	5.76%

Source: own study based on data from the Central Statistical Office (GUS)

Over the research period own-source revenue of West-Pomeranian municipalities grew systematically. The growth was described by linear trend where average annual increase was PLN 285.59 mln (Figure 2).

The next step was to make projections for major components of municipal own-source revenue with the use of an econometric model that could be adapted to own revenue forecasting in specific municipalities.

The largest component of municipal own revenue was PIT which showed an exponential trend for the study period. Exponent of the function denotes the growth rate, which in this case is interpreted as average annual increase in tax by 6.62%. The second major component, i.e. property tax, the trend was linear. Average annual increase in property tax was PLN 56.61 mln.

The dominant share of personal income tax (PIT) and property tax in municipal own-source revenue induced the author to make projections per 1 resident of the municipality. Figure 4 and 5 present trend models for the two aforementioned taxes in all West-Pomeranian municipalities.

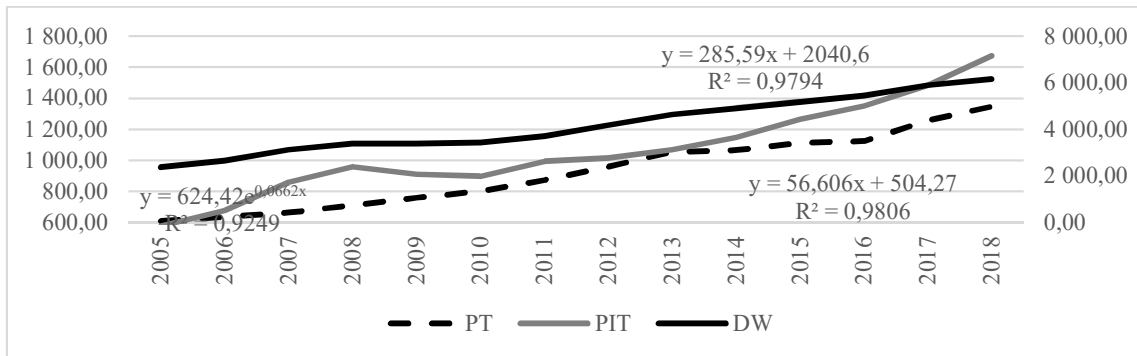


Figure 3. Total own-source revenue of West-Pomeranian municipalities over the period 2005-2018 [in million PLN]

Source: own study based on data from the Central Statistical Office (GUS)

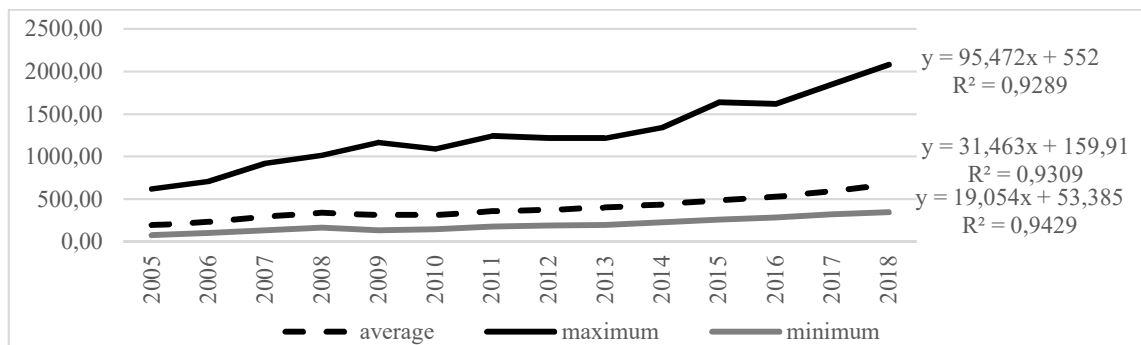


Figure 4. PIT per 1 resident of West-Pomeranian municipalities over the period 2005-2018 and forecast for the years 2019-2022 [in PLN]

Source: own study based on data from the Central Statistical Office (GUS)

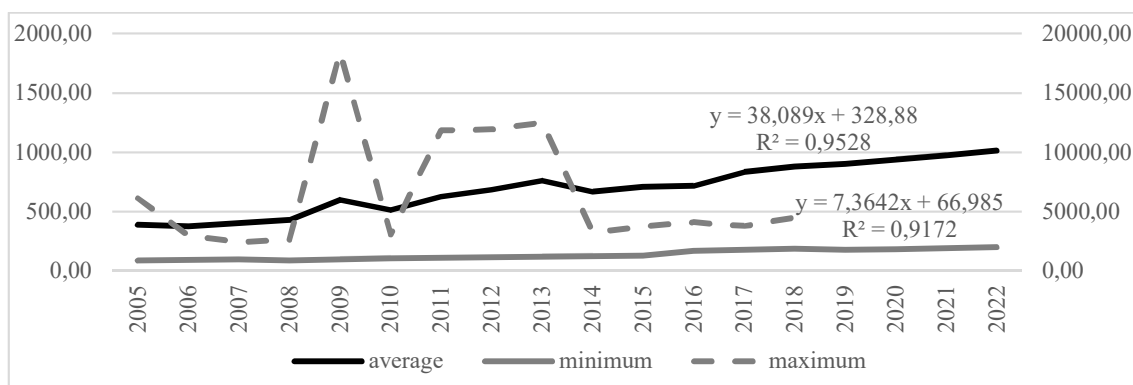


Figure 5. Property tax per 1 resident of West-Pomeranian municipalities over the period 2005-2018 and forecast for the years 2019-2022 [in PLN]

Source: own study based on data from the Central Statistical Office (GUS)

The above trends show a regularity captured by linear trend where the regression coefficient is interpreted as average annual increase. Only in case of property tax maximum values no such regularity was observed. This can be explained by the fact that in some municipalities, e.g. Nowe Warpno, a significant increase in property tax revenue in 2009 and 2011-2013 resulted from collection of outstanding water tax due to the municipality on the grounds of a law that was binding in 2002-2006. Upon the municipalities' request, the State refunded in several payments the outstanding balance of PLN 100 PLN including interests of PLN 50 mln.

Tables 2 present point predictions for PIT and property tax grouped by types of municipalities: urban, rural and urban-rural.

Projections of personal income tax were made with the use of growth trend function with a very high coefficient of determination. For property tax, it wasn't always possible to evaluate functions that would allow to extrapolate the results beyond the sample set, hence in case of average and maximum values for urban-rural municipalities and maximum values for urban municipalities Brown's method of exponential smoothing was applied.

Trend functions for PIT were linear which points to a consistent growth trend (regression coefficient). As it comes to property tax, the growth trend was linear only for rural municipalities, and also in case of minimum values for urban and urban-rural municipalities. The trend was exponential for average values in urban and urban-rural municipalities, whereas in other cases such a regularity did not occur.

Projections of average values provide information on what revenue can be expected from a specific tax, whereas projections of extreme values define the threshold of anticipated revenue. Relative prediction errors indicate that the estimated values are burdened with small errors. Eventually, the decision about which prediction values are considered in revenue planning lies in the hands of local decision makers, and interestingly, personal dispositions do play a role in the final selection. This is to say that realistically-oriented people will rather consider average values in their budget planning, whereas optimists will tend to dwell on close-to-maximum values and the especially cautious individuals will adopt near-minimum values in their planning. Projections are a useful tool for local governments and definitely support the planning process, but they should be treated just as projections and not guaranteed revenue.

6. Conclusion

Local development is mainly financed by municipal own-source revenue which relies mostly on tax revenue. To ensure efficient local development, an ongoing analysis of information reflecting municipality's developmental potential must be part of routine analysis of municipal decision makers. Increased income of companies and citizens residing locally translates directly into increased municipal own-source revenue by way of PIT and property tax revenue. It should be noted that the major components of own revenue structure are: PIT, property tax and proceeds from municipal property. Research findings reveal that the share of Personal Income Tax in total revenue is becoming increasingly larger (Batóg, 2011).

Among local government units of the West Pomerania Province some municipalities deserve attention due to the fact that the share of their own-source revenue to total revenue is more than half. A similar situation can be observed in municipalities in which own-source revenue is the primary source of revenue, although their share in total revenue structure falls below half of their total revenue. Projections of PIT and property tax revenue are a useful tool in municipal budget development. Nonetheless, what must be kept in mind is that two conditions must be met for the forecasts to serve their purpose: they must be accurate and have to be treated in a down to earth manner. However, coming up with accurate own-source revenue forecasts is a challenging task as it must take into account also the big picture, that is the relationship between tax revenue and economic situation, as well as changes in regulations regarding municipal revenue.

The success of application of econometric models in forecasting future revenue depends hugely on whether municipal decision makers are realists, in which case they assume near-average values, whereas optimists would rather refer to near-maximum values and more cautious individuals – near-minimum values.

Projections of average values reveal the amount of revenue that can be expected from a specific tax, whereas projections of extreme values determine the revenue threshold.

The paper explored the potential of using mathematical methods for analysis and forecasting. It focused on average and extreme values of own-source revenue of West-Pomeranian municipalities since own-source revenue forecasting for all municipalities was beyond the scope of this paper. Research municipalities were classified into three categories, in accordance with the territorial division of Poland. For all three categories – urban, rural and urban-rural – projections were made.

Trends calculated for PIT revenue show systematic growth in all categories with an average annual increase of ca. PLN 40 per resident of urban municipalities, PLN 32 in rural municipalities and PLN 32 in urban-rural municipalities.

Table 2. Projections of PIT and property tax revenue per 1 resident of West-Pomeranian municipalities for the years 2019-2022

	Urban Municipalities				Rural Municipalities				Urban-Rural Municipalities			
	Forecast Year				Forecast Year				Forecast Year			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Personal Income Tax (PIT)												
Average												
Projection	952.68	992.54	1032.40	1072.26	608.09	640.63	673.18	705.73	588.44	617.27	646.11	674.95
Prediction error	6.04%	5.84%	5.65%	5.49%	7.71%	7.37%	7.07%	6.80%	6.25%	6.00%	5.77%	5.57%
Minimum												
Projection	791.88	829.664	867.448	905.232	339.53	358.616	377.702	396.788	353.774	371.565	389.356	407.147
Prediction error	5.04%	4.84%	4.67%	4.51%	6.42%	6.12%	5.85%	5.62%	7.32%	7.02%	6.75%	6.51%
Maximum												
Projection	1366.44	1415.86	1465.28	1514.70	1992.65	2089.92	2187.18	2284.45	1014.28	1062.29	1110.30	1158.31
Prediction error	11.31%	10.99%	10.71%	10.44%	6.15%	5.91%	5.69%	5.49%	6.96%	6.69%	6.45%	6.23%
Property Tax (PT)												
Average												
Projection	806.11	859.21	915.82	976.15	961.11	1012.58	1064.06	1115.54	814.96	837.02	859.09	881.15
Prediction error	3.55%	3.35%	3.17%	3.00%	6.40%	6.12%	5.86%	5.64%	0.20%	0.20%	0.20%	0.20%
Minimum												
Projection	552.16	578.42	604.69	630.95	177.45	184.81	192.18	199.54	318.65	332.65	346.66	360.67
Prediction error	4.67%	4.49%	4.32%	4.18%	7.62%	7.37%	7.14%	6.94%	6.35%	6.12%	5.92%	5.74%
Maximum												
Projection	3472.39	4310.57	5148.76	5986.94	4461.65	4670.90	4880.15	5089.40	3132.11	3261.70	3391.29	3520.88
Prediction error	0.36%	0.36%	0.36%	0.36%	4.71%	4.53%	4.37%	4.23%	0.86%	0.86%	0.86%	0.86%

Source: own study based on data from the Central Statistical Office (GUS)

Average annual increase in property tax revenue is more varied. In rural municipalities the increase amounts to PLN 51 per resident, in urban municipalities it is 6.38%. The increase couldn't be determined in urban-rural municipalities as no such regularity was identified.

Revenue forecasts can greatly support municipal budget planning processes, but they cannot be treated as guaranteed revenue estimate. The data analytics and forecasting methods applied in this paper can be a useful tool in municipal budget development, the only limitation being the knowledge of predictive methods and the need to avail professional expertise.

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17. DIGITAL ECONOMY IN THE CONTEXT OF DIGITAL SKILLS IN THE LABOUR MARKET IN THE VISEGRAD GROUP

Abstract: The development of the information society and digital transformation are bringing about profound changes in the function of national economies and in the behaviour of businesses and consumers. From the work management perspective, it helps to identify and improve processes and at the same time to optimize and speed them up. Digitalization in the current institutions and enterprises is focused on monitoring of the processes and planning of activities. Therefore, the digital economy refers to all of those economic processes, interactions and activities that are based upon digital technologies. Its development depends on digital skills of the labour force. The purpose of the paper is to identify the current level of digital skills in the Visegrad Group with an emphasis on human capital. In order to achieve the purpose, these methods were used: time series analysis (period from 2014-2019), comparison and synthesis. In order to evaluate the level of digital skills and performance, the European Commission data on the Digital Economy and Society Index (DESI) were employed.

Keywords: digital economy, digital skills, human capital.

JEL Classification: O14, O15, J20, J24, E60

1. Introduction

The precondition of the digital economy is digital technology made up of economic processes that help increase efficiency of economic entities. Economic growth can be increased with innovation and productivity. Therefore, attention should be paid to digital revolution (Antón et al., 2015). On the one hand, digital transformation provides ample opportunities, but on the other hand, we are facing new labour market challenges in terms of education, employee motivation and remuneration. Today, economic development relies on digital technologies, and thus on the digital skills of labour. The digital economy increases national competitiveness (Chaaben, Mansouri, 2017). The digital economy requires labour-specific skills, and flexibility is one of them. Human capital is becoming the key factor of development and its quality is given by the quality of both education and digital skills.

2. Methodology of research

The purpose of the paper is to identify the current level of digital skills in the Visegrad Group with an emphasis on human capital. In order to achieve the purpose, these methods were used: time series analysis (period from 2014-2019), comparison and synthesis.

The performance of digital economy can be measured in a number of ways, either by using individual indicators or aggregate indices. Bukht and Heeks (2017) asserted that measuring the digital economy faces challenges of fuzzy boundaries, poor data quality, pricing problems, and invisibility

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of much digital activity. Bureau of Economic Analysis researched the digital economy's contributions to the overall U.S. economy using the estimates of digital economy gross output, value added, employment, and compensation (Barefoot et al., 2019). Ojanperä et al. (2019) proposed the construction of a Digital Knowledge Economy Index, quantified by way of measuring content creation and participation through digital platforms (GitHub, Wikipedia, Internet domain registrations).

In order to measure and assess the level of digital performance of the EU countries, the European Commission developed the Digital Economy and Society Index (DESI). The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the progress of the EU countries in digital competitiveness.

In the research, the DESI was employed to compare the performance of the digital economy and the digital skills in the Visegrad Group.

3. The Role of Human Resources in the Development of Digital Economy

Digital transformation refers to major changes in the way how global economies work. These changes go hand in hand with the advances in information and communication technology. Digital transformation has brought about changes in the behaviour of customers, businesses, communities and regions. Innovations are of great significance as they are turned into new products, services, processes or procedures. The resulting digital economy propels economic growth and development, and essential economic functions and activities are becoming digitized (Klinec, 2000).

Presently, modern economies have been working under the Fourth Industrial Revolution or the Digital Revolution which is marked by a combination of technologies blurring the lines between the physical, digital and biological spheres. It is based on cyber-physical systems where real objects and virtual processes are interlinked in smart factories (Lénártová, 2017). The fourth industrial revolution is known as Industry 4.0 in both theory and practice. The issue is being dealt with by a number of researchers and authors (Staněk, Ivanová, 2016; Brynjolfsson, McAfee, 2015; Bludorf, Fosarová, 2014; Zubov, Siniak, Grenčíková, 2019).

The digital economy has triggered various changes in terms of new products, services and innovations. Innovations are of unique importance as they boost economic growth. The economic and social developments of today show that innovations do not only improve competitiveness and economic performance but also help tackle social issues and promote social changes. The digital economy is about economic processes, interactions and activities based on digital technologies. These progressive technologies are based on innovations and their transformation into practical life. Chaaben and Mansouri (2017) claim digital technologies improve the national economic development, the productivity of businesses across all industries; and increase quality of life for human beings. Information technology reduces operational and communication costs, and increases efficiency. As a result, fewer employees are needed for these supportive roles (Grenčíková, Petrušová, Sokol, 2019). All the aforementioned facts have a profound impact on the labour market.

The changes they have brought about require new approaches, organization and "new people" equipped with digital skills. Digital transformation is not only about great possibilities, but also about new challenges in the areas of education, employment, employee motivation, remuneration and assessment. Monnig et al. (2019) maintained that digital transformation and structural changes have an impact on the labour market and causes wage inequality, especially in the long run.

The European Commission (2015) recommends digital skill levels to be raised among employees in all economic sectors and among job seekers to improve their employability. The digital economy requires labour-specific digital skills and employee flexibility. Human capital, the quality of education and high level of digital skills are becoming the key factor in responding to changes in work processes. Both employee and employer adaptation is required in order to be able to respond to challenges, assimilate new knowledge, master new skills, and take on new tasks and responsibilities. From the managerial point of view, processes need to be identified and optimized. The area of personal growth or accountability for making employees able and motivated enough to meet these challenges plays a key role (Joniaková, Blštáková, 2017). Work management system must help identify, optimize and accelerate work processes.

The labour markets of the V4 countries have currently been experiencing favourable developments in their economies. Consequently, new jobs have been created, yet they are being more and more difficult to fill. Thus, business managements have not only to tackle the issue of labour shortage but

also to forecast the future demand. Businesses are struggling to fill vacancies for several reasons. One of the reasons is the workforce structure. In this case, qualifications of the workforce do not match the labour market demands. Another reason is the inability of the long-term unemployed to find employment, reacquire work habits and become fully-fledged employees (Tupá, Vojtovič, Strunz, 2019). In this regard, societies have been facing a challenge of finding some competitive solutions for the implementation of Industry 4.0. They should create worthwhile jobs, i.e. skilled jobs supporting further training and providing healthy working environment. Furthermore, it is essential to help improve digital literacy in the workplace as poor digital literacy is one of the factors widening social disparities and jeopardizing the chances for quality education (Vešić, 2005; Montoya, 2017, Huculova, Solcova, 2018). Moreover, it is required that the forms of professional training and qualifications increase the welfare of population (Kagermann et al., 2013).

Business managements play a pivotal role in this process. The process is about business restructuring, process changes, job and skill profile changes. More than ever before, employers will have to focus on retraining programs and increasing employee qualifications (Rezlerová, 2017). Masárová, Kordoš, Sokol (2019) maintained that “a skill gap” is occurring and hindering a single digital market to be established. Technical skills, such as IT skills and competencies, data and information processing and analysis, statistical knowledge, organizational and processual understanding, ability to communicate with modern interfaces (human/machine; human/robot), will be of top priority. Gehrke et al. (2015) claimed that in addition to personnel-related skills, the following will be of utmost importance: time and self-management, adaptability and ability to change, team working abilities, social skills, and communication skills. Currently, individuals are required to be responsible, able to take risks, have an entrepreneurial spirit, performance potential, and competitiveness (Strunz, Vojtovič, 2016). The future of innovation in human resource management is therefore closely linked to the concept of the Fourth Industrial Revolution, which is essentially about the massive digitization and mutual communication and cooperation among people, machines, equipment and products. It should, however, be also borne in mind that graduates, irrespective of their qualification levels, will sooner or later find themselves in a "knowledge trap." The knowledge trap refers to a situation when the knowledge acquired in educational institutions no longer reflects the current state of knowledge. Therefore, if they want succeed, they must improve their knowledge base, change their work habits and use the latest procedures (Lipovská, Hvorecký, Šimúth, 2014).

4. Measuring of Digital Performance of Visegrad Group Countries by The Digital Economy and Society Index

The Digital Economy and Society Index has been published every year by the European Commission since 2014. In 2019, the methodology was improved and the DESI was re-calculated for previous years to allow the index to be monitored over a longer period of time.

The DESI is composed of five dimensions: connectivity, human capital, use of internet services, integration of digital technology, digital public services.

Each dimension is divided in a set of sub-dimensions, which are assessed by individual indicators. Since indicators are expressed in different units of measurement, the indicators were normalised. In DESI, normalisation was done using the min-max method. Each dimension, sub-dimension and individual indicators were assigned weights based on their importance. The resulting national score is the sum of the weighted values for each dimension. (European Commission, 2019a)

In the paper, human capital dimension was examined. In the area of human resources, there are the following indicators: at least basic digital skills, above basic digital skills, at least basic software skills, ICT specialists, female ICT specialists, ICT graduates.

The Human Capital dimension takes into consideration those skills, from elementary usage skills that empower individuals to participate in the digital society and consume digital services and goods, to high-developed skills that allow the workforce to take full advantage of modern technology, thus enhancing the productivity and the economic growth (Stoica, Bogoslov, 2017).

4.1. DESI in the Visegrad Group

The Visegrad Four (V4), like any other EU country attempt to improve the digital performance and digital skills of their citizens. Figure 1 shows the development of the DESI and its sub-index values in the V4 countries from 2014 to 2019.

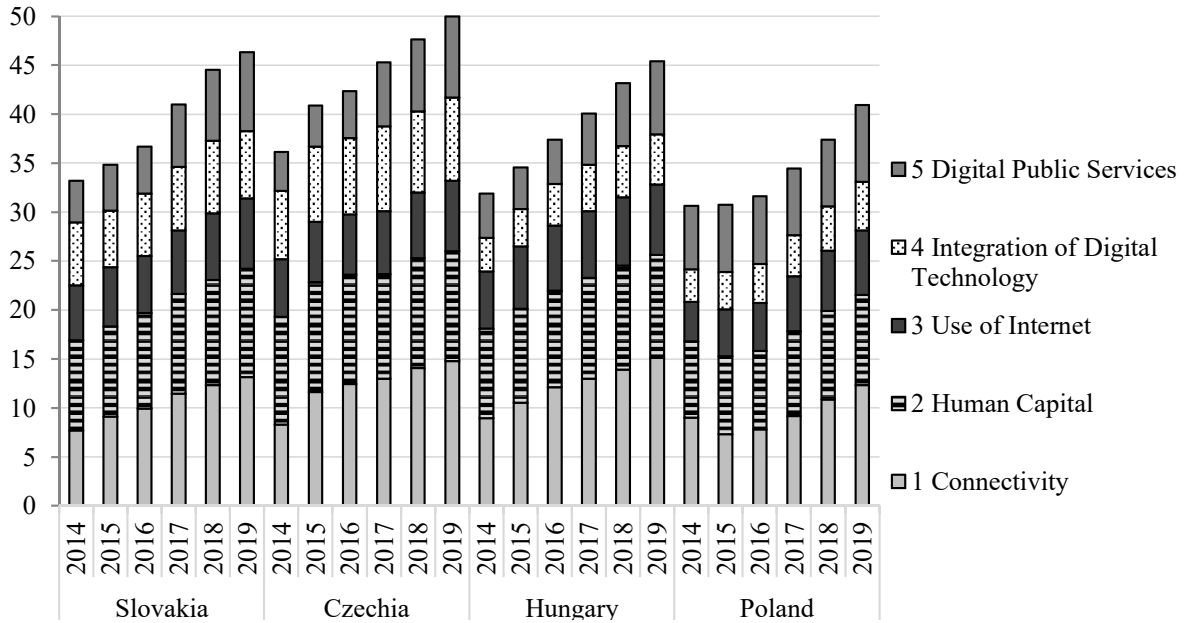


Figure 1. DESI development in the Visegrad Group

Source: European Commission, 2019b, authors' own graph

In the V4 countries, the DESI index was the highest in the Czech Republic. IN the Czech Republic, the DESI increased from 36.15 points to 49.98 points in the period under analysis. The Czech Republic was followed by the Slovak Republic (46.32 points) and Hungary (45.38 points) in 2019. The lowest increase was recorded in Poland (40.94 points) in 2019.

Śledziwska and Włoch (2015) examined the computer and internet skills amongst Poles and they took note that they had been significantly lower than the skills of other Europeans, including those from other new EU member states. They argued that the gap in human digital skills is the major cause of the low level of digitalisation of the Polish economy as a whole, which may seriously impair its development prospects in the context of the EU Digital Single Market.

Slovakia was ranked 21st in DESI 2019. Slovakia was successful in the human capital dimension (the share of population with basic and advanced digital skills is higher than the EU average). In addition, there were improvements recorded in internet connectivity, the use of Internet services and public digital services. The Czech Republic was ranked 18th, Hungary 23rd and Poland 25th.

DESI and its sub-index values vary across the V4 countries. Therefore, differences among sub-index values were also examined. Figure 2 shows the development of differences expressed with the coefficient of variance.

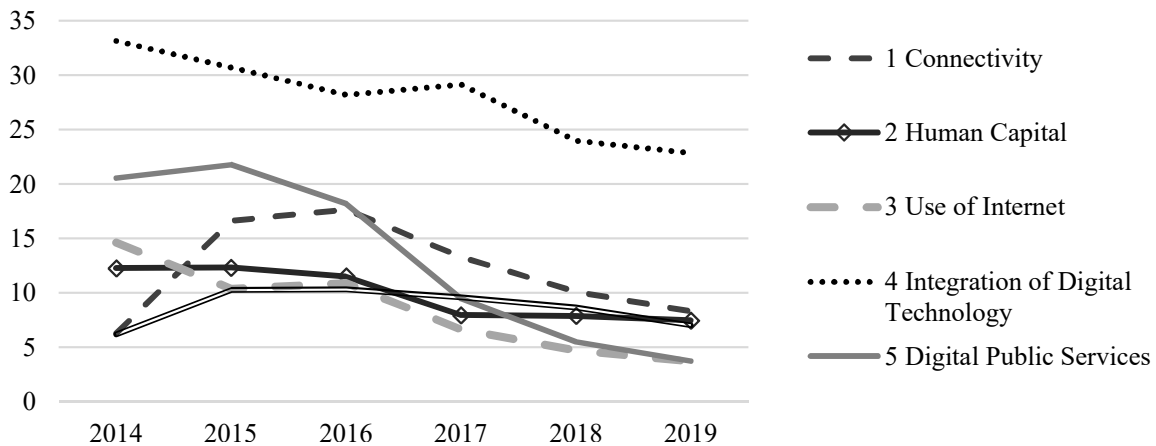


Figure 2. Development of DESI sub-index variability in V4 countries

Source: authors' own graph based on authors' own calculations

Figure 2 indicates that the biggest differences among the V4 countries were in the sub-index 4 – Integration of Digital Technology (in 2014 as much as 33.16%). The slightest differences were found to be in the sub-index 3 – Use of Internet (in 2019 mere 3.72%). From 2016, the differences among the V4 countries grew smaller in all the DESI sub-indexes.

A comparison of the DESI dimension values in the V4 countries in 2019 can be seen in Figure 3.

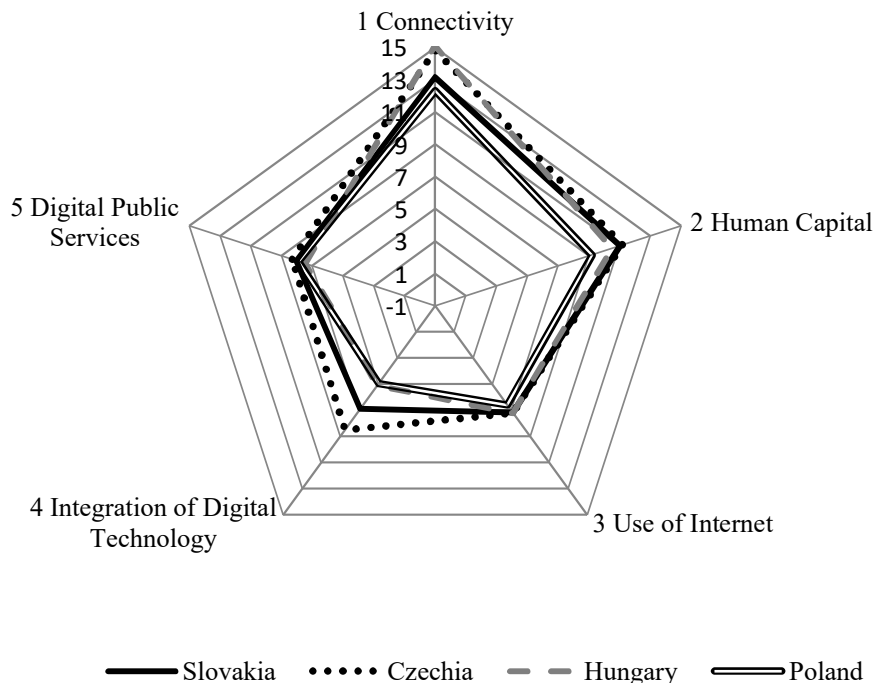


Figure 3. Comparison of DESI dimensions in the V4 countries in 2019

Source: European Commission, 2019b, authors' own graph

The V4 countries were the most successful in the dimension 1 (Connectivity) with Hungary having scored the best results. The ratings of individual V4 countries are similar in dimensions 3 and 5. The biggest gap between the Czech Republic and other V4 countries was found to be in the dimension 4 (Integration of Digital Technology) which made the Czech Republic to have the highest DESI score.

4.2. Level of Human Capital in DESI in V4 Countries

The paper specifically addresses human resources and the role they play in the digital economy. That is why the DESI Human Capital sub-dimension in the V4 countries was examined.

DESI Human Capital Dimension calculated as the weighted average of the two sub-dimensions: 2a Internet User Skills (50%) and 2b Advanced Skills and Development (50%).

DESI Internet User Skills sub-dimension calculated as the weighted average of the normalised indicators: 2a1 At least Basic Digital Skills (33%), 2a2 Above basic digital skills (33%) and 2a3 At least basic software skills (33%).

DESI Advanced Skills and Development sub-dimension calculated as the weighted average of the normalised indicators: 2b1 ICT Specialists (33%), 2b2 Female ICT specialists (33%) and 2b3 ICT graduates (33%).

Figure 4 illustrates the development of Human Capital sub-dimensions in the V4 countries.

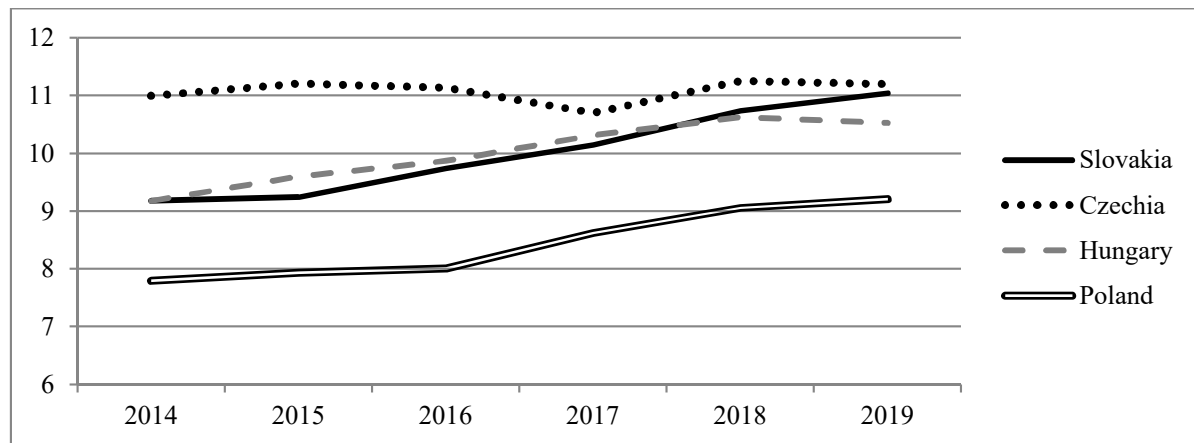


Figure 4. Human capital in DESI in the V4 countries

Source: European Commission, 2019b, authors' own graph

Although the Czech Republic had the best results in the Human Capital dimension, the remaining V4 countries managed to catch up. Slovakia, for instance, scored similar values in the Human Capital dimension in 2019. Hungary's rating was similar to Slovakia's, except for the final year under analysis. Poland lagged significantly behind in the entire period under analysis.

Table 1 lists the values of individual indicators under the Human Capital sub-dimension in the V4 countries.

Table 1. Human Capital sub-dimensions in the V4 countries in 2019

	Slovakia	Czechia	Hungary	Poland
- at least basic digital skills (% individuals)	59	60	50	46
- above basic digital skills (% individuals)	33	24	26	21
- at least basic software skills (% individuals)	63	62	52	49
- ICT specialists (% total employment)	2.8	3.6	3.6	2.8
- female ICT specialists (% female employment)	0.8	0.7	0.7	0.9
- ICT graduates (% graduates)	3.2	4.0	4.3	3.1

Source: European Commission, 2019b, authors' own table

In 2019, the Czech Republic was ranked highest in the Human Capital dimension, and did best in three of the six human capital sub-dimensions. Slovakia did best in the “above basic digital skills” sub-dimension, while lagging behind in ICT specialists and ICT graduates. Hungary, quite the contrary, scored best in the “ICT specialists” and “ICT graduates” sub-dimensions. Poland got ahead the other V4 countries in the “female ICT specialists” sub-dimension with 0.9% of employed women working as ICT experts.

5. Conclusion

The development of the digital economy made the quality of human resources and the associated quality of knowledge acquired in the learning process of crucial importance. It is therefore essential to match the structure of the education system with the structure and demands of the labour market under the conditions of digital economy. Businesses have to have their say in this process, too. As a matter of fact, business managements must provide for business reengineering, process changes and employee profile changes. In this context, the European Union monitors the Digital Economy and Society Index (DESI) on a regular basis. DESI summarizes the respective indicators of European digital performance and monitors the development of digital competitiveness in the EU countries

The research was focused on the DESI development in the Visegrad Four. The highest DESI values were in the Czech Republic, followed by Slovakia and Hungary. The lowest DESI value was found to be in Poland (40.94 points). The development of the variation coefficient of DESI sub-indexes in the V4 countries indicates slight differences, except for the sub-index 4 “Integration of Digital Technology” which stood at 22.86% in 2019. It is the “Integration of Digital Technology” that earned the Czech Republic the highest DESI score among the V4 countries.

Special attention was paid to the level of Human capital in DESI in the V4 countries. In this dimension, the Czech Republic performed the best, yet other V4 countries had been catching up with the Czech Republic and Slovakia reached similar values (CR 11.20; SR 11.048).

In 2019, the Czech Republic was ranked best in other three human capital sub-dimensions (“at least basic digital skills”, “at least basic software skills”, and “ICT graduates”). Slovakia performed best in the “above basic digital skills” sub-dimension, Hungary in the “ICT graduates” sub-dimension, and Poland outperformed other V4 countries in the “female ICT specialists” sub-dimension.

The research results indicated relatively slight differences in the level of digital performance in the V4 countries. In the research, the external sources of data were employed. The research may stimulate additional research on for instance digital skill acquisition at different levels of education, digital skill training programs provided by businesses to their employees, or digital skill testing.

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18. TOURISM MANAGEMENT ISSUES UNDER INDUSTRY 4.0 WITHIN THE WORLD ECONOMY DEVELOPMENT

Abstract: The accelerating digitization and automation of work, known as the fourth industrial revolution, will have an enormous impact on job creation and job loss issues. A range of new technologies that are fusing the physical and digital worlds, affecting all disciplines, economics and management, characterizes it. The paper will deal with the issue how robotics and automation can affect the world tourism industry within the world economy development. Based on analysis of ongoing processes of automation, robotics being implemented into world tourism management the goal of the paper is to figure out the impact of Industry 4.0 elements on the further world economy development within the international labor market processes. To accomplish this goal, methods such as analysis, comparison, synthesis and logical deduction as well as data from international economic organizations and governmental statistical databases are to be used. Surprisingly the jobs in world economy sectors are even increasing for now. It is hard to forecast how it is going to be in next decade. However, jobs in world tourism industry involving complex human interactions and high emotional intelligence, such as innovation and education, will be least susceptible to automation.

Keywords: automation and robotics, Industry 4.0, job creation and job loss, new technologies implementation, world economy development.

JEL Classification: F63, O31, O51

1. Introduction

Tourism belongs to the sectors of national and world economies that have a significant impact on gross domestic product (GDP) creation in a country as well as on employment. Tourism management under the influence of information and communication technologies development is being molded incredibly fast and responses to this technological advancement are different (Jenicek, 2016; Zagata, Hrabak, Lostak, 2019). According to Fojtikova and Stanickova (2017) and Helisek (2016) some tourism organizations are able to adapt flexibly to this progress, while others are losing their stable market position. With the oncoming fourth industrial revolution called Industry 4.0, being characterized by technological changes, this phenomenon has become even more pronounced. This means that the current technology era also requires organizations to take an innovative approach to be able to offer new products and services (Miklosik et al., 2019; Okreglicka et al., 2017). On the other hand, Industry 4.0 also brought significant changes in labor market as new jobs creation and old jobs loss. A constantly changing environment, driven by increasingly demanding customer requirements, demographic change, increasing competition, technological advancement and globalization, make businesses and tourism centers adapt their offers, which means that in order to keep their market position they must innovate. Boukalova, Kolarova, Lostak (2016) and Hanulakova, Dano, Drabik (2019) state that innovation implementation within the Industry 4.0 should therefore focus on protecting the environment that is the source of tourism development (environmental dimension of sustainable development), ensuring the livelihood of local people (economic dimension of sustainable development) and improving their quality of life (social dimension of sustainable development).

This paper will draw attention to the importance of tourism sector in world economy in terms of its synergies due to the implementation of Industry 4.0 in tourism management in terms of new jobs creation and old jobs loss. Based on an analysis of the synergies of tourism industry in world economy and Industry 4.0, the contribution of Industry 4.0 aspects implementation in tourism sector to the

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socio-economic development of world economy will be discussed. The data were taken from the professional literature sources and reputable internationally organizations such as UNWTO, World Economic Forum, OECD, Eurostat and others.

Within the stated objective the outline of the paper is as follows. Current trends in tourism management, its importance in the world economy in the context of globalization and sustainable development, as well as the significance of international tourism within GDP and employment will be explained. The economic indicators of tourism industry will be analyzed in order to show the significance of tourism industry for GDP creation but also for jobs creation and what important benefits it has for the world economy development. In addition to the need to create new jobs, the effects and benefits and what the economies should focused on in order to eliminate the negative aspects of old jobs loss in tourism sector will also be discussed.

2. Literature Review

This chapter will deal with tourism as a world economy sector, its significant role in current world economy, with tourism in the context of globalization and sustainable development, as well as with the main characteristics of Industry 4.0 and its basic elements and current challenges.

According to Zemanova, Drulakova (2016), Taušer, Arltová, Žamberský (2015) tourism is an activity of people traveling temporarily to places outside their conventional living space, while the main purpose of traveling is different from pursuing an occupational activity. They argue that tourism is a sum of activities of persons traveling to particular places outside their usual environment or residence for less than one continuous year for the purpose of leisure, business or other intentions. Since tourism is an important sector of both the national and world economy, its benefits are difficult to be assessed at both national and regional levels. Not only private organizations, but also public sector and non-government organizations (NGOs) are involved in meeting visitors' demands. Tourism thus includes both domestic and foreign travelers (Cihelkova, Platonova, Frolova, 2019; Ahrám, 2017). In order to enable a more accurate tourism benefits assessment, so-called „tourism satellite account“, which expresses all direct expenditures as well as its contribution to value added tax (VAT), employment and capital investment, has been implemented. Because of this, it is necessary to define the economic activities being characteristic for tourism, it means that, the subject and the industry of tourism have to be defined (Jirankova, Hnat, 2012).

There are authors such as Miklosik, Kuchta, Zak (2018); Mynarzova, Kana, Okreglicka (2016) who believe that tourism industry in world economy is merely traveling by itself or traveling organizations, but the truth is that tourism spans multiple sectors. Some sectors are characteristic of tourism and directly affect it. According to Hnat, Stuchlikova (2014), the economic activity being characteristic of tourism, which directly and to varying degrees influences the demand of visitors, is called the tourism industry, on the other hand, the other activities are outside characteristic areas, but are nevertheless beneficial for tourism. Authors such as Miklosik et al. (2019) and Sadilek, Zadrazilova (2016) agree that the tourism industry which characterizes them includes, inter alia, restaurants, catering services, accommodation of all categories, ranging from hostels, domestic accommodation to luxury hotels and facilities; all types of carriage as well as taxis or other carriage from the airport to designated place and back; travel agencies and agency activities, including online services, selling trips and other needs to tourists; rental of transport equipment for passenger; sporting, recreational, cultural events; production and supply of equipment for hotels and hotel services (laundry, cleaning, maintenance); but also insurance, medical care, personal welfare facilities and services; country-specific retail outlets; public administration, security, etc.

Daňo, Lesáková (2018) and Sadilek, Zadrazilova (2015) argue that tourism is also closely linked to the concept of sustainable development, which brings tangible and intangible benefits to local and regional communities in a way that is consistent with sustainable development. Success in the field of tourism is associated with identifying and promoting sustainable and matching tourism products and services, but close cooperation with local authorities, networking and stakeholder cooperation is also important (Mura, Havierníková, Machová, 2017). Miklosik, Kuchta, Zak (2018) highlight that education and research and, last but not least, the attractiveness and value of a region also affect tourism. Tourism also contributes positively to the creation of new jobs, leads to poverty reduction and contributes to human development and helps to sustain the environment. Opportunities for development through tourism can be beneficial for countries in different areas along with the contribution to economic growth.

As Kreckova, Odehnalova, Reardon (2012) and Dvorakova (2013) point out, the guidelines for sustainable development of tourism and management procedures is applied to all forms of tourism in all types of destinations, including mass tourism and various segments of tourism.

A lot of authors such as Krnacova, Drabik (2018) and Zak, Hrcakova (2014) argue that Industry 4.0 marks the fourth industrial revolution where digitalization is at the forefront. It is characterized by a combination of technologies that blur the boundaries between the physical, digital and biological spheres. That's why Industry 4.0 is built on two main pillars: 1) digitization of products, processes, equipment, services and 2) application of exponential technologies. According to Szakacs (2018) Industry 4.0 is built on people, machines, equipment, logistics systems and products being able to communicate and collaborate directly with each other, leading to full networking, resulting in the use of large amounts of non-captured information to make faster and more accurate decisions. A tight connection between devices, people and products increases the efficiency of production facilities, reduces costs and saves resources. Intelligent tracking and transparent processes will enable companies to keep track of how they can flexibly and quickly respond to market changes (Tajtakova, Zak, Filo, 2019). As Industry 4.0 becomes more entrenched in any industry, it will ultimately lead to a turn-based economy based on real-time demand research, and highly automated, flexible and fully interconnected production. This development will call for the ubiquitous use of automation, robotics and intelligent machines as a complement to human labor. As a result, the nature of labor force involvement will change dramatically, along with new forms of skills it will have to succeed in a much more automated and digitalized economy (Krajnakova, Vojtovic, 2017).

According to Lipkova, Braga (2016) Industry 4.0, is focused on three areas: a product with Internet of Things attributes; the organization of an enterprise in terms of Industry 4.0; new business models - mostly focused on services. It is usually a combination of two or even three areas. Drabik, Zamecnik (2016) argue that in the future, the development of Industry 4.0 is likely to be divided into four distinct phases. Stages 1 and 2 represent actual opportunities that can be quickly put into action. They begin with a focus on operational efficiency. Such activities are already taking place in companies and will accelerate in upcoming years. Stages 3 and 4 include long-term structural changes, starting after mastering the first two phases. The outcome economy will be built on the ability to automate quantification of results.

3. Goal and Research Methods

The research task is focused on the analysis of the problematic aspects of world tourism sector development in terms of the robotics and automation issues affected by Industry 4.0 elements implementation and find out its consequences. The research will be focused on exploring the world tourism industry analyses and its further development under the Industry 4.0. In general, this paper will handle the problematic aspects regarding the economic and social issues within the world tourism sector covering the Industry 4.0 implementation processes in international economics. To put in other words, the main goal of this paper is by means of analysis, comparative analysis methods followed by logical deduction to figure out the potential benefits for world economy development coming out of Industry 4.0 aspects being implemented in world tourism sector. The issue is to figure out whether and to what measure the robotics, new technologies might affect the new job creation along with the labor force adaptability to it.

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. The basic data come from widely recognized institutions in assessing the basic indicators of tourism and GDP growth of particular economies such as the World Trade organization on Tourism (UNWTO), the OECD, Eurostat and many others. Annually published reports on competitiveness by organizations such as the UNWTO and OECD has achieved high recognition from the governments of countries being evaluated as well as businesses, and therefore they are considered as authoritative sources in this field.

4. Results and Findings

Tourism is a key driving force for investment and economic growth within world economy. According to UNWTO (2019), tourism industry contributed to world economy 8.3 trillion USD in 2018 or 10.4% of world GDP, taking into account all direct, indirect and induced impacts. According to International

Air Transport Association (IATA), European airlines recorded an increase of 8.1% and more than a billion passengers for the first time in 2018. Tourism contributed 22.6% of GDP in North Africa in 2018 pointing out to a recovery in tourism following the effects of terrorism in previous years. Asian countries continue to grow in global tourism with growth of 7.4% in Northeast Asia and 6.7% in Southeast Asia, with China’s continuing growth by 9.8%. China and India are projected to generate more than a third of absolute GDP growth and almost half of employment growth over the next ten years within tourism sector. Growth in tourism is projected to continue by 3.8% on average by 2028. According to the World Tourism and Tourism Council, more than 107 million jobs (3.6% of total employment and 3% of total GDP) were created directly in tourism in 2018 and 284 million jobs were created indirectly or induced, being implied, each 11th job has been created in tourism sector. By 2026, these figures are expected to increase by 136 and 370 million jobs, which means that one in nine jobs will be in tourism. Thus, by 2028, tourism is expected to support more than 400 million jobs worldwide, which is approximately 25% of global job creation (UNWTO, 2019).



Figure 1. Numbers of international arrivals and revenues from tourism in 2018

Source: UWTO (2019)

In Figure 1 we can see the number of international arrivals and incomes from tourism. The biggest number of arrivals 671 million in 2018 was recorded in Europe with revenues of 512 trillion USD. The total number of arrivals in 2018 was 1.323 million with a total revenue of 1.332 trillion USD.

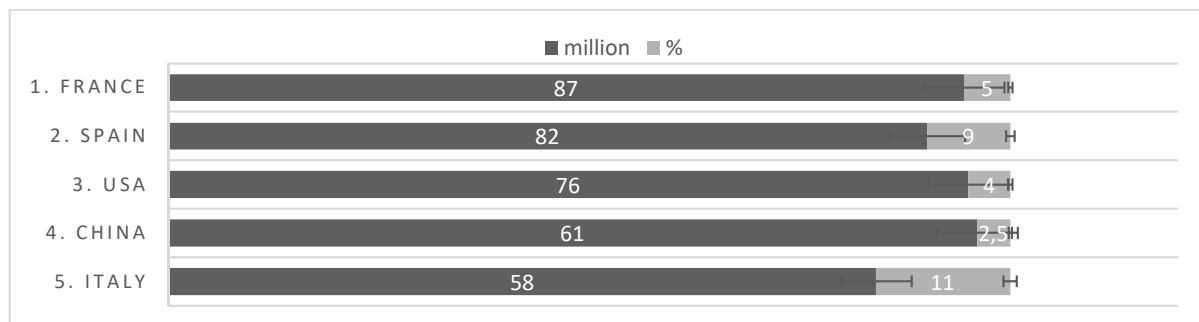


Figure 2. International arrivals - top 5 countries in 2018

Source: UWTO (2019)

In Figure 2 we can see the top 5 countries that recorded the biggest number of arrivals in 2018. France is at the forefront with 87 million arrivals and a 5% increase over last year. The top five are closed by Italy with 58 million arrivals and a 11% increase in arrivals. The number of arrivals in the USA was increased by 4% and the total number of arrivals in 2018 was 76 million.

Based on UNWTO data the main benefits of tourism sector for social and economic development. A crucial element is the contribution to GDP, which represents 10% of total GDP; 7% of world exports are made in tourism, 30% in services; one in ten jobs has been created in tourism (UWTO, 2019). Last but not least, there are also social aspects such as cultural asset, building peace and security.

According to Eurostat (2019), the EU tourism industry in the strictest sense (traditional recreation and tourism providers) consists of 2.3 million businesses, in particular small and medium-sized enterprises (SMEs), employing approximately 12.3 million people. In 2018, one in 10 businesses in European non-financial sector belonged to tourism sector. In 2018, the tourism sector directly generated 3.9% of EU GDP and employed 5.1% labor of total workforce (equivalent to around 11.9 million jobs). However, taking into account its close links with other economic sectors, these figures are even higher (10.3% of GDP and 11.7% of total employment, or 27.3 million workers). In 2018, international tourism in world economy reached 1.32 billion visitors (+ 7%), of which 671 million visitors in Europe, representing 51% market share (+ 8%). A long-term study by the World Tourism Organization foresees a moderate growth in tourism in Europe by 2030, to around 744 million tourists (+ 1.8%), representing 41.1% of global market (UNWTO, 2019).

Based on Eurostat (2019) data we conducted analyzes dealing with the impact of tourism on GDP and the national economy, as well as on employment in selected Southern European countries. The survey was conducted in the following countries: Albania, Bosna and Herzegovina (BIH), Bulgaria, Greece, Northern Macedonia, Montenegro, Romania, Serbia, Slovenia. These countries were deliberately chosen as they are the countries where tourism creates a high percentage share of GDP. The results of this analysis are shown in the following Table 1. The findings highlight the significant fact that investment in tourism is an important factor for economic growth.

Table 1. Chosen key facts on significant role of tourism for regional development - a comparison of the nine selected Southern European countries

Countries	GDP - direct contributions in %		GDP - total contributions in %		Employment - direct contributions in %		Employment - total contributions in %		Export of visitors in %		Investment in %	
	2018	2025	2018	2025	2018	2025	2018	2025	2018	2025	2018	2025
AL	5,9	6,2	21	21,8	5,3	5,8	19,2	20,4	30,4	24,2	4,3	4,5
BIH	2,5	3,0	9,3	11,0	3,0	3,8	10,7	13,1	13,0	13,2	4,7	6,6
BG	3,7	3,9	13,1	12,9	3,4	4,3	12,1	12,9	12,3	9,6	6,1	5,8
CRO	12,5	16,8	28,3	36,2	13,6	16,3	30,2	35,3	43,7	48,3	10,2	10,4
MK	1,4	1,4	5,2	5,7	1,3	1,4	4,7	5,2	5,6	4,2	2,2	2,6
MNE	9,5	14,8	20,0	31,9	8,6	13,4	18,5	29,6	54,3	51,6	30,1	53,2
RO	1,6	1,6	4,8	5,1	2,4	2,5	5,5	5,9	2,5	2,6	7,3	7,6
SRB	2,1	5,2	6,1	7,2	2,6	3,2	6,4	7,5	6,5	7,0	4,4	4,2
SLO	3,5	3,8	12,7	13,8	3,9	4,5	13,0	14,6	8,0	8,8	9,4	10,0
EUROPE	3,4	3,6	9,2	9,8	3,6	4,1	9,0	9,9	5,6	5,8	4,7	5,0
WORLD	3,1	3,3	9,8	10,5	3,6	3,9	9,4	10,7	5,7	5,6	4,3	4,9

Source: By Eurostat (2019)

Table 1 shows not only the impact of tourism on GDP formation and employment in selected countries within the period of 2018, but also a forecast of this trend in 2025. The table shows that countries with higher levels of tourism investment in 2018 (Croatia, Montenegro and Slovenia) also have the highest total GDP in tourism. This means that adequate investment in this sector is also necessary for the favorable development in tourism sector.

5. Discussion

Based on the findings in the following section, the discussion regarding the impact of international tourism development within the fallouts of Industry 4.0 aspects implementation in this sector on the situation on international labor market, international movement of labor within the possibilities of world economy socio-economic development will be discussed. In particular, issues such as the impact of Industry 4.0 on tourism, the synergy of tourism and new information technologies, new trends in tourism, tourism and job creation will be mentioned.

As we can see from the findings, tourism is one of the largest and fast growing sectors in world economy. In recent years, tourism has become a creator of jobs and a driving force of information and communication technologies (ICT). According to Lehmannova (2015) and Ivanova, Masarova (2018)

as tourism is one of the most dynamic sectors, tourism activities must also be flexible enough and adapted to changing conditions and customer needs. When it comes to new trends in digitalization within tourism sector, a „sharing economy“ or joint shared activities are quite common. Generally speaking, this common sharing develops technologies, including a common application and platforms that allows us to share products. It has been already mentioned that the fourth industrial revolution brings up many innovations, also useful in the field of tourism. These include, for example, the use of virtual reality to be transferred into the past by means of special devices. Let's imagine that we could come back in time and see what all the mythical places on earth looked like in ancient times, leaving behind only ruins.

As our findings proved that, under the influence of the fourth industrial revolution, there will be changes within labor market. Not only the type of profession, but also its structure, professional profile of employees, their competency models will change. Some professions will disappear and at present times we have no idea what kinds of new jobs and professions will need to be created in the future to meet new challenges offered by implementation processes of robotics and automation. Based on our research results, Industry 4.0 will need people with technical education and analytical skills, creative and professional skills and innovative engineering will be a must to be hired in new jobs. At the same time, the quality of people's skills will change and the value of people's skills will also change. Some authors agree that on one hand there is a jeopardy with reference to professions that consist of routine, easily algorithmable activities: figures processing officers, general and helping administrative staff, drivers, transport and logistics workers in general, employees in tourism, sales, construction, etc., however on the other hand, professions such as database and networking specialists, ICT executives, analysts and software or computer application developers will be wanted (Kreckova, Zadrazilova, Rezankova, 2016). These positions have the greatest positive potential in the world of digitization and automation. According to ILO (2019) at the same time, nowadays there is a lack of specialists who program, maintain and set up robots. In the selection of human resources in tourism, attention will have to be paid on choosing labor and staff with a high degree of learning (measured by so called learnability quotient - LQ) and creating a system for their continuous development. Thus, employees will need to be able to learn new skills to remain employable.

According to WEFORUM (2019), for every group of 30 new tourists who have chosen to travel one new job in tourism sector is to be created. At present, tourism and its industry have almost twice as many employers as other sectors. Tourism offers job opportunities for people entering the labor market for the first time, or for those who are not able to work in other sectors. By and large, in addition to job creation for highly skilled workers, tourism industry plays a key role in creating jobs for low-skilled workers, minorities, the long-term unemployed, but also for women who prefer part-time work because of family responsibilities.

6. Conclusion

The paper was dealing with the characteristics of Industry 4.0. and the analysis of tourism industry in world economy. The latest trends brought by digitization, information technologies and other aspects of Industry 4.0 implemented in tourism were also discussed. We have arrived to the conclusion that, Industry 4.0 within the tourism sector management has had a significant impact on the creation of innovative jobs that need higher education in ICT area. This means that the current technology era requires tourism organizations such as agencies and companies to focus primarily on the development of innovative products and services. First and foremost, creating online booking options and an innovative approach to sophisticated customers. To meet these new customer demands, organizations need to invest in the development of their products and services as a priority. In this paper we have shown that with the emergence of technology, certain jobs have been reduced, costumers go less to travel agencies, which services are to be replaced by internet and digitalization. Airports and hotels are full of innovation and automated processes, where machines and technology have replaced human power. But on the other hand, people travel more and more, and not every job can be replaced by a robot, machine or other digital technology. There will always be professions and jobs where direct personal contact will be necessary, especially in tourism, whether it be passengers transport, hotel services, catering and various businesses related to the provision of services in tourism sector. As research limitation there can be mentioned issues such as: statistical data varies depending on the source being used, each organization has different approach how to process data and information thus

comparison may not be too accurate. To broaden this topic, the further research will continue with exploring the role of Industry 4.0 and its impact on tourism sector development within the world economy development particularly in the U.S. and EU economies.

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19. SOCIAL CUSTOMER RELATIONSHIP MANAGEMENT WITH GENERATION Z REPRESENTATIVES IN SOCIAL MEDIA

Abstract: Contemporary enterprises wanting to obtain and then, maintain market advantage, should concentrate their attention on establishing long-term relationships with their customers. Currently, representatives of generation Z, which belongs to the least recognised generations, enter the labour market. Those are persons who were born in the digital world and spend a significant part of their free time in the virtual world. In this world entrepreneurs should establish communication with generation Z representatives. Social Customer Relationship Management (Social CRM) is a conception allowing entrepreneurs establishing contact with generation Z representatives in social media. The aim of the article is to indicate the features of activity of generation Z representatives in social media as basic knowledge allowing the enterprise to establish relationships with the use of the conception of social CRM. The results presented herein constitute a part of the research conducted by the authors in 2018 and 2020 among students of the Department of Management of the Czestochowa University of Technology. In order to conduct the research, the CAWI technique – survey questionnaire, which had been posted on the Webankieta.pl platform, was used. On the grounds of the conducted research, the authors stated that the gender of a representative of generation Z influenced the type of activity undertaken in social media in 2018, whereas, it was not important in the research conducted in 2020. On the other hand, the place of residence of a representative of generation Z does not influence the type of activity undertaken by them in social media.

Keywords: CRM, generation Z, relationship building, social CRM, social media.

JEL Classification: M15, M31, L20

1. Introduction

From among company management strategies, a special attention should be paid to strategies concentrating on knowledge constituting the company's intellectual capital. Strategies related to knowledge management at the time of the dynamically changing and developing competition allow obtaining an increase in the company's value leading to gaining market advantage. Customer related knowledge is still underestimated by enterprises despite the fact that knowledge and customer relationships management is considered to be key processes of learning organisations (Mazurek-Łopacińska, 2018, p. 180).

Currently, generation Z representatives, that is, persons born in 1995 or later, enter the labour market. Those are persons who do not know the analogue world, who were born in the digital world. Therefore, they often feel better in the virtual rather than real world. The attribute of generation Z representatives is a smartphone providing them with continuous contact with social media. It is estimated that they devote approximately 11 hours of free time on using mobile devices (Criteo, 2017). Representatives of generation Z belong to the least studied and described in the subject literature generation, which is at the same time the most numerous. This insufficient knowledge hinders or even prevents enterprises from offering products and services meeting customers' expectations. Therefore,

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gaining this knowledge should constitute one of the main tasks of contemporary enterprises, which want to be competitive in such a dynamically changing market. The birth of the Internet and its very fast development contributed to the creation of social media, which not only constitute a repository of knowledge on the customer, but also allow the enterprise to establish relevant relationships. The conception, which allows the enterprise to establish long-term relationships with a customer via social media is the social Customer Relationship Management – social CRM.

The aim of the article is to indicate the features of activity of generation Z representatives in social media as basic knowledge allowing the enterprise to establish relationships with the use of the conception of social CRM.

2. Literature Review

From the point of view of enterprises, the resources being the customer-related knowledge can be considered in four perspectives: knowledge for the customer (knowledge on the enterprise, its products and services, as well as suppliers), knowledge on the customer (knowledge allowing identification and understanding of customers' behaviours, their motivations and preferences), knowledge from the customer (knowledge coming from the customer) and knowledge co-created with the customer (knowledge coming from combining the enterprise's knowledge and the customer's knowledge) (Rowley, 2002; Li, Huang, Weng, 2013). Therefore, one can discuss, among others, Knowledge Management - KM, Customer Relationship Management – CRM, Customer Knowledge Management - CKM. In the subject literature CKM is usually defined as a combination of KM and CRM (Belkahla, Triki, 2011, p. 649; Bueren et al., 2004, p. 2; Campbell, 2003, pp. 375-383; Garcia-Murillo, Annabi, 2002, pp. 875-884; Salojärvi, Sainio, Tarkiainen, 2010, pp. 1395-1402; Zahay, 2008, pp. 264-272; Ziemba, 2012, p. 32), although it is also indicated that it is an oversimplification requiring substantive discussion (Mikuła, 2016, p. 40).

The CRM conception does not have one, generally accepted definition in the subject literature. It results from the fact that the CRM is considered from at least five different perspectives – as a process, strategy, philosophy, ability (potential) of the organisation or technology (Zablah et al., 2004, p. 447). Difficulty in the explicit definition of the CRM concept was underlined by Greenberg in the definition proposed by him “CRM (...) isn't a technology. As you will see, that's true, but not strictly. I also heard that it was a 'customer-facing' system. That it is a strategy and/or a set of business processes. A methodology. It is all of the above or whichever you choose” (Greenberg, 2011). Also the definition proposed by Bose indicates the diverse nature of the CRM – “At the core, CRM is an integration of technologies and business processes used to satisfy the needs of a customer during any given interaction. More specifically, CRM involves acquisition, analysis and use of knowledge about customers to sell more goods or services and to do it more efficiently” (Bose, 2002).

It should be underlined that the traditional CRM conception allows solely one-way communication meaning transferring contents to the customer by the enterprise. A lack of feedback constitutes the basic defect of this conception. Together with the development of the Internet and social media, the traditional CRM conception transformed into the social CRM conception ensuring two-way communication. The social CRM conception constitutes a combination of social media with the CRM conception, which is underlined by B. Thompson, who indicates that “Social CRM is the integration of social media and CRM. Literally: Social + CRM. If you don't have both, you don't have Social” (Thompson, 2009). In the opinion of the authors of these deliberations, in the entities operating in contemporary times it is not possible to consider social CRM only from one perspective, since social CRM is at the same time a strategy, philosophy, process, but also the entity's ability to implement this strategy, philosophy, process in the favourable organisational culture and with the use of proper technologies in social media. The main aim of CRM is to establish and maintain long-term relationships with customers based on trust and loyalty leading to sales of products and services maintained at the high level and/or indicating an upward trend.

Establishing long-term relationships with customers requires enterprises to get to know them in-depth, especially if they represent the least recognised generation, that is, generation Z. In the subject literature there is no explicit position regarding dates specifying timeframes of particular generations. Therefore, it is also not possible to indicate the lower limit of the timeframe specifying the date of birth of generation Z representatives. For the purposes of the research the authors assumed that the term generation Z means the generation of persons born in 1995 or later (New Strategist,

2004; Kavounis, 2008, p. 49; Seemiller, Grace, 2018). On the grounds of the hitherto research, it can be indicated that to some extent representatives of generation Z manifest a pessimistic approach to economic aspects of their future – they forecast economic context of low growth and uncertain situation concerning employment. They assess that succeeding in the conditions in which they came to live will be much more difficult than their parents, whose economic situation they assesses as decidedly better. Wanting to survive, they focus on achieving economic success primarily in the entities with ‘corporate lattice’ type of structures rather than the traditional ‘corporate ladder’ type (Ipsos MORI, 2018). Furthermore, it can be indicated that generation Z representatives: embrace diversity; are social change-oriented; more cautious, but not afraid to try new things; are collaborative, tend to follow authority, have confidence, have a short attention span (Seemiller, Grace, online), they love to shop (especially online), they are eager to start working, they are mature and in control, they intend to change the world (Sparks&Honey, 2014). Whereas, in the social media: love constant and immediate feedback (instant information), like to contribute their knowledge and opinions online, can seek out own learning, use their network of relationships as a source learning, learning from the Internet is preferred over print materials like books, get recommendations from social media sites, like to go to a website after learning about a product, word of mouth is still very important, humour works (Seemiller, Grace, online).

3. Methodology of Research

The aim of the article is to indicate the features of activity of generation Z representatives in social media as basic knowledge allowing the enterprise to establish relationships with the use of the conception of social CRM. The authors attempted to obtain answers to the following research questions:

- a) Does the gender of the respondent have impact on the frequency of activities performed in social media?
- b) Does the place of residence of the respondent have impact on the frequency of activities performed in social media?

The following hypothesis have been formulated:

H1 The gender of generation Z representatives influences the type of activity undertaken by them in social media.

H2 The place of residence of generation Z representatives influences the type of activity undertaken by them in social media.

All analyses have been conducted with the use of the Statistica v.13 programme. The results presented herein constitute a fragment of the research conducted by the authors. Other results of the research on the features of generation Z and their behaviours in social media have been presented by authors in other publications (Korombel, Ławińska, 2019a; Ławińska, Korombel, 2019a; Korombel, Ławińska, 2019b; Ławińska, Korombel, 2019b). In order to conduct the research the CAWI technique – survey questionnaire, which had been posted on the Webankieta.pl platform, was used. First (1) research was conducted in November and December of 2018, whereas, second (2) research was conducted in January 2020. Students of the Department of Management of Czestochowa University of Technology participated in both. The research conducted in 2018 (1) covered 264 students, of which answers given by 223 students were qualified to the analysis. The research conducted in 2020 (2) covered 157 students, of which answers given by 151 persons were qualified to further research. The catalogue of variables used in the research was proposed on the grounds of the critical analysis of the literature (Petrykowska, 2013, pp. 6-16; Moroz, 2013, pp. 123-132; Gregor, Kubiak, 2014, pp. 3-27). In the subject literature there is no agreement regarding the year of birth of persons representing generation Z. Usually the year 1995 is given and this year has been adopted by the authors of the article as the cut-off year in their research.

4. Results

In order to determine, whether the gender and the place of residence of the respondent have impact on the frequency of specific activities performed in social media, the authors included the following question in the survey questionnaire: *How often do you perform the following activities in social media?* Results obtained in 2018 and 2020 concerning the impact of gender on activities performed in social media, covered by the authors with the statistical research, have been presented in table no. 1.

Table 1. Analysis for gender – 2018 and 2020

How often do you perform the following activities in social media?	Rank sum Man		Rank sum Woman		U		Z		p	
	2018	2020	2018	2020	2018	2020	2019	2020	2018	2020
contacting official brand profiles of products/services	4386.0	9610.5	20590.0	1865.5	3525.0	1540.5	-0.6	0.2	0.58	0.86
participating in contests organised by companies	3808.0	9609.5	21168.0	1866.5	2947.0	1541.5	-2.1	0.2	0.04	0.87
adding comments/assessments under posts added by companies or products'/services' brands	4867.0	9690.0	20109.0	1786.0	3456.0	1461.0	0.7	0.6	0.46	0.57
recommending to friends company accounts on social media, which especially drew your attention and which you liked	3753.0	9652.0	21223.0	1824.0	2892.0	1499.0	-2.2	0.4	0.02	0.71
sharing posts added by liked company profiles or brand profiles of products/services	4131.0	9768.5	20845.0	1707.5	3270.0	1382.5	-1.2	0.9	0.22	0.34
other, what?	4130.5	9912.0	20845.5	1564.0	3269.5	1239.0	-1.2	1.7	0.22	0.09

Mann-Whitney U Test (with correction for continuity) (Vector) with regard to variable. Gender Indicated results are significant with $p < .05000$.

Source: own study

Analysis of data collected in 2018 allowed in two cases to state that gender significantly differentiates analysed variables: participating in contests organised by companies $p=0.04$ and recommending to friends company accounts on social media, which especially drew your attention and which you liked $p = 0.02$. In the case of both variables women performed the enumerated activities on social media with significantly higher frequency, which is confirmed with the graphic illustration below (Figures. 1. and 2).

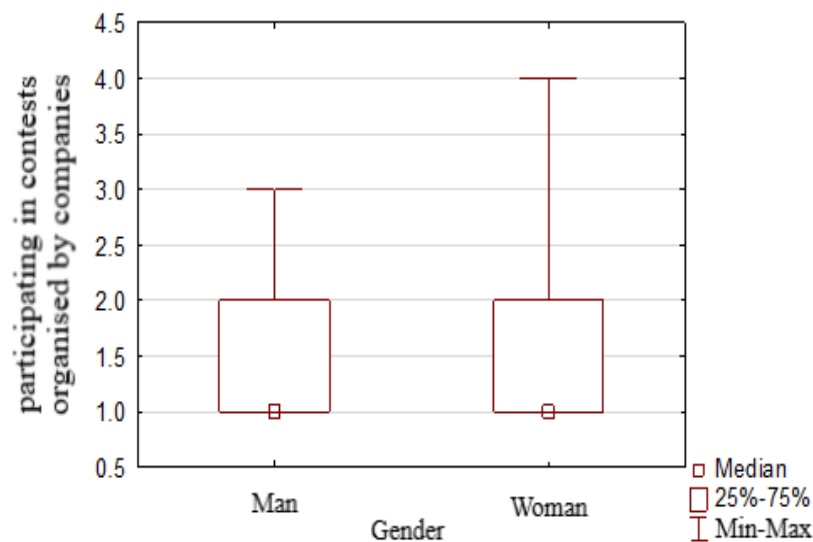


Figure 1. Participating in contests organised by companies by representatives of generation Z depending on gender

Source: own study

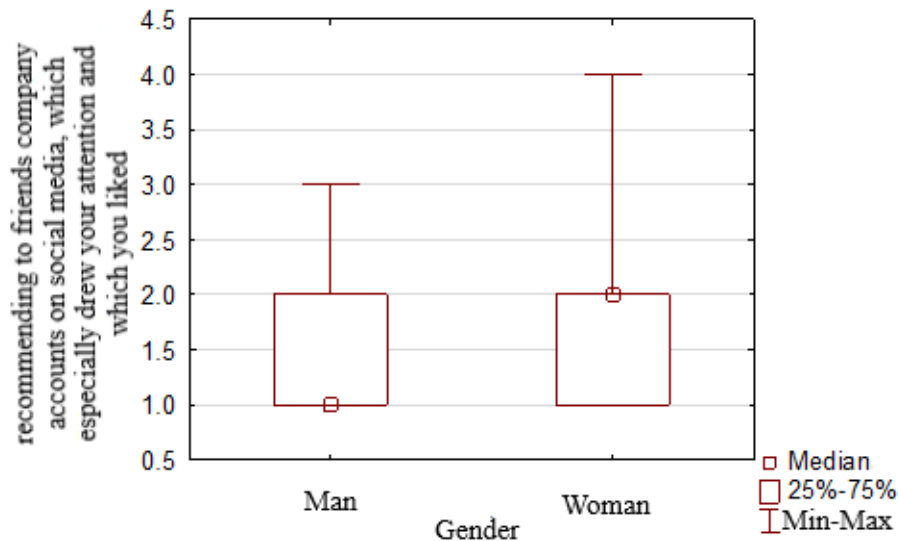


Figure 2. Recommending to friends company accounts on social media, which especially drew attention and which liked by representatives of generation Z depending on gender

Source: own study

It should be underlined that the analysis of data collected in 2020 did not confirm the aforementioned relations. Therefore, the results of the research conducted in 2018 confirm the hypothesis H1, whereas, the results of the research conducted in 2020 did not confirm the hypothesis H1.

In the next step, the authors subjected to statistical research the results obtained in 2018 and in 2020 in order to specify the impact of the place of residence of generation Z representatives on activities performed by them in social media (table no. 2).

Table 2. Analysis for the place of residence in 2018 and 2020

How often do you perform the following activities in social media?	N significant		R Spearman		t(N-2)		p	
	2018	2020	2018	2020	2018	2020	2018	2020
contacting official brand profiles of products/services and the place of residence	223	151	-0.01	-0.13	-0.12	-1.55	0.90	0.12
participating in contests organised by companies and the place of residence	223	151	-0.00	-0.10	-0.04	-1.25	0.96	0.21
adding comments/assessments under posts added by companies or products'/services' brands and the place of residence	223	151	0.09	0.03	1.30	0.34	0.19	0.74
recommending to friends company accounts on social media, which especially drew your attention and which you liked and the place of residence	223	151	0.03	0.12	0.50	1.45	0.62	0.15
sharing posts added by liked company profiles or brand profiles of products/services and the place of residence	223	151	0.10	0.04	1.43	0.51	0.15	0.61
other, what? and the place of residence	223	151	0.08	0.04	1.14	0.49	0.25	0.62

Spearman's rank correlation coefficient (Vector) BD eliminated in pairs. Indicated correlations are significant with $p < .05000$.

Source: own study

No statistically significant correlations between analysed variables ($p > 0.05$) have been stated by the authors in both researches. Therefore, there are neither grounds to confirm the hypothesis H2 with regard to the research conducted in 2018, nor the research conducted in 2020.

5. Conclusion

Knowledge enabling getting to know representatives of generation Z – their needs, expectations, favourite manners of communication or typical behaviours in social media will allow enterprises to offer to their customers more attractive products and services, as well as effectively adjust instruments of marketing impact on the market. And this constitutes one of the conditions of achieving and maintaining market advantage. The main aim of this study is to determine whether gender or a place of residence of generation Z representatives have impact on the type of activity undertaken by them in social media. On the grounds of the conducted research, the authors stated that:

1. the gender of a generation Z representative influenced the type of activity undertaken in social media in 2018, whereas, it was not important in the research conducted two years later;
2. the place of residence of a generation Z representative does not influence the type of activity undertaken by them in social media.

Results of both researches show that the impact of the gender of generation Z representative on the activity undertaken in social media is not explicitly specified. Such dynamically changing activities of generation Z representatives can be related to, among others, development of social media or development of contact forms undertaken by enterprises. One thing is certain – generation Z requires conducting further research that will allow obtaining answers to the following questions, among others: Which portals do they like visiting the most, and which do not attract them and what is the reason? What are the most desirable manners of communication? What values are the most important for generation Z? What needs and expectations do they have? What influences their shopping decisions? How do they like being rewarded for their impact in solving enterprise's problems? This knowledge, at another step, will allow creating a message expected by the youngest generation, that is, a personalised, intelligent, interesting message that simultaneously convinces the recipient of the message/customer that they are an important person for the enterprise. Developing short editions of limited products with a distinct message referring to such issues as social responsibility, environment protection or ecology, should be considered.

Authors are aware that the conducted research did not cover the representative sample, therefore, the above conclusions refer to the studied group and generalisation thereof for the whole population would require further research.

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20. THE PROCESS OF FORMULATING BLUE OCEAN STRATEGY

Abstract: The purpose of this article is describing the process of formulating Blue Ocean Strategy. It concentrates on one of the key areas of strategic management of an enterprise, namely designing the strategy. This article indicates how the company's vision and goals may be re-defined, how the borders of the market on which the company operates may be reconstructed, and how to select a relevant strategic sequence, which defines the framework for activities related with executing the strategy. All these elements were discussed through the prism of the assumptions of the Blue Ocean Strategy, which assumes that a company is not condemned to a very risky and weakening competition battle on crowded markets, often full of much stringer rivals. It is possible to create a new market space, free from competitors, which eliminates or largely limits problems related with the competitive battle. This article has epistemological nature. Scientific perspective methods were used, typical for this type of works. Literature studies were carried out in the area of strategic management, in particular consideration for the strategy design stage. Available sector literature was used to present the strategic context, and the core of the work is the analysis and synthesis of the Blue Ocean Strategy by W.Ch. Kim and R. Mauborgne. The analysis and the synthesis supported by induction and deduction processes are the basic applied method of scientific perspective.

Keywords: Blue Ocean Strategy, management, strategic management, strategy.

JEL Classification: L1, M11

1. Introduction

Strategic management is usually understood as an information/decision-making process, supported by classical management functions, i.e. planning, organization, leadership (motivating) and control. It deals with solving key problems of the company's activities, which decide about its going concern and development, with particular consideration for the influence of the environment as well as the key factors of own capacity (Stabryła, 2000). It is most frequently viewed as a process consisting of three stages: strategic analysis, planning (strategy design), and management (strategy execution). In functional terms, strategic management is a set of activities to diagnose the company and its environment, which enable building and executing the strategy. In terms of tools, strategic management is a set of methods allowing to examine, assess, and project the future of the company or its components from the point of view of going concern and development (Gierszewska, Romanowska, 1999).

In the most general sense, strategic management seeks an answer to the question on what is the most effective manner of operation, which ensures largest probability of achieving success on the market. This search is a part of various schools of strategic thinking.

Strategy is at the heart of strategic management. Strategy may be understood as an integrated and coordinated set of activities undertaken in order to take advantage of principal competencies and obtaining competitive advantage (Hitt, Ireland, Hoskisson, 1995; Johnson, Scholes, Whittington, 2009). The selection of the strategy defines the manner, in which the company obtains, collects, processes and redistributes own controlled resources, and activities to be undertaken towards competitors. One of these strategies is the Blue Ocean Strategy, presented in this elaboration.

The purpose of this article is describing the process of formulating Blue Ocean Strategy. This article has epistemological nature. Scientific perspective methods were used, typical for this type of works. Literature studies were carried out in the area of strategic management, in particular consideration for the strategy design stage. Available sector literature was used to present the strategic context, and the core of the work is the analysis and synthesis of the Blue Ocean Strategy by W.Ch. Kim and R. Mauborgne (2015). The analysis and the synthesis supported by induction and deduction processes are the basic applied method of scientific perspective.

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2. Theoretical Background

The strategic management strategy includes numerous classifications of various approaches. Although there are many suggestions in this regard, generally accepted is the classification proposed by P. McKiernan (1997), who divides the approaches to company management into: planning, evolutionary (learning), positions, and resources. Each of these approaches used to dominate in the theoretical discourse at some point, and then it was deemed that it cannot explain certain situations. Thus, more concepts were created.

The planning approach concentrated on long-term planning in order to achieve a status of “adjustment” between the company’s general strategy and its environment (Ansoff, 1965; Andrews, 1987). This approach assumed that it is needed to formalize goals and offer tools allowing measurement of results. In the conditions of instability and unforeseeability of the environment, making strategic decisions may be carries a significant risk of error (Stonehouse, Hamill, Campbell, Purdie, 2004). Awareness of these limitations led to the revolutionary (learning) approach, according to which the strategy begins to evolve and develop along with the passage of time, and the company will adjust to the changing conditions and will handle itself without the need of long-term planning (Mintzberg, Waters, 1985; Mintzberg, Lampel, Quinn, Ghoshal, 1991). Therefore, it may be adopted that the strategy evolves in a rational manner as a reaction to changes in the environment (Quinn, 1978). A limitation of this approach is the low level of operationalization and a lack of tools. These defects were not present in the positioning approach, which has dominated the strategic thinking in the 1980’s, and which is connected mainly with Porter (1980; 1985). The strategic management canon included his concepts of the general strategy, the five forces model, and the value chain model. In this approach, the competitive environment and the company’s activities are analyzed. This approach is criticized (Rumelt, 1991) for its statistical nature and for putting more emphasis on the environment than on the company (Stonehouse, Hamill, Campbell, Purdie, 2004). On the basis of this criticism the resource approach evolved, which connects the company’s success firstly with its - mainly intangible - resources. A company is treated as a group of resources and skills, which form its power and differentiate it from other entities (Obłój, 2007). The type, size and nature of resources and skills constitute the principal factors that affect the company’s competitive position.

There is no exaggeration in stating that a strategy is something that has fundamental influence on the company’s life or death, its success or failure. However, to date there is no universal strategy model formulated, which would ensure a company’s success. There are many ways to proceed in regard to resources and competition. The assumptions of these procedures are often internally inconsistent. The concept of strategy is still evolving.

The beginnings of formalizing strategy categories are related with the works of Drucker (1954), who understood strategy as an action plan. Chandler (1962) underlined that a strategy must take account of goals in the long-term perspective. This approach has also been presented by Ackoff (1974), Andrews (1987), Ansoff (1985). Mintzberg (1987) claimed that strategy comprises planned, formalized activities, which are to ensure a better position of the company on the market. According to Eisenhardt, Sull (2001), strategy is developed on the basis of concentration of the most important processes executed in and by the company. Johnson, Scholes and Whittington (2009) claimed that strategy is a long-term action plan, which may provide competitive advantage as a result of concentration and appropriate configuration of the most strategically important assets and competencies. According to Porter (2010), the goal of strategy is ensuring long-term competitive advantage, which may be ensured by executing other tasks, or the same tasks in a different manner, concentrating on a certain group of customers, whose needs and expectations have been thoroughly recognized. The offer should be well positioned. All strategic moves were categorized into three types, namely: building the advantage on the basis of costs, differentiation and concentration. Strategy is an area of constant interest of scientists from all over the world. It is explored in various contexts. Important publications of recent years include, for example, the following papers: Teece (2010), Casadesus-Masanell, Ricart, (2010), Cocks (2010), Parnell (2010), Zheng, Yang, McLean (2010), Gilad (2011), Pugh, Bourgeois (2011), Slater, Olson, Finnegan (2011), Lukac, Frazier, (2012), Engert, Baumgartner (2016).

An interesting position in the recent years was the Blue Ocean Strategy proposed by W.Ch. Kim and R. Mauborgne (2015). This concept was noted and noticed by the scientific environment. For example, an article by these authors was listed as one of the most important articles in the area

of strategic management of the Harvard Business Review (*HRR's 10 Must Reads on Strategy*). It was also noticed by managers. The book, with a detailed description of concepts, tools, manner of formulating and executing the strategy, entitled: *Blue Ocean Strategy. How to Create Uncontested Market Space and Make the Competition Irrelevant* has been sold in over 4 million copies on five continents and translated into 46 languages since it was published in 2005. In the bestseller ranks, it is listed, amongst others, in the New York Times, Wall Street Journal, Los Angeles Times. The content of the 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. This concept has therefore achieved huge commercial success. It may be stated that this success is the result of two elements – simplicity and communication. Simplicity makes this proposal easy to formalize, explain and present, which makes it easy to understand and implement, in theory of course.

3. Research Methodology

The purpose of this elaboration is an attempt to describe the process of formulating the Blue Ocean Strategy, one of the most important strategic concepts in recent years, by Kim and Mauborgne. Studies indicate the high effectiveness of this strategy in building the company's development potential. However, its effectiveness depends on its proper formulation. The exit point is to find the gap in demand, proper identification of external and internal conditions, proper planning of future activities using relevant tools, formulating the strategy, and its proper execution. This article constitutes an attempt to identify sources of success and the risk of failure of the Blue Ocean Strategy at the stage of formulation. Strategy formulation requires a reconstruction of the market borders, a skill to create a vision of a company functioning in still non-existent conditions and to select a relevant strategic sequence. These elements are described herein below.

Achieving this goal required applying relevant study methods. The work has cognitive nature, and appropriate methods were applied. The starting point were literature studies, which allowed thorough review of this subject, as well as formulating the research problem. For this purpose, analysis covered scientific magazines, which discuss strategic management, starting from the editions, which saw the start of the strategic management concept, and ending on latest literature. Particular attention was paid to works by the authors of the Blue Ocean Strategy concept. The present work constitutes the author's starting point to future studies concerning this strategy.

For the purpose of this work, scientific cognition methods of key significance for this type of studies were used, namely analysis and synthesis. Analysis allowed decomposing the main problem into more detailed elements. Next, with the use of other cognitive methods, meaning induction and deduction, a synthesis was performed to obtain a concise and formalized description of the mechanism of the process of formulating the Blue Ocean Strategy.

4. Basic Assumptions of the Blue Ocean Strategy

The point of exist for the preparation of the Blue Ocean Strategy was taking note of the fact that most enterprises apply the *head-to-head competition* strategy, which turned out ineffective in a majority of cases. To explain their concept, Kim and Mauborgne refer to metaphors. They suggest to look at the economy as a world built of two oceans: red and blue.

Red oceans mean sectors, which exist today. This is the known market space. Here, the borders of branches are defined and accepted, and rules of competition games are known. Competitive battle is based on traditional assumptions. Companies attempt to get ahead of their competitors and win the largest part of existing demand. While the market space is becoming more and more crowded, growth perspectives are becoming more uncertain. Offered products quickly lose their distinguishing attributes and become standard products, while "life and death" competition becomes an ocean of blood of competing rivals.

Blue oceans, on the other hand, are sectors which do not exist today. This is the unknown and unused market space, creating demand, and growth opportunities. Some blue oceans are actually created outside of existing sector borders, but most are developed from parts of red oceans through expanding the borders of existing sectors. In blue oceans competition is not important, because the rules of the game are yet to be established.

What distinguishes winners from losers in creating blue oceans is the approach to strategy. Companies trapped in red oceans applied conventional strategic approach. Creators of blue oceans do not compare themselves with competition using indices, and do not apply generally popular strategic tools. They use a completely different strategic logic, which was called the *value innovation* (Kim, Mauborgne, 2004). It takes place when companies combine innovation with usability, price with costs. This is against the generally adopted dogma, which assumes the necessity to choose between valuable innovation and costs.

Creating a blue ocean is about simultaneous reduction of costs, and increasing the value of buyers. The value for the customer results from usability and the price of the offer addressed to the buyer. The value for the company results from prices and costs of offered products. The entire approach may work if it is properly configured. In this sense, it is something more than just innovation. It is a strategy that covers the entire system of the company's operations. Value innovation requires that companies concentrate their entire system on achieving a value jump, both for the buyer and for themselves.

5. Stages of Formulating the Blue Ocean Strategy

5.1. Reconstruction of Market Borders

The first step in formulating the Blue Ocean Strategy is a reconstruction of market borders, which allows setting free from competition and creating a blue ocean. Based on their studies, the authors distinguished action models, which are described below.

Looking at alternative industries is extremely important, because the company is not competing only within the defined industry – this is obvious – but also with manufacturers of alternative products. To meet their own needs, customers do not always need a substitute. Sometimes an alternative product will be a better choice. Therefore, it is essential to identify alternative industries and find an answer to the question on why customers choose between the products of these industries. Thanks to concentrating on the key factors, which make customers choose between these alternatives makes it possible to create a new free market space.

Looking across strategic groups in industries is the next stage. The offers of various companies may be sorted according to a defined hierarchy, e.g. the price. The key to creating new market space is breaking this manner of perceiving the market, and understanding what factors affect decisions of customers moving from one group to another. The next step is delivering a product with characteristics demanded by both strategic groups.

Looking across the chain of buyers is the next stage. In most industries, competitors define buyers in a similar manner. A buyer is the one who pays for the product or decides about the purchase. They are not always users. For example, purchases for company employees are often made based on the price, not functionality. In the pharmaceutical industry, the target group is often the doctors, who will prescribe the medicine rather than the patients who will take the medicine. Through redefining buyers and equating them with the final user it is often possible to see new value sources.

Looking across complementary products and service offerings is the next stage. When we buy the given product, we choose to take advantage of the given solution and to incur the costs related with exploitation. The value represented by the product for the customer is therefore affected by other but complementary products and services. The potential of creating free market space lies with complementary products. Therefore, it is required to identify the biggest limitations and faults related with the use of the given product, and then eliminate them by offering complementary product and services.

Looking across functional or emotional appeal to buyers is the next stage. Various products satisfy the needs of consumers in various ways. Products with utilitarian functions are often advertised with regard to their functionality and a reference to low prices. Some products are advertised by appealing to emotions. In such case, the price is not most important – what's important are the emotions related

with possessing the given product, belonging to a sort of a community of owners of these products. A new market space can be found by undermining the existing state. For example, companies which apply functional/utility approach may attempt to expand their offer by appealing to emotions. And, vice versa, in traditional products related with emotions these elements may be reduced while emphasizing utility characteristics.

Looking across time. All industries are subject to defined external trends e.g. globalization. These trends may be the opportunity to develop new market spaces. It is essential to foresee how these trends will affect value for customers. Through comparing the value of today's offering with the projected future value it is possible to find new market spaces.

5.2. Focusing on the Big Picture – Drawing the Strategy Canvas

One of the attributes of a good strategy is a possibility to present it in a simple and understandable manner. Studies by Kim and Mauborgne demonstrated that in most analysed enterprises the strategic planning process was excessively bureaucratized. The starting point is usually a detailed description of the current conditions of competing in the given industry. Further effort is concentrated on proposing the company's future action. The end result is preparing an extensive document with a massive volume of data, prepared by various people from numerous departments, often without mutual arrangements and communication. As a result, a plan prepared in this way does not include a strategy at all – rather, it is a collection of tactics, which seem to make sense when analysed separately, but together they do not constitute logical systemized action aiming at achieving one goal.

The canvas is very important in building a strategy. This is the basic blue ocean strategy tool, which allows managers to concentrate not only on the numbers and operational details, but on the broad strategic vision. It gives three measureable benefits. Firstly, it demonstrates the industry's strategic profit by way of capturing the factors that determine competition in this industry. Secondly, it reveals strategic profiles of competitors. Thirdly, it presents the company's strategic profile and this allows learning how the company invests in competition factors.

A frequent problem is the fragmentation of strategy. This derives from the fact that people responsible for the given section of activity in the company concentrate on their area solely. This results in a lack of strategic consistence. To guarantee consistence and a broad strategic perspective, the process of formulating the strategy should comprise the four following stages: visual awakening, visual exploration, visual strategy fair, visual communication. Completing all stages allows preparing the strategy canvas.

Visual awakening is the starting point of building a new strategy. Sketching the strategy canvas in consideration of the current situation allows identifying competition factors, meaning the factors on the basis of which the company is currently building its competitive position. Imperfections in a strategy are demonstrated in that the curves, being a graphical reflection of the strategy, are presenting a visible lack of concentration and a high similarity to competition's curves, and this results in a lack of possibility to formulate a catchy punch line, which is supposed to communicate the strategy in a concentrated, original and simple manner.

The canvas is an analytical scheme of the value innovation. It is a tool, which allows diagnosing the current state of the company and of the industry, as well as projecting the future competition factors with a view to create a blue ocean. It allows for a graphical presentation of the most important competition factors in the given industry. Simultaneously, they are the areas of intensive investments made by the competition. The canvas allows capturing what the customers are actually receiving now and what they will receive in the future. The key element of the canvas is the value curve, which reflects the level of the leader's achievements or of typical industry achievements (depending on what is the subject of the analysis) in reference to every competition factor, which was assessed as important. It is required to identify these factors – i.e. the elements which determine success. They are subject to substantial expenditures, and, at the same time, constitute a source of costs. A value curve built on the basis of these assumptions allows responding to the question concerning what the competition concentrates its efforts and expenses.

Visual recognition is the next stage. In the process of formulating the strategy, information on how customers perceive the company's products and how they use them are a very important element. Managers usually outsource this task to other employees or use reports prepared by others. This is a mistake. This role should be fulfilled by people responsible for the strategy. Firstly, customers

should be observed. However, it doesn't end here, and noncustomers must also be observed. This is very important because observations may demonstrate that it is possible to offer a related service (e.g. child care services for movie theatre customers), thus make a non-customer a customer.

Visual strategy fair follows visual recognition. It means that teams of employees from various departments present strategies prepared by them in the form of a canvas. Strategies are assessed by invited jurors, who represent most demanding customers, potential customers, and current customers of the competition. This allows checking whether key competition factors identified by managers correspond to factors important for customers. This way, objectively significant competition factors are determined, and this allows modifying the strategy curve. During the process of constructing the curve, the eliminate-reduce-raise-create diagram is presented in Figure 1.

Eliminate	Raise
Reduce	Create

Figure 1. Eliminate-reduce-raise-create grid: the case study of Cirque du Soleil

Source: Based on Kim and Mauborgne, 2015, p. 58

Using the diagram will lead to the need to identify defined actions for each of the four groups. It requires answering the following question: what should be eliminated, reduced, raised or created. This greatly simplifies the creation of a new value curve.

Visual communication is the last stage. After the final strategy determination, it should be presented to employees in a simple and understandable manner. The strategy canvas is very helpful here. It allows demonstrating the existing and the new strategic profile of the company, and to explain what the company should concentrate its efforts on. The strategy should be communicated in the entire organization. This will ensure better understanding by employees of why changes are necessary and what action should be taken in all business units for better operation of the entire unit. To better demonstrate these issues, Figure 2 presents the strategy curve of a traditional circus and of Cirque du Soleil.

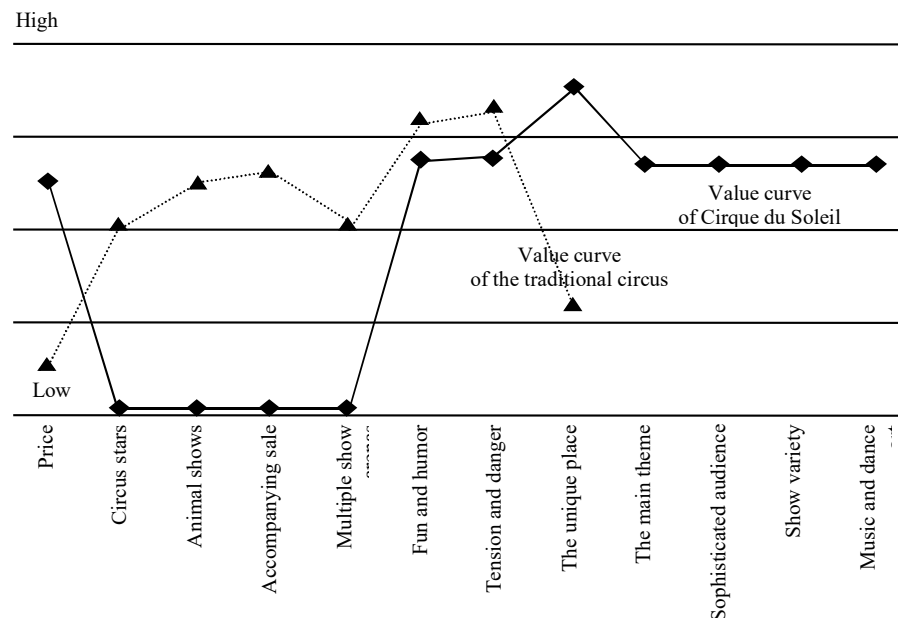


Figure 2. A strategy canvas of the traditional circus and Cirque du Soleil

Source: Based on Kim and Mauborgne, 2015, p. 65

Companies offering the highest value, unique for the customer, are referred to as *pioneers*. They attract most customers and achieve highest profits. Studies conducted by the Blue Ocean Strategy authors demonstrated that their value curve is substantially different than the competition's curve. In every industry dominating are companies, for which the competition factors, and, what follows, the strategy curve, match the industry average. They may be referred to as *settlers*. These are

companies entrapped in the red ocean. Somewhere in the middle are companies called *migrators*. They are located at the verge of red ocean and blue ocean. They offer value higher than average, but not high enough to create a blue ocean. These criteria may be applied towards companies, individual types of activity, or offered products and services in the company's portfolio.

If the current portfolio of products consists mainly of settlers, the company is stuck in the red ocean, it has weak development perspectives, and it is exposed to harsh pricing competition. In these conditions, it is essential to intensively seek value innovation. If there are many settlers in the offer, then this reflects a high growth potential, but still there is a risk of being pushed to the margin by the competition, which introduces value innovation. But what is important, the more settlers in the industry, the greater the chances of creating a blue ocean and being successful on the market.

5.3. Exceeding Current Demand

Apart from reconstruction of market borders and concentration on the vision, the third rule of the Blue Ocean Strategy is reaching beyond the existing demand. This is about action aiming at creating appropriate conditions for expanding the demand for the company's offering. This reduces risk related with creating a new market.

A traditional strategic convention consists in concentrating of existing customers and adjusting the offer through taking into account the differences between these customers and their requirements. This may lead to excessive fragmentation of the offer and, as a result, market segmentation, which results in creating many small markets. The Blue Ocean Strategy assumes opposite action – meaning concentration on common attributes, and only then on the differences. The second assumption is looking at noncustomers, instead of concentrating on existing customers. Noncustomers mean market participants who are not currently handled by the company, and who may become actual customers through expanding, modifying or creating an offer. There are three tiers of noncustomers.

The first tier are customers who purchase on the company's offer but they are looking for something better. Mentally, they are noncustomers and they can very easily give up on the existing offer. To keep them it is essential to create an offer with a greater value for them. The second tier of noncustomers are people who do not purchase on the current offer because they have no need to do so, or cannot afford this offer because it is not acceptable to them for various reasons. In such case, their needs either remain unmet or are met in other ways. The third tier of noncustomers is the group most distant from current customers. This is the part of the market, about which no one in the industry thought before as of potential customers, because their needs were perceived as an element of a different market. For noncustomers to become customers, it is necessary to concentrate on their common needs, not on the differences. That is how market de-segmentation is done and new demand is created.

5.4. Selection of the Proper Strategy Sequence

The last stage of formulating Blue Ocean Strategy is the selection of the appropriate strategy sequence. A proper sequence allows reducing the business model risk. It requires concentrating on the following elements: utility, price, cost, adoption.

Utility for the buyer is the starting point. A question must be answered whether the new offer includes an element of particular utility, which could convince the mass customers. Impressions of buyers are assessed by dividing into several stages the period from the moment of purchasing the product by the customer until its disposal. Each of these stages is evaluated with the aid of certain characteristics referring to utility. A new offer is well prepared if most utility blockades, identified throughout the entire customer experience, have been removed. Most significant blockades are often related with largest possibilities of unleashing unique value for the customer.

Appropriate offer valuation is the next stage. A question must be answered of whether the price will not constitute a barrier in attracting the mass customer, and can he afford this offer. The price should be set at a level acceptable for the buyer and, simultaneously, discouraging for potential followers. During setting the price, the price sensitivity of customers should be considered. They are accustomed to compare offers in terms of prices. This must be taken into account during setting the so-called price corridor, meaning the range of offered prices potentially acceptable for future customers. This range, in turn, is a derivative of, amongst others, the level of legal protection and resources. In case of high level of protection and, additionally, difficult imitation, the price may be set higher. A lower price must be set if legal protection is low, and access to resources as well as imitation are easy.

Costs are the next very important element. A question should be answered whether it is possible to develop an offer within the range of assumed costs, simultaneously obtaining a satisfactory margin. It may be helpful to reconstruct operations and introduce cost innovation throughout the process, starting from production and ending on distribution. Costs of material may be reduced by using substitutes, costs of processes – by simplification, costs of development – by joining alliances, costs of production – by change of production location or by outsourcing. However, it must be remembered that striving for a cost reduction to maximize profits cannot cause a decrease of the level of utility of offered products and services.

The final element is defining the barriers in implementing the new business idea. It should be assumed that changes may trigger resistance of certain groups of the company's stakeholders, meaning employees, business partners and customers. To overcome their concerns, it is essential to raise awareness and educate. The key challenge is to engage stakeholders in an open discussion on why the new concept is implemented, and what benefits this will bring for the company. It should also be defined what are the related expectations of each group and how the company intends to relate to them. Stakeholders must be convinced that their voices are heard and taken into account.

In general, the Blue Ocean Strategy may be evaluated in terms of: utility, price, cost and adoption by answering the following questions:

- Are there any special reasons to buy the offered product or service?
- Is the price easily acceptable for the mass recipient?
- Is the cost structure within the range of the target cost?
- Were potential barriers in strategy adoption previously considered?

The strategy may bring success for the company if affirmative answers were found to these questions. Then, the concept will form a consistent entirety.

6. Conclusion

This article points out the specificity of the process of designing a blue ocean strategy – one of the most important strategic concept of recent years. This concept is subject to criticism, which is based on arguments that it is not a new concept and it constitutes a set of assumptions and tools, which have been known in the strategic process for a long time. Nevertheless, the concept by W.Ch. Kim and R. Mauborgne should be recognized as a very valuable and important concept, in particular for economic practitioners. The language of science is often difficult to understand for a recipient from outside of the scientific community, and proposals seem over-intellectualized and low level of operationalization. The Blue Ocean Strategy is most definitely lacking these defects. It is easy to understand, tools are simple, a direct translation to the final strategy form is visible. Of course, proper planning of future activities will not guarantee success. This would require appropriate execution of these activities. This is an area, which has not been discussed in the elaboration, while it is very important and requires further exploration.

This article has theoretical and cognitive nature. It is only a synthesis of the problems of formulating strategy according to the assumptions of the Blue Ocean Strategy. The article is not critical or polemical but only descriptive. In the author's opinion it would be interesting to conduct empirical studies that would help to better understand the mechanisms behind creating blue oceans, in particular in the context of the durability of the competitive advantage. Blue oceans may change with time and will usually change their colour to more and more red.

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21. CONDITIONS OF THE BUSINESS ENVIRONMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES IN THE EUROPEAN UNION - SELECTED ASPECTS

Abstract: The business environment of enterprises, especially the SME sector, affects the behavior of organizations. Their development, growth and even market success depend on the quality of the business environment in which enterprises operate. In turn, the quality of the business environment is affected by many different factors, which include the help of state and state institutions. The aim of the article is to assess the impact of the state policy on business environment of small and medium enterprises. The inference is based on the authors' own research, which was carried out in Poland and Slovakia. The research was carried out on enterprises of the SME sector in 2016.

Keywords: business environment, development conditions, SME sector, management.

JEL Classification : M21, M38, O11

1. Introduction

The review of the subject literature in the field of the conditions for enterprise development and determinants affecting the development of enterprises contributed to the formulation of the scientific problem of this article, which is based on the assumptions concerning the functioning of the contemporary micro-, small and medium enterprise in the business environment in the countries of the European Union. The selection of the research problem was determined by the disturbances observed in the development of enterprises of the SME sector in the turbulent environment and the changes resulting from the quality level of the business environment in Poland and Slovakia. The quality of the business environment, its volatility and nature affect the behavior of enterprises, especially in the SME sector. Therefore, state aid and support for the business environment is important because of the turbulence of the environment and the high level of competition. The development of small and medium-sized entrepreneurship depends on the business environment, including its quality and capabilities.

The aim of the article is to assess the impact of the state policy on business environment of small and medium enterprises. The inference is based on the authors' own research, which was carried out in Poland and Slovakia. The research was carried out on enterprises of the SME sector in 2016.

2. Body of Paper – Sections

2.1. Conditions for the Development of the SME Sector

The enterprises belonging to the SME sector are characterized by flexibility (Lemańska-Majdzik, Shulgina, 2018), dynamic approach to the environment, they respond quickly to the changing needs and preferences of potential customers and adapt to them (Zvirblis, Buracas, 2012). In this way, they significantly contribute to increasing efficiency of the functioning of the entire economy and constitute an important part of the regional development (Mikołajczyk, Krawczyk, 2006). Džafić (2014)

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underlines that the SME sector, as the key one for the world economy, encounters, however, many barriers to development on the side of the environment, among others, including legal regulations, restrictive labor laws, amount of tax, limited access to sources of financing (Ivanová, Lemańska-Majdzik, 2016). In the conditions of dynamic intensification of competition and the need for more rapid response of enterprises to changes taking place in the environment, there are taken actions burdened with an increasing risk. In the conditions of the turbulent environment, conducting a business activity, particularly in the case of the SME sector, consists in adapting to changes taking place on the market (Tang et al., 2010; Moroz, 2013, pp. 77-81). These attempts consist in increasing the rapidity of responding to these changes, predicting them and also searching for solutions that will allow for more efficient and effective response to the changing business environment (Tomski, 2011).

Small and medium enterprises are, therefore, one of the main factors of social and economic growth of the country (Tang et al., 2010). These are a type of stimulus for economic development. Their number and potential is often considered the marker of economic development. Their operation reflects the entrepreneurship of the society. The impact of enterprises on economic development may be direct or indirect as well as it may produce so called multiplier effect and affect the attitudes of the citizens of the specific country (Skóra, Kopeć, 2015). Helmsing (2003) maintained that SMEs all over the world have a very representative weight for economies and for local development, and integrated influence on community economic development, enterprises development and locality development. In summary, the world scientific literature deals with the issue of small and medium-sized enterprises for the topicality and universally recognized high importance they have for the economic development of countries, such as job creation and employment, better export performance and innovation performance of the economy, regional development and elimination of regional disparities. In addition, SMEs are relevant in terms of cooperation with foreign companies operating within the country (Chen, 2008).

The SME sector occupies an important and special place in the countries of the European Union economy since the development of micro, small and medium-sized entrepreneurship, its economic and financial condition influences the basic indicators of the countries of the EU economy (Ivanová, 2011, Koišová et al. 2016), among others, the rate of economic growth, the level of unemployment and the international competitiveness. Therefore, the significance of the SME sector can be analyzed at several levels, depending on the adopted criterion, namely, at the level of the impact on creating GDP as well as by means of creating jobs. However, it is undeniable that the existence of SMEs, their operation and development is the condition necessary for the proper development of economy (Urban, Michałowska, 2014). The level of the economic activity of enterprises, willingness to invest, an increase in production capacity, particularly belonging to the SME sector, obviously depends on the current state and forecasts for economic development. The more open and liberalized the economy of the specific country the greater the dependence of the situation of companies on the external environment (Gorynia, Kowalski, 2008).

Nowadays, the most visible manifestation of entrepreneurship is intensive development of the sector of small and medium enterprises. Great significance of this group of enterprises can be observed both in generating national income and an increase in employment, innovativeness or competitiveness of the entire economy. The specific role of small and medium enterprises also results from the fact that these enterprises are the ones to create new needs, new fields and the way of operation due to development of entrepreneurship (Lemańska-Majdzik, 2012). Identifying opportunities, formulating the vision, developing the business concept, assessing and developing the strategy, acquiring essential resources and competences, exploiting opportunities occurring at the time of rapid development, maintaining entrepreneurial behavior, rejecting the business activity in the way creating value – in the opinion of Bratnicki (2001), are undoubtedly important areas of creating wealth of the organization, including its strategic advantage. All of this emphasizes great importance of the entrepreneurship of the SME sector for the real economy and the society. Therefore, it is worth making attempts to analyze this phenomenon, particularly in the case of the companies of the SME sector, which is the basis for the economic development.

2.2. Business Environment of the SME Sector

Each organization operates in a specific environment, at the same time influences it, persists thanks to it, but also creates its specific opportunities and threats. The business environment is unique and each organization must identify it. Quality of entrepreneurial environment has a key impact on locations of companies and their sustainable operation in a certain region. Quality of entrepreneurial environment can significantly be affected by the work of formal and informal institutions operating in the regions (Lisiński, 2004, p. 71; Dutt, 2011). Based on these characteristics, regional entrepreneurial environment and its conditions play a significant role in the formation and dynamics of SMEs development. The creation, development and quality of entrepreneurial environment are shaped by the key players in regional policy. Therefore, building support institutions in the regions is the primary goal of entrepreneurial environment support (Philip, 2011).

Important interventions at regional level may include support of organizations which facilitate inter-company cooperation as well as cooperation with other organizations operating in the region. Regarding this, an important role is played by business associations, employers' associations, trade and professional chambers and associations, regional advisory and information centers, etc. (Wiklund et al., 2009).

The state is the key player in regional policy and regional development at the national level. The state disposes primarily of the tools in the framework of policies to support SMEs as well as of competencies to create conditions for regional development. Buček et al. (2010) wrote that a state establishes institutional, legislative, financial and systemic conditions, but in the first place, decides on the strategic directions of regional policy.

The employment of regional tools to support entrepreneurial environment has direct or indirect effects on business activities of small and medium-sized enterprises in the region, as well as on business location in the region, networking of companies, investments in the region, investment strategy development, innovative performance growth in enterprises and the like (Nowodziński, 2013, p. 24). Therefore, state support plays an important role in the area of the business environment, which affects the development of the sector of enterprises in question.

3. The State in the Policy of Supporting Small and Medium Business in Selected Countries of European Union

3.1. Research Methodology

The aim of the article is to assess the impact of the state policy on business environment of small and medium enterprises.

The research was conducted in selected countries of the European Union, in Poland and Slovakia in 2016. A total of 390 enterprises, including 193 Slovakian and 197 Polish enterprises, included in the SME sector. The author's own questionnaire was used in the study. The questionnaire consisted of 38 closed questions and the demographics. The structure of the questionnaire allowed the authors to identify the group of questions concerning the most important conditions for the development of the examined sector referring to the business environment. The questionnaire was completed by the owners or managers of enterprises in paper form. The questionnaire was anonymous.

The conducted quantitative research allowed for using statistical methods. During the research analysis there were used descriptive statistics and correlation measures. Test probability value at the level of $p < 0.05$ was found significant. While recording the questions concerning the impact of the business environment on the development of enterprises of the SME sector, there was used a five-point Likert scale, which allowed to obtain more detailed opinions of the respondents.

3.2. Results of the Own Research

The conducted research indicated that both Polish and Slovak enterprises do not obtain sufficient aid from the State, which could be helpful in running own business. However, this situation does not apply to the support for the innovation activity of the enterprises of the SME sector. The research results indicate that as many as 131 Polish entrepreneurs, i.e. more than 66% of the respondents, and 122 Slovak entrepreneurs, i.e. over 63% of those questioned, believe that the State does not help small and medium companies in running business at all. Only 18% of the Polish entrepreneurs and 27.5% of the Slovak companies of the SME sector think that such aid exists and it positively influences the conducting of own business activity (Figure 1).

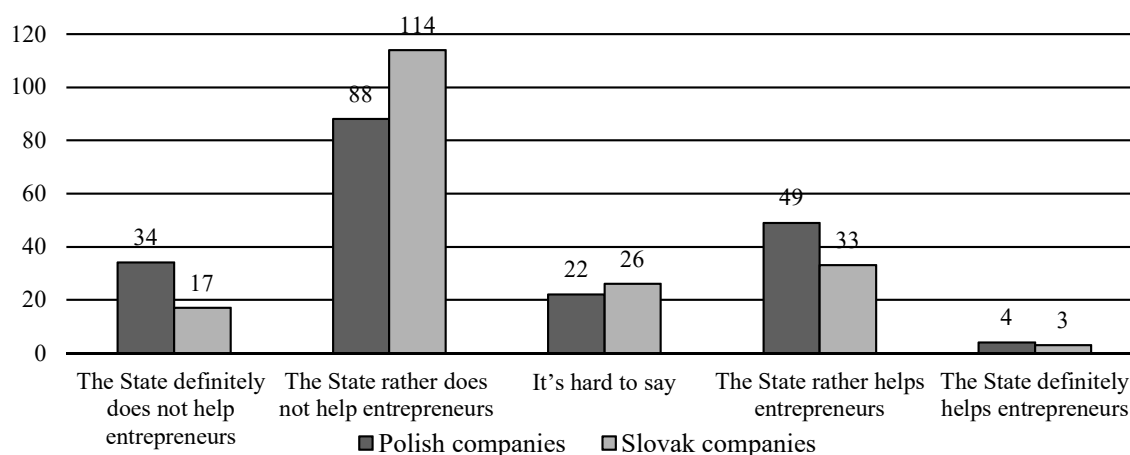


Figure 1. The State aid in conducting business for the entrepreneurs of the SME sector in in selected countries of the European Union

Source: Own work based on the survey

This situation shows that entrepreneurs have rather limited trust in the State institutions and when conducting own business do not particularly count on the State aid, although there are some industries or branches that require this aid. Therefore, the expectations of entrepreneurs may be really low in some industries whereas relatively high in others.

Table 1. Gamma rank correlation between the size and age of enterprises and the overall aid of the State in conducting business by the companies of the SME sector in selected countries of the European Union

	Size of the company	Age of the company
	*Gamma rank correlation (p-value < 0.05)	
The overall aid of the State for the companies of the SME sector in Poland	0.081	0.176*
The overall aid of the State for the companies of the SME sector in Slovakia	0.333*	0.282*

Source: Own work based on the survey

The research analysis indicated that variable of the aid of the State for the companies of the SME sector in Poland is positively statistically significant with the age of the company at a moderately low level. Such correlation was not found with the variable of the size of the company. Therefore, it occurs that the older the company, i.e. the longer it operates on the market, the more aid for entrepreneurs from the State in conducting business. At the same, the research indicates that the variable of the aid of the State for the companies of the SME sector in Slovakia is positively statistically significant with the size and age of the company at a moderately low level. Therefore, it occurs that the larger the company, i.e. the larger number of employees it hires, and the older it is, i.e. the longer the entrepreneur conducts their own business, the more overall aid from the State for entrepreneurs in conducting business (Table 1).

Table 2. The assessment of the aid from the State for the entrepreneurs of the SME sector in Poland

	Mean	Min	Max	St. dev.
The State helps entrepreneurs in order to improve their innovation performance	2.69	1.0	5.0	1.074
The State, in its policy, affects the improvement in the quality of the business environment	2.70	1.0	5.0	1.034

Source: Own work based on the survey

The research also indicates that the Polish entrepreneurs assess the already existing aid, which may affect the level of innovation of the companies, rather at an average level of 2.69, or the policy of the State, which is aimed at the improvement in the business environment of the companies of the SME sector at the level of 2.70 (on a 5-point Likert scale) (Table 2).

Table 3. The assessment of the aid from the State for the entrepreneurs of the SME sector in the Slovak Republic

	Mean	Min	Max	St. dev.
The State helps entrepreneurs in order to improve their innovation performance	2.28	1.0	4.0	0.718
The State, in its policy, affects the improvement in the quality of the business environment	2.23	1.0	4.0	0.784

Source: Own work based on the survey

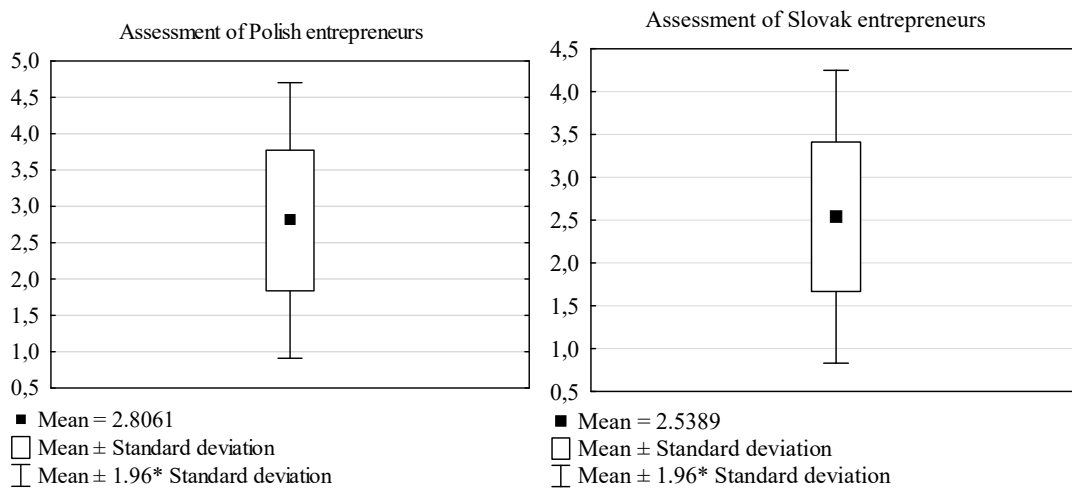
In turn, the Slovak entrepreneurs assess the aid from the State in the field of innovation performance of the companies from the SME sector rather poorly, at the level of 2.28 on a 5-point Likert scale, however no entrepreneur indicated the value of 5.0 in this assessment. The assessment concerning the impact of the State on the improvement of the quality of the business environment looked similarly, it was at the level of 2.23 on a 5-point scale, however also no entrepreneur indicated the maximum value in this assessment, i.e. the rating of 5.0 (Table 3).

Table 4. Gamma rank correlation between ‘the quality of the business environment has improved’ and ‘the State, in its policy, improves the quality of the business environment’ in selected countries of the European Union

	The quality of the business environment has improved
	*Gamma rank correlation (p-value<0,05)
The State, in its policy, improves the quality of the business environment in Poland	0.322*
The State, in its policy, improves the quality of the business environment in Slovakia	0.456*

Source: Own work based on the survey

The research indicates that the variable of ‘the quality of the business environment has improved’ is positively statistically significant, both in Poland and Slovakia, with the variable of ‘the State, in its policy, improves the quality of the business environment’. Therefore, it can be concluded that the policy of the State concerning the improvement in the quality of the business environment, in which the surveyed small and medium enterprises operate in Poland and the Slovak Republic, actually influences the improvement of the quality of the business environment (Table 4).

**Figure 2. The cooperation of the companies of the SME sector with the authorities affects the improvement in the quality of the operation of the companies in selected countries of the European Union**

Source: Own work based on the survey

At the same time, the surveyed enterprises in Poland and Slovakia assessed whether the cooperation of entrepreneurs with the authorities, e.g. local authorities, influences the improvement in the quality of the operation of the companies on the market. The analysis of the research results shows that the Polish entrepreneurs evaluate this type of cooperation slightly better (the average rating at the level of 2.80) compared to the Slovak entrepreneurs (the average rating at the level of 2.54 on a 5-point Likert scale) (Figure 2).

4. Conclusion

The conducted research indicates that both Polish and Slovak enterprises do not obtain sufficient aid from the State, which could be helpful in running own business. However, this situation does not apply to the support for the innovation activity of the enterprises of the SME sector. This situation shows that entrepreneurs have rather limited trust in the State institutions and when conducting own business do not particularly count on the State aid, although there are some industries or branches that require this aid. Therefore, the expectations of entrepreneurs may be really low in some industries whereas relatively high in others. Moreover, one can conclude that:

- in Poland the longer it operates on the market, the more aid for entrepreneurs from the State in conducting business,
- in the larger number of employees it hires, and the older it is, the more overall aid from the State for entrepreneurs in conducting business.

The policy of the State concerning the improvement in the quality of the business environment, in which the surveyed small and medium enterprises operate in Poland and the Slovak Republic, actually influences the improvement of the quality of the business environment. Moreover the surveyed companies in Poland and in Slovakia rated, it the cooperation of entrepreneurs with the authorities, e.g. local authorities, influences the improvement in the quality of the operation of the companies on the market. The analysis of the research results shows that the Polish entrepreneurs evaluate this type of cooperation slightly better compared to the Slovak entrepreneurs.

The research also has its limitations, which result from the number of entities surveyed and the subjective responses of business owners. However, the authors hope to continue the research on a larger group of enterprises and / or in other European Union countries and to develop the research problem in order to find dependencies and recommendations for entrepreneurship development in the business environment.

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22. THE INFLUENCING FACTORS OF SOCIAL COMMERCE INTERACTION TO USER'S BEHAVIOR

Abstract: Social commerce is a new branch of current e-commerce. The emergence of social commerce makes consumers to share their ideas and information with each other in real-time become daily activities. The relationship between the interactions of consumers and consumers' behaviors has become a valuable research topic. This paper studies social commerce interactions from the information and emotional aspects, introducing the mediator of trust in social commerce, exploring the specific impact of social commerce on user's behaviors, and finding out how the social commerce interaction influences user's behavior.

Keywords: social commerce, social commerce user's behavior.

JEL Classification: M31, G40

1. Introduction

At present, with the change of people's lifestyle and the upgrading of consumption, the progress of Web2.0 technology (interactivity, user-generated content, etc.) and the vigorous development of e-commerce, social commerce emerges at the historic moment under the combination of the two. This model takes social media as the medium of communication to help users make purchase decisions by user-generated information and network interaction.

The social commerce model has become a common practice. Oversea social commerce websites such as Instagram, Facebook, and Tumblr have made great achievements, and domestic merchants have begun to imitate and learn from them. Social commerce platforms such as Mogu and Red have sprung up. Socialization, personalization, content, and mobility are the new directions for e-commerce development. Since the exploration of social commerce in 2011, China has developed vigorously and formed three main models as shown in Table 1.

Table 1. Three main models of social commerce in China

Social commerce models	Example
1. Build the community based on e-commerce	Taojianghu, Jdlexiang, JMXI
2. Implant e-commerce in the community platform	Sina MicroBlog, Tcent Wechat
3. Third-party social commerce platform	Red, Meilishuo, Mogu

Source: China Datacenter

Social commerce users in the network can sense to the concrete information and accept his friend's help that perceived social support for the user. Meanwhile, users use social networking platforms to share information about goods, services and shopping experience, and they can also communicate with other network users to share high-quality information effectively which will help the user to make a purchase decision and ask for preferential policies from the seller. This is also a social commerce's

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characteristic. Therefore, it is extremely necessary to analyze the relationship between social users and social support, which can bring profound influence for enterprises to conform to the trend of social commerce and subsequent development.

On December 27, 2017, the China Internet Network Information Center (CNNIC) released 2016 China social application user behavior research report' pointing out that social network users with 39.4% of people will buy products recommended by others, although this number has increased by 7.1% compared with 2015, there are still 60% of users won't buy. This report disclosed that the virtuality and potential trust issue of the internet are still big obstacles. The basis of business transactions in social commerce is social relations and social network platforms, and the core is user-generated content (UGC). Users used to passively accept massive information from the media, but now they can actively filter the needed information and share their views and effective information at the same time. In the interactive environment of virtual liberalization, enterprises establish stronger dependence and trust, so users can consume under the trust. In this paper, we concentrate the social commerce, and find the factors which can affect the consumer behavior.

2. Theoretical Research and Hypotheses

2.1. The Connotation of Network Interaction

With the emergence and popularity of the internet, people have a new platform to communicate, and it changes the way of communication between human beings. It has the advantages of being independent of time and space or subject when people interact in the Internet environment, so it becomes the most significant way nowadays. Hoffman and Novak (1996) had the researched in last century, they found the Network interaction reflects the interactive relationship and behavior between network users and the website platform where they are located, as well as the depth of users immersed in the communication environment based on the computer. Liu and Shrum (2002) think the network interaction is the degree of interaction and interaction between users and the information, media, and other parties with whom they interact. Mengjun Wu (2014) Network interaction is the use of online media in modern Internet applications to achieve the sharing of information and emotional exchange between two or more individuals or groups, in order to achieve the purpose of interaction between the two parties interacting and relying on each other. Network interaction is the interaction of users in virtual space through various network media, using text, symbols, video, audio and other information codes. Compared with direct face-to-face communication in traditional times, network interaction not only saves users from suffering in reality Sense of urgency and crisis to avoid possible real conflicts

2.2. The Dimension of Internet Interaction

Hoffman and Novak (1996) thought the internet interaction is users and their group interact with machine, The main form of user interaction with the machine is the interaction between the user and the computer, and Interactions between users are the interactions between users who simulate real communication scenarios with other users in the Internet environment.

Coyle and Thorson (2001) thought the internet interaction divided into two methods: Human-computer interaction and interpersonal interaction. Massey and Levy (1999) thought the interpersonal interaction and content interaction is the real part of the internet. Verhoef and Langerak (2001) had pointed In his research, he used the four dimensions of community interaction, organizer-member interaction, member-to-member interaction, and organizer-to-member interaction to clearly distinguish network interaction. This research mainly focuses on the online interaction of socialized e-commerce platforms, and explores the impact of network interactions on consumers' purchase recommendation intentions. Based on previous research, it integrates the nature of socialized e-commerce, using consumers and platforms, Three interaction dimensions between platform merchants and their own groups to divide the network interaction of socialized e-commerce platforms.

2.3. The Factors in Internet Interaction

In the study of network interaction, scholars divide it into different dimensions for research. At the same time, because network interaction is a relatively complex concept and difficult to measure, each interaction dimension is characterized by a corresponding interaction factor. Tang Jiageng (2006) based on three perspectives, proposed five different types of interaction factors in the study of the impact of interaction on consumers, which are mainly two-way, mutual assistance, perceived

usefulness, perceived ease of use, Responsiveness. Xie Yuanyi (2013) believes that there are three types of online interactions, and when exploring the impact of online interactions on consumer impulse purchases, he pointed out that two-way, mutual assistance, perceived usefulness, perceived ease of use, responsiveness, and controllability Test and measure interactivity. Li Yufang (2012) explored the interaction of Weibo marketing on consumer purchase intentions from the perspective of six interaction factors including ease of use, usefulness, mutual assistance, two-ways, personalization and influence of opinion leaders influences. Zhao, Zhou and Jiang (2015) in their research on the factors affecting consumer impulse purchase behavior, proposed that four factors such as personalization, control, mutual assistance, and responsiveness should be used to test the effect of online interaction.

In this study, the author chooses the usability and usefulness to measure the interaction between the consumers and e-commerce platform.

Consumer purchase intention is an important concept in the attitude theory of consumer behavior, which includes cognition, emotion, and action. Fishbein and Ajzen (1975) believed that the purchase intention of consumers is the main determinant of purchase behavior and other factors will also indirectly affect the individual purchase. Spears and Singh (2004) proposed that consumers' purchase intention is an individual's conscious effort and there is a positive relationship between consumers' satisfaction with services or goods and consumers' purchase intention. Tang Jiageng (2006) proposed that when consumers have a clear attitude of trust in e-commerce sellers and e-commerce platforms also have a security guarantee, the consumer will have a deeper degree of trust and more significant purchase intention. Due to the change in consumption environment. social commerce users are more dependent on sharing from social friends. In combination with previous studies, this study defines the purchase intention of social commerce users as follows: the subjective intention of individual consumers in social commerce to purchase services or products on the social commerce platform with the internet as the medium.

2.4. Hypotheses

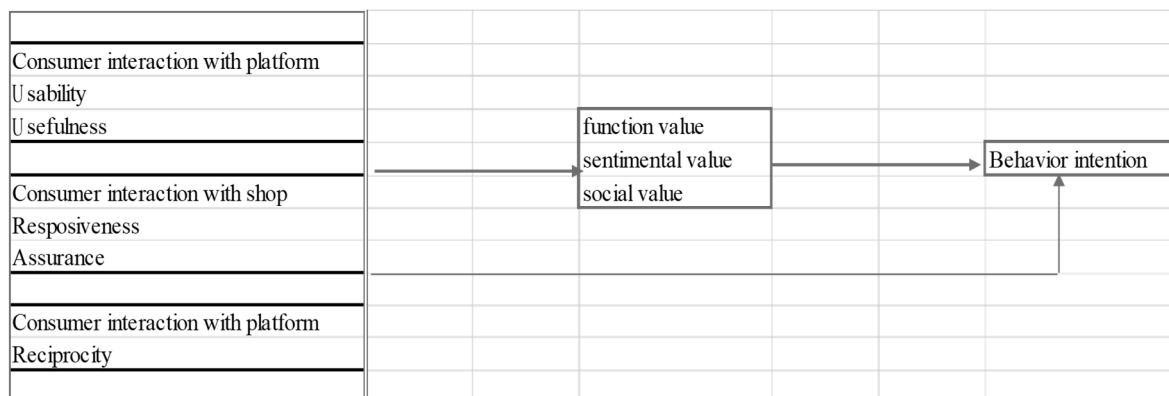


Figure 2. Model graph based on authors' theory

Source: Authors' paper research theory

2.4.1. The Impact of Social Interaction on Social E-commerce Platforms on Consumer Behavior Intentions

H1: Social interaction on social e-commerce platforms has a significant positive impact on consumer behavior intentions.

H1a: The ease of consumer interaction with the platform has a significant positive impact on consumer behavior intent.

H1b: The usefulness of consumer interaction with the platform has a significant positive impact on consumer behavior intentions.

H1c: The responsiveness of consumer interaction with platform merchants has a significant positive impact on consumer behavior intentions.

H1d: The assurance of consumer interaction with platform merchants has a significant positive impact on consumer behavior intentions.

H1e: The reciprocity of interaction between platform consumers has a significant positive impact on consumer behavior intentions.

2.4.2. The Impact of Social Interaction on Social E-commerce Platforms on Perceived Value

H2: The ease with which consumers interact with the platform has a significant positive impact on perceived value.

H2a: The ease of use of consumers interacting with the platform has a significant positive impact on functional value.

H2b: The ease with which consumers interact with the platform has a significant positive impact on emotional value.

H2c: The ease of use of consumers interacting with the platform has a significant positive impact on social value.

2.4.3. The Impact of Usefulness on Perceived Value

H3: The usefulness of consumer interaction with the platform has a significant positive impact on perceived value.

H3a: The usefulness of consumer interaction with the platform has a significant positive impact on functional value.

H3b: The usefulness of consumer interaction with the platform has a significant positive impact on emotional value.

H3c: The usefulness of consumer-platform interaction has a significant positive impact on social value.

2.4.4. The Impact of Responsiveness on Perceived Value

H4: The responsiveness of consumer interactions with platform merchants has a significant positive impact on perceived value.

H4a: The responsiveness of consumer interactions with platform merchants has a significant positive impact on functional value.

H4b: The responsiveness of consumer interactions with platform merchants has a significant positive impact on emotional value.

H4c: The responsiveness of consumer interactions with platform merchants has a significant positive impact on social value.

2.4.5. The Impact of Assurance on Perceived Value

H5: Assurance in the interaction between consumers and platform merchants has a significant positive impact on perceived value.

H5a: Assurance in consumer interaction with platform merchants has a significant positive impact on functional value.

H5b: Assurance in the interaction between consumers and platform merchants has a significant positive impact on emotional value.

H5c: Assurance in the interaction between consumers and platform merchants has a significant positive impact on social value.

2.4.6. The Impact of Reciprocity on Perceived Value

H6: The reciprocity of interaction between platform consumers has a significant positive impact on perceived value.

H6a: The reciprocity of interaction between platform consumers has a significant positive impact on functional value.

H6b: The reciprocity of interaction between platform consumers has a significant positive impact on emotional value.

H6c: The reciprocity of interaction between platform consumers has a significant positive impact on social value.

2.4.7. The Impact of Perceived Value on Consumer Behavior Intentions

H7: Perceived value has a significant positive impact on consumer behavior intentions.

H7a: Functional value has a significant positive impact on consumer behavior intentions.

H7b: Emotional value has a significant positive impact on consumer behavioral intentions.

H7c: Social value has a significant positive impact on consumer behavior intentions.

3. Design of Study and Measurement

3.1. Social Interaction E-Commerce Platform Network Interaction Factors Measurement Questions

Table 2. Social interaction e-commerce platform network factors

Constructs	Items	Sources
Usability	PEU1 Open app soon and smoothly	Armstrong (1997)
	PEU2 Easy to use	
	PEU3 Easy fet the information	Merrilees, Fry (2003)
	PEU4 Shopping is easy for me	Merrilees, Fry (2003)
Usefulness	PU1 Service and goods is useful for me	Gefen (2003a)
	PU2 The platform increase efficient	Gefen (2003b)
	PU3 The platform provide the feedback	Gefen (2004)
Responsiveness	RES1 The merchant response soon	Rafaeli (2010)
	RES2 The merchant can exactly anwser	
	RES3 The merchant have patience	Yin (2005)
Assurance	GUA1 Can return and exchange	Zucker (1986)
	GUA2 Shopping is safety in the platform	Shi, Chow (2015)
	GUA3 Describe real and no fake	
	GUA4 The platform have good after sale service	
Reciprocity	REC1 Consumer can communicate and share experience	Jiageng (2006)
	REC2 If I have question, platform will answer.	
	REC3 The platform encourage people communicate and interaction.	

Source: based on authors' paper

3.2. Questionnaire Design

The first part of the questionnaire is mainly the basic personal information of the interviewees, including the status and issues of gender, age, education level, online shopping period, average monthly online shopping times, and social e-commerce platforms that are frequently used. The second part of the questionnaire includes operational questions about social interaction, perceived value, and behavioral intentions of the social e-commerce platform. The main network interactions mainly include five dimensions: ease of use, usefulness, responsiveness, assurance, and reciprocity. A total of 18 questions; then, starting from the three aspects of functional value, emotional value and social value, investigate the perceived value of the intermediate variables; finally, survey the consumer's behavioral intention, a total of 4 questions. Evaluations and behavioral intentions were conducted using the Likert 5-point scoring method, which was divided into five levels: totally disagree, disagree, general agree, agree, and fully agree. The scores were 1, 2, 3, 4, and 5, respectively.

3.3. Reliability Analysis

450 questionnaires were distributed in this study, among which 422 valid questionnaires were collected and analyzed.

Table 3. Reliability statistics

Variables	Item	Cronbach's alpha
Usability	4	0.885
Usefulness	3	0.908
Assurance	4	0.819
Responsiveness	3	0.923
Reciprocity	4	0.946
Function value	4	0.875
Sentimental value	4	0.923
Social value	6	0.901
Behavior intention	4	0.776

Source: Authors' research and results analysis

According to the test results in table 3.2, the Alpha coefficients of the nine variables in the scale are all greater than 0.7 and all of them reach an acceptable level. When the final result reaches above 0.7, it indicates that the test has a strong internal consistency, which proves that the data of this survey has a strong credibility.

3.4. Content Validity Analysis

This study first performed KMO and Bartlett sphere tests on the 18 measurement indicators of social e-commerce platform network interactions to test whether these factors are suitable for factor analysis. And the KMO value of the network interaction scale is 0.872, and its significance probability is 0.000, indicating that can do factor analysis.

3.5. Regression Analysis

In this part we use the regression analysis to evaluate will the internet interactions affect consumers' behaviors. And all results based in the significance level 0.01.

We use the Usability, usefulness, responsiveness, assurance and reciprocity as the independent variable and use the consumer behaviors as the dependent variable to regression. The results shown below:

Table 4. The basic information of internet reactions with consumers behaviors

<i>R</i>	<i>R</i> ²	Adjustment <i>R</i> ²	error
0.668	0.474	0.464	0.5414

Source: Authors' calculations

Table 5. The ANOVA analysis of internet reactions with consumers behaviors

	TS	Freedom	MS	F	significance
Regression	71.187	5	14.236	48.565	0.000
Residual	79.146	270	0.293		
Total	150.327	275			

Source: Authors' calculations

From the table before we can see the internet interaction can analysis 46.4% part of consumer behaviors, and from the ANOVA analysis, we can see F is 48.565, and the significance level less than 0.01, we can think the regression is good.

Table 6. The regression coefficient of internet reactions with consumers behaviors

	Beta	t	significance
Constant		-0.679	0.498
Usability	0.170	3.020	0.009
Usefulness	0.247	5.524	0.000
Responsible	0.224	4.588	0.000
Assurance	0.228	4.389	0.000
Reciprocity	0.201	4.241	0.000

Source: Authors' calculations

From the table 7, we can see their beta all in significance level and it prove these factors we selected have passive effect on the consumer behaviors. So the hypothesis H1a, H1b, H1c, H1d, H1e is accept.

Then we will use the same way to build the model to test our hypothesis, we didn't show the calculations here.

3.6. Hypothesis Test Results

We built model to test all hypothesis in 2.5, and we get only H2a and H2c is reject, all other hypothesis is accepted (H2 is part accept). It shows that social interaction factors of e-commerce networks have a significant positive impact on consumer behavior intentions, and in the ease of use, usefulness, responsiveness, assurance, and reciprocity have significant positive effects on functional value. Usefulness, responsiveness, assurance, and reciprocity all have a significant positive impact on social value.

3.7. Limitations of Research

Limitations of sample selection. Due to the constraints of existing investigation conditions and my limited research capabilities, As a result, most of the investigators in this study are within the scope of the author's own social relationships, which has led to a relatively concentrated sample and weakened the typical characteristics of the sample, which may have a biased effect on subsequent empirical analysis. Moreover, the selection and adoption of the interactive dimension of the social e-commerce platform network needs to be further improved.

4. Conclusion

In this paper we study the relationship between internet interactions and consumer behaviors, and get the results:

- a) First, the ease of use, usefulness, responsiveness, guaranty, and reciprocity of social interaction on social e-commerce platforms have a significant positive impact on consumer behavior intention.
- b) Each factor of network interaction has a significant positive impact on functional value, and usefulness and reciprocity have the greatest impact on consumer functional value. Usefulness, reciprocity, ease of use, and responsiveness can have a significant positive impact on the emotional value of consumers, In contrast, assurance does not have the same effect on this. The possible reason is that assurance is the quality guarantee that exists when consumers buy products or receive service experiences, which can increase consumers 'confidence when shopping on the platform, and thus affect consumers' behavior intentions when shopping, but may Ease and joy in the shopping experience.
- c) Social value for consumer purchase and the influence of recommendation intention is small.

Advice to marketing:

- Enhance platform construction and improve consumer operability.
- Enrich the content of web pages and provide personalized product information for consumers.
- Improve responsiveness and enhance interactive communication between buyers and sellers.
- Enhance consumer shopping protection (like fast return goods, shipment in 8 hours etc).

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23. THE AIR SECTOR AS GENERATOR OF RESOURCES AND DEVELOPMENT IN BRAZIL

Abstract: The airport has played a prominent role in the transport matrix, serving as a modal transfer point, from air to land or vice versa, and as a point of interaction between the three main components of the air transport system, airport, airline and user. This study points out some characteristics of the air sector as generating factors of resources and the benefits that have made possible the development of the transport matrix and the sustainability of the aviation companies that contribute with the economic development of Brazil. The methodological procedures adopted in this analysis include bibliographic research for the diagnosis of existing literatures among books, articles, dissertations and theses, and empirical research, through interviews with aviation professionals to obtain information that reflects the reality at airports, in order to contribute to the research. Through the analysis of the questions presented, we find that one of the main objectives of the airlines is to increase connectivity in order to exploit more economic and strategic routes to remain sustainable and profitable in the market. Airports play a key role in maintaining business operations, as good infrastructure is critical to maintaining and expanding business in the air sector.

Keywords: air sector, development in Brazil, resources generator.

JEL Classification: L93

1. Introduction

The airport has gained a prominent role in the transport matrix, serving as a modal transfer point, from air to land or vice versa, and as a point of interaction between the three main components of the air transport system, the airport, the airline and the user. Over the years and with the development of new technologies, it has been realised that airports have a high potential to generate economic value for undertakings operating air transport services, such as air operators, aerodrome operators, commercial undertakings, service providers and undertakings providing services ancillary to air transport. In this way, efficiency in supply chain management, process management and modelling to strengthen economic potential has been the focus of many organizations, considering the relevance of air modal.

According to data from the National Civil Aviation Agency (ANAC) Brazilian airlines transported more than 117 million passengers on domestic and international flights during the year 2018, in the year 2017 were more than 90 million, presenting a significant increase. In domestic flights 93.6 million passengers were transported in 2018, an increase of 3.3% before the year 2017. In international flights, the high number of passengers transported was 11,9%, reaching more than 23 million passengers transported, in December 2018 were 875 thousand passengers on international flights, being the highest level ever recorded in the historical series of ANAC, since its beginning in the year 2000.

The approach of the theme considers opportunities that can be created, the development of more efficient and profitable production systems, the influences suffered with airport operations as connection centres in the regions where they are inserted. And it takes into account the actors involved, government, private enterprise and companies that support intermodal transport logistics.

This study points out some characteristics of the air sector as generating factors of resources and the benefits that have made possible the development of the transport matrix and the sustainability of the aviation companies that contribute with the economic development of Brazil.

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2. Development of the Brazilian Air Sector

Latin American and Caribbean Air Transport Association – ALTA reported in its annual report 2018/2019 that of the 20 largest Latin American airports surveyed in 2017 nine are Brazilian. Alta is an association that brings together 19 companies in the region, plus about 60 members operating in Latin countries or suppliers to the aviation industry. The busiest airport is Mexico City, with nearly 45 million passengers in 2017. Guarulhos, in São Paulo, with almost 40 million, comes in second place; and Brazil is still represented by Congonhas in fifth place, Brasília that took the eighth place, Galeão in ninth, Confins in tenth quarter, Campinas in tenth sixth, Santos Dumont in seventh place, Porto Alegre in the eighteenth and Salvador in the ninth tenth according to passenger movements registered at airports. According to ANAC, together these nine airports transported around 140,000,000 (one hundred and forty million) passengers in the year 2018, according to data published in the yearbook. (ANAC, 2018).

The number of flights on domestic and international markets also grew significantly, providing an overview of local and regional development around airports, since according to the increase in flights, there is an increase in other demands such as hiring manpower and improvements in airport infrastructure. In this way the airports with the greatest economic potential in Brazil gained more attention in the national context through investments and in the international scenario has attracted foreign aviation companies interested in exploring the Brazilian passenger market that are joining the air transport that has expanded over the years.

Table 1 demonstrates evolution in the number of flights operated in Brazil between 2009 and 2018, including domestic and international markets.

Table 1. Evolution in the number of flights in domestic and international markets from 2009 to 2018

Year	Domestic	International	Total
2009	733.624	101.124	834.748
2010	844.718	117.472	962.190
2011	958.083	135.426	1.093.509
2012	990.839	142.514	1.133.353
2013	946.681	144.845	1.091.526
2014	941.853	149.318	1.091.171
2015	935.675	147.203	1.082.878
2016	828.893	135.863	964.756
2017	805.472	135.416	940.888
2018	815.862	151.197	967.059

Source: ANAC (2018)

It is noted that between 2009 and 2012 there was an increasing evolution and in the years that followed between 2013 and 2018 there was a sharp drop in domestic flights resuming growth in the year 2018, while the international market gradually grew in the years 2009 and 2014, going through a slight drop between the years 2015 e 2017, returning to grow in the year 2018, signaling a continuous growth in the long term.

With the evolution in the number of flights there is consequently an increase in the number of paid passengers transported and users of the services offered in the air transport. There was growth between the years 2009 with 69.7 million passengers until 2015 reaching 117.7 million passengers transported, with a slight decrease in 2016 falling to 109.6 million passengers, resuming their growth levels in the years 2017 with 112.5 million and 2018 with 117.6 million passengers transported. This represents an increase in the business and profits of airlines, air transport auxiliary services and airport concessionaires and administrators in Brazil, which in addition to resource generators are part of a profitable business model for all.

The evolution in the number of flights and passengers transported warms the aviation industry in Brazil and causes it to grow at a billion-dollar rate. In Figure 1 we can visualize the exponential growth in revenue of public air services between 2009 and 2018 in billions of reais.

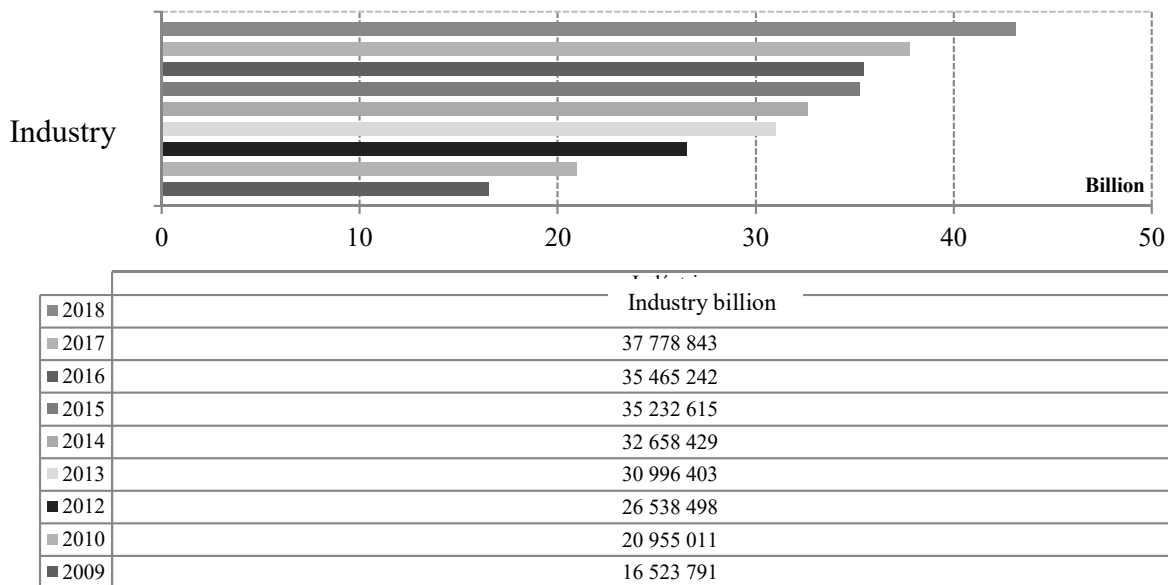


Figure 1. Revenue from Public Air Services (R\$ 1,000.00) from industry, 2009 to 2018

Source: ANAC (2018)

There was a percentage increase of 270% between 2009 and 2018 in revenues generated through public air services. This growth also generates resources for companies involved in the air sector such as concessionaires and administrators of airports, airlines, air transport ancillary services companies, commercial companies and service providers operating within airports, generates development in the regions in which they are located.

The airports in Brazil that have the largest annual passenger movement have HUB airport characteristics that are demand concentrators and contribute to an increase in the employability and heating of the economy and the service sector by being interconnected through transport of goods directly or indirectly as part of the production and logistics chain necessary for the maintenance of activities at airports.

3. Characteristics and Benefits of Aviation Development

Studies make it possible to calculate risks associated with delays, congestion and other problems at the airports where the company operates and can make them useful for possible route optimisations and increased efficiency in the air transport sector, contributing to the decision-making regarding the strategic positioning of the company and its level of competitiveness in the market (Lopes, 2005).

The changes brought about by the process of liberalising air transport have led to an increase in competitiveness, which has led to changes in airline strategy and management practices, whose objective has become primarily based on cost management and productivity improvement (Belobaba, Odoni, Barnhart, 2009).

For Ashford, Mumayiz and Wright (2011) airport passenger and cargo terminals are by themselves installations that have three distinct functions:

- Change of mode where they provide a physical connection between the aerial vehicle and the surface vehicle, designed to accommodate the operating characteristics of the vehicles on the air side and on the ground side respectively;
- Processing where the necessary facilities are provided for the emission of passages, documentation and control of passengers and cargo; and
- Change in the type of movement where continuous loading is carried out by trucks and departing passengers by car, taxi and train in lots suitable for aircraft that usually have pre-scheduled exits;

Based on the growing awareness of the commercial potential, many airports reinvented their business concept. Capitalizing on the passenger growth, some have meanwhile grown into economic centers conducting a variety of activities and providing a wide range of services. Nowadays, airports are no longer only regarded as modal interfaces but also as leisure attractions and primary attractions

in their own right. Several adopted the “airport city” approach, transforming into multifunctional enterprises acting as global gateways for tourism, commerce, and industry, and generating sizable commercial development within and beyond their site (Baker, Freestone, 2011; Kasarda, 2013).

Liu et al. (2013) explored the co-evolution of the geographies of aviation and corporate networks and confirmed that insight, showing that cities with well-developed aviation networks attract more globalized business service firms, while globalized business service firms in turn stimulate the development of aviation networks.

In contrast to the network of operations of strategic alliances using Hub airports, airlines using the point-to-point system have a dense and complex network of direct flights between destinations, making aircraft profitable, without relying on other airlines for the transport of their passengers, such as airlines operating on Hub systems and coordinating flight schedules at Hub airports with other airlines in the same alliance (Almeida, Costa, 2014).

Airports have evolved from being public sector infrastructure providers into sophisticated, business-oriented service providers which can be run efficiently and in many instances be self-sufficient (Gittens, 2015).

In civil aviation economic development is a strong indicator for market demand. The development of developing and developed regions is a scenario in which current producers are trying to address. This situation is evident at the global level and also it is based on service at the regional or country level. Factors such as; Gross Domestic Product (GDP), private consumption, international trade, tourism, crude oil prices, airline profits and productivity gains contribute to economic factors (IATA, 2016).

In the last 10 years Brazil has been going through a process of concessions at its airports in order to improve the infrastructure of the air transport matrix and develop aviation. Within this context of making complex privatisation decisions concerning airport groups, Socorro et al. (2018) argued that it is not just whether competition is feasible that should be considered, but also whether it is desirable from the perspective of the national interest.

Much attention has been focused on world cities, which are significant clusters of multi-national firms and global business service firms and so play a prominent role in international air traffic movements (Matsumoto, Domae, 2019).

We account for the scale of operation (hub size) of an airline in a city. The hub size variable is constructed by calculating the number of destinations that an airline connects to from the origin city using Nonstop flights. Hub size also captures some level of congestion at airports (Yimga, Gorjidoz, 2019).

Common ownership of airports poses a particular challenge for policy-makers, in that consumers (airlines and passengers) may not have access to benefits that stem from a more competitive system (e.g. lower prices, higher quality of service), assuming that the operating environment is such that competition between the airports could potentially exist. However, whilst the arguments for and against group versus individual operations have been debated in the literature, there are only limited practical cases when a change from common to individual ownership has occurred (Pagliaria, Grahamb, 2019).

The potential implications for airlines have received very limited attention, which is somewhat surprising as network connectivity has always been under the sovereignty of the airlines and airport-led transfer schemes, at least to some extent, try to challenge that status quo (Never, Suau-Sanchez, 2019).

Airlines can apply the model's result in planning medium- and long-term network layout, fleet composition, and operation strategy. In this type of demand forecasting, however, the airline's competition behavior, such as airfare and service, is usually not considered in as much detail as those in the operational planning; only the general condition is applied (Wang, Wong, 2019).

4. Methodology

The methodological procedures adopted in this analysis include bibliographic research of existing literatures among books, articles, dissertations and theses, and empirical research, through interviews with aviation professionals to obtain information that reflects the reality at airports, in order to contribute to the research. The results were analyzed in order to achieve the proposed objectives.

The empirical research or field study is dedicated to the deepening of a specific reality, through the direct observation of the activities of the studied group in order to obtain explanations and interpretations of what happens in that reality (Gil, 2008).

The method adopted for analyzing interviews was content analysis. According to Nascimento e Menandro (2006), the content analysis consists of a data analysis method that deals specifically with transcribed verbal material such as interviews, documents, essays, among others.

In order to gather information about the air sector and its characteristics, interviews were conducted with 2 professionals working at Congonhas/BR airport (A) and Santiago/CL (B) in the areas of management and business strategy respectively, and a flight co-ordinator for an airline (C) between June 23 and July 17, 2019.

The interview script with 05 questions, was developed based on some features that are in evidence in the Brazilian air sector and related to their development. Table 1 illustrates the questions in the proposed interview script:

Table 1. Interview script issues

What is the importance of deploying low-cost and more economical routes in airports, for Brazilian aviation companies this is a differential?
Does the operational part of airports influence the choice of airlines in terms of possible route deployment?
Do the economic aspects directly interfere in the choice of companies to direct the routes in airports and in what aspects?
Does the airport concession system that has been developed in Brazil in recent years favour and create conditions for the development of the air transport matrix and the implementation of routes?
Have new forms of services been used that would attract more interest from different types of customers in order to improve revenue flow?

Source: own study

5. Results and Analyses

The first issue was to verify the importance of deploying low-cost and more economical routes at airports for aviation companies. According to the interviewee A “in relation to low-cost routes hubs are operated because companies can centralise flights at an airport and connect to several destinations with shorter ground time, lower operational costs as there is better use of the teams, and diversity of routes that represents an attraction for the client, is what happens with the main domestic hubs like Brasília and Congonhas, and Guarulhos that is a hub of international flights”. Aviation companies want to explore today more economic and strategic routes with the aim of increasing connectivity, routes have to be sustainable and profitable.

The next question was whether the operational part of the airports influences the choice of airlines as to whether to deploy routes. For the interviewee B “airports must offer an attractive infrastructure to the airlines, since in smaller airports the operation may have some limiters that make it difficult to implement and maintain routes, besides compromising the connectivity. Airports with restrictions on aircraft types and operating times are examples of these infrastructure-related limiting factors that may impair operations.

The third item refers to the economic aspects and how they can directly interfere in the choice of companies to direct the routes and in what aspects. The interviewee C says “visualizes all aspects inherent in both passenger and cargo transport, so if a city, state or country undergoes a crisis or economic warming, respectively, decreases and increases the purchasing power of the people, altering the possibility of profitability of the route. The question of government influences since airports that charge lower charges encourage the implementation of new routes and increase the possibilities of airlines to establish”. So when the economy is warmer you have more frequency of flights, and when local governments reduce rates it becomes an attraction for the airlines.

The fourth item is an enquiry about the airport concession system that has been developed in Brazil in recent years, whether favors and creates conditions for the development of the air transport matrix and for the implementation of routes. The interviewee mentions that “several airports have infrastructure problems and the concession, in general improves management and infrastructure, making aviation a more attractive and safe means of transport for the population. For the interviewee B “the gain from negotiating with the concessionaires after the privatizations has improved greatly

compared to public administration, because despite aiming at profit Infraero is a company very full of processes and the structure of public airports is still a bit precarious”. The interviewed C says that “the new administrations of airports aim and work in partnership with the client who are the airlines. But there is a disadvantage in the privatization system which is the increase of products and services, there is an investment in airport infrastructure to increase the quantity of flights, invests in more spaces for customers, more shops, and the structure becomes expensive due to these benefits offered”. It is noticed that the system of concessions is more beneficial for the airlines and for all users, since there are more investments and improvement in the quality of the services offered, in the management and negotiation processes, despite making services more expensive compared to public administration.

In the fifth item, information is sought on new forms of services that arouse greater interest from different types of customers in order to improve the revenue flow. The interviewee comments that “the airport formerly had a very operational function, and today airports have a wider range of specialized services that are provided to all customers, sales, VIPS rooms, wider variety of shops, 50% of revenues comes from services and the other 50% are more operational, improved mobility and ease for customers by bringing more comfort to customers. It should be noted that airports are able to generate revenues to remain profitable and manage the system where they operate efficiently within the ecosystem where they act to benefit customers.

By analysing the questions presented, it was found that airports play an important role in the maintenance of the operations of the companies, since good infrastructure is fundamental to the business. Governments also exert a direct influence on the expansion of routes, since it is the controllers of charges that focus on airport operations, so when the economy is heated, if it has more frequency of flights, and when local governments reduce rates it becomes an attraction for airlines. Within the airport ecosystem it was found that companies granted private administration have invested more in technological and structural improvements to attract more customers becoming more beneficial compared to public administrations, and consequently manage to remain sustainable and profitable on the market.

6. Conclusion

The research consisted of a study that pointed out some characteristics of the air sector as factors generating resources and the benefits that have made possible the development of the transport matrix and the sustainability of aviation companies.

The analysis can be justified in the search for evidence of generating resources and benefits, in addition to observing other factors that create competitive advantages for aviation companies so that they can remain more sustainable and profitable in the market, adding value to their products and services and keeping the focus on the service to all customer profiles, adapting the market and governmental changes of which they are susceptible.

The importance of airports in maintaining the operations of companies is evident when we confront the possibilities created in structural terms for business in the air sector. Governments have a direct influence because they are the controllers of charges on airport operations, so that when the economy is warmer you have more frequency of flights at certain airports, and when local governments reduce rates it becomes an attraction for airlines. Within the airport ecosystem it was found that companies granted private administration have invested more in technological and structural improvements to attract more customers becoming more beneficial compared to public administrations, and consequently manage to remain sustainable and profitable in the market, which makes them generators of resources that leverage the development of Brazil.

The focus of the work was based on empirical research in order to compare the literature on the subject with the reality experienced in the air sector and demonstrated effectiveness in meeting the objectives initially proposed. It is also noteworthy that the study did not aim to exhaust the topic. It is therefore suggested a more in-depth study with the purpose of analyzing and expanding knowledge through the use of different alternatives. The main limitations of this study are related to the access of information on investments by the concessionaires that manage the airports, and the larger airlines where access to managers is more difficult.

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24. IS TRUST INFLUENCING LONGER BUSINESS RELATIONSHIP? AN EMPIRICAL STUDY

Abstract: The aim of this article is to analyze the relationship among trust, dependence, satisfaction and future scope of business. Trust is the one of the most crucial factor that influence on the relationship between channel partners. Long term relations between marketer and channel participants based on trust allows for proposition for entering into new or existing target markets, generation of repeat purchase by the target customers, creation of exit barriers. Our model shows that the relationship with overall channel member's satisfaction with trust, dependence and business continuity provide to long lasting relationship and overall satisfaction of channel participants.

Keywords: channel relationship, dependence, trust.

JEL Classification: L20, M31

1. Introduction

Relationship between marketer and channel participant is important as observed by obvious from many researchers. Actually, it is hard to imagine a business-to-business transaction, without the existence of a professional relationship. Nowadays, most firms are unable to cope with the rapid changing market competition on its own resources and capabilities and therefore, the companies should keep long-term relationship with business partners (Wong, 2011). Conceptually business related relationships are characterized by a greater individualization, selection, interaction and integration of the participants (Siguaw, 1998). Theory proposed by Andaleeb (1996) suggests that a firm engage in a relationship with another because it needs the other firm to achieve desired goals of market expansion, profits, competing etc, and nevertheless, it is important to focus on the long-term relationship because of its proposition for entering into new or existing target markets, generation of repeat purchase by the target customers, creation of exit barriers, and the view that it benefits all parties involved. Relationship stability is also one of the important concept in the distribution channel literature. "Relationship stability is defined as the extent to which the buyer-supplier relationship is steady and both parties are engaged in an active and long-term working relationship" (Lai et al., 2009). Stable relationships are often characterized with higher level of customer satisfaction (Anderson, Naurus, 1990).

Various research studies are carried out to examine the effect of trust and dependence in relationships (Andaleeb, 1996). Specifically in order to explain trust and dependence in relationships, two behavioral outcomes of exchange relationships, first is commitment and the second one is satisfaction is essential to explain. Both the behavioral outcomes are important to relationships as satisfaction has been regarded as an important component of relationship by many

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researchers (Crosby et al., 1990; Frazier, 1983). The mutual trust and dependence of channel participants and marketer on each other is the key concern for making a stable relationship between marketer and channel participant. In other words we can say long term relationship between marketer and channel participants is the function of mutual dependence and trust of one other and overall satisfaction of channel participants. This trust and dependence among marketer and channel participants are not only broaden the future scope of business but also help to achieve overall business objective of the company and satisfaction. Thus, the investigation of the relationship among trust, dependence, satisfaction and future scope of business is needed for better understanding of relationship between marketer and channel participants with an objective of better sustainability and growth.

2. Theoretical Background

2.1. The Concept of Relationship in Distribution Channel

The relationship means „attitude or relation between objects, concepts, values, etc.” (Dictionary of the Polish Language) as well as „the way in which two or more companies, countries, or people behave towards each other” (Cambridge Business English Dictionary). The above definition indicates that the relationship is not one-dimensional bond, and today's it's analyzed in the vertical (i.e. buyer-seller) and horizontal (i.e. networks) context. The approach to relationships in the corporate management is made from different research perspectives, including: marketing, networks, or resource approach in strategic management (Otolá, 2016). The forms of relations between companies are characterized by varied degree of mutual interaction from the lowest degree (relation based on information and social ties) to average degree (based on market play of action-reaction), and strong degree (based on mutual trust and achievement of common goals) (Otolá, 2013).

Over the last few decades there has been a multiplication of research on the characteristics of business relations and scholars used different theoretical perspectives to explain the causal mechanisms among the set of identified characteristics (Zaefarian et al., 2017). Theories and concepts described business relations include the commitment-trust theory (Morgan, Hunt, 1994), resource-based theory (Barney, 1991) relational view (Dyer, Singh, 1998), network theory (Burt, 1992; Gulati et al., 2000). Each of these theories or concepts focuses on certain characteristics of the business relationship, such as trust, commitment, integrity, responsibility communication, cooperation and dependence, competences, relational capital and many more. With the further development of relationship marketing approach, channel members have stressed on establishing and developing a few stable and mutual relationships instead of many conflicting relationships, so that relational benefits and competitive advantages could be achieved (Narayandas, Rangan, 2004; Wang et al., 2005). By understanding the linkage between channel types and relation among channel members, each channel member can develop more realistic expectations about the advantage and disadvantage of being in different type of channels (Brown et al., 1991). Besides the relationship between the organizations there is need of very good relationship between manufacturer and channel participants with the help of improvements in communication, time management, knowledge and courtesy (Meyers, 2006). It would be worth mentioning here that, much focus and attention has given to the maintenance and development of relationships, but relatively less has been given to the terminations of the relationship (Giller, Matear, 2001). A relationship is said to be terminated when there is no activity links between the parties involved in the relationship. Even if personal ties may be there, but both parties perceive the relationship as ended (Skinner et al., 1992). However, it is important on the issue of termination of relationship that firms evaluate which relationship to initiate, develop, and continue to invest and which to be closed and discontinued. This decision should be taken as a strategic decision rather tactical, and one should remember that there will be different outcome of different termination strategies. It is upon the responsible managers to select the right one out of many termination strategies (Giller, Matear, 2001).

A considerable amount of literatures have mentioned that trust is one of the most significant factor in channel partner relationship. The relationships with high level of trust provide to each other more benefits and profits. Trust reduces conflict and enhances channel member satisfaction (Doney, Cannon, 1997). Trust is a reciprocal construct, it develops and builds over time in the relationships after partners experience many satisfied business transactions. Partners in a relationship understand,

perceive each other better and predict the future behaviors (Doney, Cannon, 1997). When trust exists, channel partners believe that long term special investments can be made with scant risk because whole sides will refrain from using their power to go back on contracts or use a shift in terms to obtain profits in their favor. Once trust is developed in a relationship, partners will spend more effort (Morgan, Hunt, 1994).

2.2. Trust in Business Relationship

One of the key concepts related to business relationship is trust. Although trust has been widely studied in many disciplines like psychology, sociology and economics for several decades, nowadays it started to gain interest in management. An understanding of the social mechanisms underlying the cooperation between the actors of different organisations was the basis for research on trust in management science (Seppänen et al., 2007). Trust has been identified as a major factor influencing such things as business negotiations, buyer-seller relationship, relationship marketing, cross-cultural communication, learning and various types of cooperation, and many more (Paliszkievicz, 2011). The term trust is defined in literature in a variety of ways, mainly due to context and relationship specific. Trust in psychological terms is defined as an expectation involving confident positive behaviour about another's motives, focusing on the contextual factors that enhance or inhibit the development and maintenance of trust (Boon, Holmes, 1991; Lewicki, Bunker, 1996). In the theory of organization trust is understood as “the willingness of a party to vulnerable to the outcomes of another party based on expectation that the other will perform a particular action important to trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995). Although there was no consensus on the definition of trust, most researchers considered trust to be a complex issue concerning faith, honesty, competence, integrity, dependability, reliability of trusted participants in the system (Castelfranchi, Falcone, 2001; Hou et al., 2018). Above all in theoretical frameworks, the heterogeneous, multi-dimensional and complex nature of trust is emphasised. The definitions of trust can be considered in a cognitive or affective way. An affective source of trust is based on the existence of an emotional bond between the participants of the relationship, based on previous positive relationships between specific entities, justifying the belief that they will continue contacts the in the future (Chrisidu-Budnik, 2016). This approach indicates goodwill in building relationships between the participants. A cognitive source of trust, on the other hand, is based on available knowledge and a reasonable belief that the other side of cooperation is credible. The emphasis is on the risks associated with opportunistic behaviour of the partners (Zaefarian et al. 2017; Zaheer et al., 1998) To this end, the partners takes the activities to counteract the risks such as the establishment of formal contracts and agreements. A different classification allows to distinguish between interpersonal trust and interorganisational trust. The interpersonal trust is on the micro level and refers to individual motivations and behaviors of persons, while at the macro level, these behaviors refer to organisations and is called interorganizational trust (Zaheer et al., 1998). Attitudes based on trust can be observed at different levels of interaction between partner companies as well as within the organisation in relation to interpersonal and inter-group trust (Lascaux, 2020). The multifaceted nature of trust means that there are a number of dimensions through which this phenomenon is considered in scientific research. The most popular dimension includes the typology proposed by Doney and Cannon (1997), which consists of credibility and benevolence. The dimension of credibility between partners refers to the execution of an effective transaction without irrational behaviour. The benevolence dimension, on the other hand, is the expectation of trust, which results from goodwill and the intentions of the opposing party are favourable. Sako and Helper (1998) proposed a three-dimensional approach to trust, distinguishing the following features: contractual, competence and goodwill. Both the contractual as well as competence dimensions refer to agreements between partners, so they can be qualified for credibility. Very similarly dimensions were proposed by Akrou and Diallo (2017), whose calling them "calculative (e.g., cautious'; behaviors underlying deterrent sanctions), cognitive (e.g., predicting the other party's behaviors), and affective (empathy, security, emotional bonds)". Apart from the dimensions mentioned above, the reliability, honesty, dependability, fairness, responsibility, faith, integrity are most often used in the empirical research on inter-organizational trust (Seppänen et al., 2007). An affective and cognitive approach to trust allows to point out another important feature of the relationship, namely dependence. Dependence is defined here as the degree to which a target firm needs the resources provided by the source firm to achieve its goals. It may be

a case that dependent party in a relationship does not trust the other party, but it maintains the relationship because of the benefits it derives from that party. This sort of relationship is characterized by weakness because of the low level of trust in the relationship. This low level of risk increases the complexity of the relationships, making the relationship difficult, costly, and difficult to continue, given that expected outcomes are highly uncertain. For example when party A is not dependent upon the party B, the relationship for A is not salient because of availability of alternative companies, but if trust is present, the relationship is likely to continue, because of the that value inherent in trust. Thus it helps organizations to increase the channel principal relationship and satisfaction.

Many scientific studies on trust clearly demonstrated that trust helps improve performance companies (Zaefarian et al., 2017; Costa e Silva et al., 2012; Krishnan et al. 2006), is a basic requirement for successful relationships in complex markets (Doney, Cannon, 1997; Seppänen et al., 2007), reduce transaction costs (Zaefarian et al, 2017; Dyer, Chu, 2003; Zaheer et al., 1998), reduces conflict and enhances channel member satisfaction (Akrouf, Diallo, 2017; Doney, Cannon, 1997) The complex relationship between trust and dependence is a key challenge for successful relationship coordination and ultimately for robust results of companies (Laaksonen et al., 2008). It is important that business relationships with a high level of trust provide each other more benefits and gains then in a relationship not based on trust (Sezen, Yılmaz, 2007; Kabadayi et al., 2011).

3. Methodology of Research

3.1. Objective of the Study

Most of the previous studies have measured channel participant's trust, dependence, continuity and satisfaction in channel principal relationship. None of them establishes a comprehensive relational model with various related parameters. In this backdrop, we have tried to form a model for making a strong channel-principal relationship. Further we also study the relationship among trust, dependence, and continuity with channel satisfaction in order to achieve a long lasting channel-principal relationship. It is important for the marketers to strive for the stability of relationships, as any kind of relationship termination could result in loss of channel member satisfaction.

3.2. Construct Development, Sampling and Survey Details

We have employed various dimensions related to trust, dependence, continuity, future scope of business, various aspects of channel satisfaction and overall satisfaction of channel partner to formulate the model. A questionnaire has been developed with the help of Doney and Cannon (1997), Ganesan (1994) and Fraizer et al's (1985) scale. We used 30 items to measure trust, dependence, channel member's satisfaction, future scope of business and overall satisfaction. Trust and dependence dimension consists of seven items each. To measure the satisfaction level in various parameters we have deployed 14 items. We also measured the overall satisfaction and future scope of business. Finally we used 30 item variables to measure trust, dependence, satisfaction, and continuity, future scope of business and overall satisfaction of channel participants. The construct consists of the items of trust, dependence and continuity are to measure the business relation indicators (BR) and satisfaction (ST) related items measures the overall channel satisfaction. A continuous rating scale is used ranging from strongly disagree (1) to strongly agree (7) in the construct.

Distribution channel partners of Cement, FMCG, Pharmaceutical and water purifier industry have taken into consideration for the present study. The survey has been conducted in the state of west Bengal in India. The developed questionnaire has been deployed to collect the primary data from a sample of distributor and dealers of the said marketers. The personal interview is taken only among 263 channel members. Finally, we have received 219 positive responses. We have recorded the observation on trust, dependence, future scope of business, various aspects of channel satisfaction and overall satisfaction of channel partner.

3.3. Analysis and Model Building

We have measured the reliability coefficient to assess the consistency of entire scale, Cronbach's alpha has been calculated for the construct. As a thumb rule Cronbach's alpha value should exceed threshold of .70 (Hair et al., 2009). Cronbach's alpha for the deployed construct is 0.893. Thus the construct reliabilities have satisfied the criteria.

We have used data reduction technique to get the underlying latent factor from the items under two dimensions namely business relation indicators (BR) and satisfaction (ST). Firstly we have run the factor analysis among seven items of trust to get the latent factors behind this. Before applying factor analysis, we measure the useful statistics Kaiser-Meyer-Olkin (KMO) to check the appropriateness of sample adequacy. Generally KMO measure is an index used to evaluate the sample adequacy of factor analysis. A high value (between .5 and 1.0) indicates that factor analysis is adequate in terms of sample (Malhotra, 2009). Bartlett’s test of Sphericity is also used to check the appropriateness of factor model. The greater the value of test statistic, factor model becomes more appropriate. The null hypothesis that the population correlation matrix in identity matrix and rejected by the Bartlett’s test of Sphericity. The approximate chi-square value is 439.586 with 21 degree of freedom, which is significant at .01 level. Thus considering all the above facts, we are eligible to use factor analysis to identify the latent variables. We used principal component analysis method in factor analysis to determine the minimum number of factor that will account for maximum variance in the data (eigenvalue more than 1). This initial solution is then rotated by using varimax method with Kaiser Normalization to select the variables with high loading on a particular factor. The principal component method by using varimax reduce the 11 variables to three factors (see Table 1) having eigenvalue greater than 1. Each factor is composed of variable which is having factor loading of more than .50 (Hair et al., 2009). Three factors are extracted with 61.72% cumulative variance. Table 1 depicts the result of factor analysis.

Table 1. Factor analysis result of Business Relation Indicators (BR)

Variables	Dependence	Continuity	Trust	Variance Explained	KMO	Cronbach's Alpha	Bartlett's Test of Sphericity		
T-14	0.794			23.04%	0.77	0.893	Approx. Chi-Square	752.82	
T-13	0.747								
T-10	0.711								
T-12	0.644								
T-4	0.579			19.82%			0.765	Degree of Freedom	55
T-18		0.765							
T-20		0.741							
T-15		0.653		18.85%			0.89	Probability Significance	0.000
T-2			0.89						
T-1			0.86						
T-9			0.52						

Source: Own evaluation

Table 2. Factor analysis result of Satisfaction Variables (ST)

Variables	Facility Related Satisfaction	Behavioral Related Satisfaction	Business Related Satisfaction	Variance Explained	KMO	Cronbach's Alpha	Bartlett's Test of Sphericity		
T-22-iii	0.769			22.76%	0.864	0.849	Approx. Chi-Square	961.123	
T-23-ii	0.741								
T-23-iv	0.629								
T-22-ii	0.598								
T-23-iii	0.582								
T-23-i	0.547			19.89%			0.819	Degree of Freedom	91
T-21-v		0.819							
T-21-iv		0.799							
T-21-i		0.619							
T-21-ii		0.581		11.17%			0.681	Probability Significance	0.000
T-22-v			0.681						
T-22-i			0.678						
T-21-iii			0.616						

Source: Own evaluation

This analysis yielded three interpretable factors contained five, three and three items (see Table 1). We use naming for the purpose of unique representation of the latent factor behind items grouped under the each factor. Factor 1 describes the hidden fact of the degree to which a target firm needs the resources provided by the source firm to achieve its goals. This indicates the dependency of

channel participants on each other. As a result of this we named the latent factor of business relation indicators as ‘Dependence’. Similarly items under factor 2 define the belief of channel participants about the relationship sustainability and future continuity of it with the other partner. In other words it explains the expectation that the relationship will continue in the future. Based on this we have named this factor as ‘Continuity’. Factor 3 represents channel participants’ honesty, belief and reliability and their mutual beneficial intentions and motives towards each other. This indicates the trust among the channel principal and channel subordinates in channel principal relationship. Thus we have named the latent factor of business relation indicators ‘Trust’.

Using the same process of factor analysis we have tried to reduce the 13 item variables under satisfaction dimensions (Table 2). Three factors have been emerged with 69.23% of cumulative variance. We have also named these factors for unique representation of the factors. Factor 1 represents channel satisfaction related to business exchange or facility offered by the channel principal. We have named this factor as ‘Facility Related Satisfaction’. Factor 2 explains the channel satisfaction related to channel-principal relation. More specifically it describes the behavior of channel principal toward channel subordinates. We have named this factor as ‘Behavioral Related Satisfaction’. Likewise we have name the third factor as ‘Business Related Satisfaction’.

3.3.1. Confirmatory Factor Analysis

We had not restricted ourselves only by carrying out exploratory factor analysis. Rather we tried to confirm the construct developed in exploratory analysis by deployment of confirmatory factor analysis. We have confirmed the factors of BR and ST dimension getting from exploratory analysis. Confirmatory type of analysis started with goodness of model fit despite of the fact that it was only primary part of model confirmation.

Three factor solutions from BR and ST dimension are derived from exploratory factor analysis (EFA). These two initial model solution is then fitted into AMOS for conducting CFA. Based on the modification indices (MI), covariance and regression path has been established, result shows the excellent fit of the models (see Figure 1).

The final model shows an excellent fit in data. The fit indices of BR model and ST model are presented in Table 3.

Table 3. Statement of fit indices of BR and ST models

Model	CMIN	DF	P	CMIN/DF	RMR	GFI	AGFI	RMSEA	FMIN (F0)	Hoelter
BR Model	41.94	29	0.057	1.45	0.1	1	0.93	0.045	0.059	222
ST Model	74.55	58	0.071	1.29	0.06	1	0.92	0.036	0.076	225

Source: Own evaluation

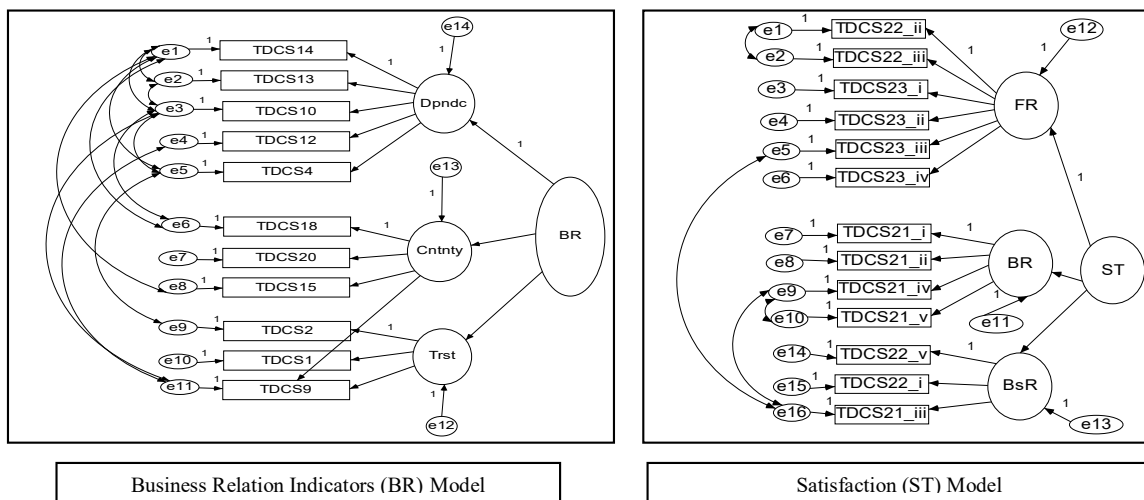


Figure 1. BR and ST models

Source: Own evaluation

It is found from Table 3 that the final model which is being confirmed by CFA provides all fit indexes i.e. the final model is relatively good fit.

3.3.2. Integrated Model Building of Business Relation Indicators & Satisfaction

Finally to frame out the integrated model we have run the second order confirmatory among business relation indicators (BR) and satisfaction (ST). We have considered business relation indicators as dependent & satisfaction as dependent and draw the initial path diagram of the model. Already we observed that business relation indicators represent the trust, dependence and business continuation expectation among the channel participants.

These various indicators are playing a significant role while making fruitful channel principal relationship. Considering the fact we have taken satisfaction as independent and business relation indicator as dependent one. There are numbers of thumb rules for evaluating degree of goodness of model fit between the hypothesized model & sample data. We have used the thumb rules to judge the goodness of model fit. The final model shows an excellent fit in data (Table 4).

Table 4. Statement of fit indices of integrated model (BR and ST)

Model	Chi-square	Df	P	GFI	AGFI	RMR	RMSEA	FMIN	Hoelter (0.5)
Integrated model	558.37	245	0.00	0.823	0.783	0.142	0.077	2,561	111

Source: Own evaluation

In this paper we have investigate the interrelation between satisfaction and business relation indicators with an in-depth look of regression weight of each of the variables involved in the model. More specifically we examine the estimate, standard error (S.E), critical ratio (C.R) and level of significance(P).

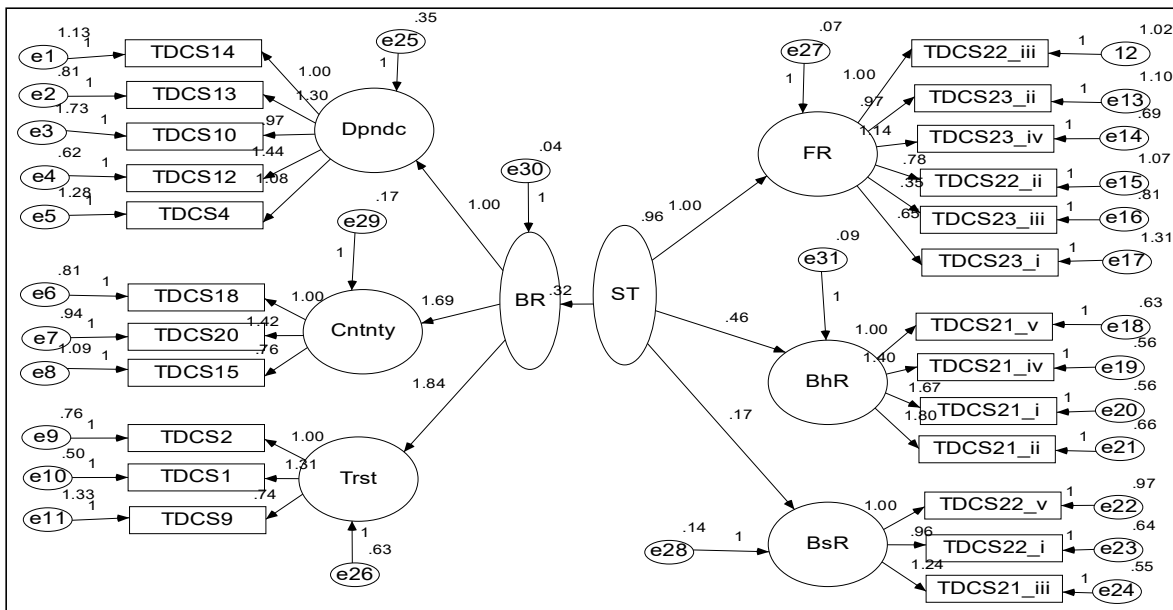


Figure 2. Integrated model BT and ST in channel principal relationship

Source: Own evaluation

The developed model has shown the way of making a stable channel-principal relationship. The model indicates that trust and dependence are both are interdependent. Thus we can say that the channel member and principal are dependent to each other because of their mutual trust on each other and this trust makes their dependence level stronger and this dependence generates the seeds of business continuity. The model also indicates that trust and dependence have positive impact over business continuity. It is obvious that if the channel partner and channel principal are having mutual trust on each other and one is dependent on other, then the scope of doing business in future will increase. The model also depicts the joint impact of Facility Related Satisfaction, Business Relational Satisfaction and Behavioral Satisfaction to achieve overall satisfaction in a channel system. Further this model shows the relationship with overall channel member’s satisfaction with trust, dependence and business continuity. So, more the satisfaction in channel principal relationship, more will be the

mutual trust, dependence and expectation of business continuity in channel principal relationship and highly satisfied channel participants widen the way of making a long lasting stable channel principal relationship.

4. Conclusion

The developed model illustrates the laws behind stable channel-principal relationship in channel management system. This study also indicates that business relation indicators i.e. trust, dependence and business continuity have a positive impact in creation of channel satisfaction. Finally, the model assists the practicing channel manager to create a stable relationship with channel partners through expectation of business continuity and building trust and dependence on each other to achieve company's overall objective. In other words we can say long term relationship between marketer and channel member is the function of mutual dependence and trust of one other, future scope of business (business continuity) and overall satisfaction of channel participants. This trust and dependence among channel-principal not only broaden the future scope of business but also help to achieve overall business objective of the company and satisfaction.

So, overall the model demonstrates the practicing channel manager to create a stable relationship with channel partners by building trust on channel participants' mind about the market and make them dependent over channel principal by showing the future scope business and finally get them satisfied to achieve company's overall objectives.

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25. SOCIAL CAPITAL & ORGANIZATIONAL AMBIDEXTERITY – A COMPARATIVE VIEW

Abstract: Organizational ambidexterity and corporate social capital are two closely related concepts. The major objective of this paper is to increase understanding about the relationship between these concepts. This conceptual effort aims to offer a theoretical explanation of the relationship between organizational ambidexterity, corporate social capital and potential fruition in firms' competitive advantage. The author finds that organizational ambidexterity may be considered as an internal mediator within the relationship between social capital at a corporate scope and an organizations' ability to lean into the future. Procedures employed are the review of research literature on organizational ambidexterity and social capital. Theoretical analysis is followed by theoretical prepositions to determine spatial distance of the proposed topics whom shall be tested empirically subsequently. Research design is comprised of mixed methods in between deductive and inductive reasoning. Its methodology is operationalized through a sequence of six consecutive steps. Main outcomes and results are based on theoretical findings as this paper clarifies the relationship between concepts of organizational ambidexterity and corporate social capital. It suggests that organizational ambidexterity plays a mediating role in the relationship between social capital and firm competitive advantage. Described findings of this paper propose conclusions as well as implications for further theoretical and empirical research within these fields. This paper represents a partial fulfillment in progress of a Ph.D. dissertation – by developing a novel strategic social capital management approach – including organizational ambidexterity theory, focusing at organizations' ability of leaning into the future.

Keywords: competitive advantage, corporate social capital, innovation, organizational ambidexterity.

JEL Classification: A13, L25, M14

1. Introduction

For decades, HR professionals have allocated much of their efforts towards optimizing human capital strategies in an effort to 'win the war on talent' – developing comprehensive talent management systems, justifying leadership competency models, and modelling the best possible leadership development programs. More recently, emphasis has evolved around enhancing employee engagement, leveraging people analytics and fine-tuning performance management systems. Although it is hard to argue against the need for human-capital-centric strategies, latest research raises questions about if they are as effective as presently believed. More particular, research proposes that HR professionals need to consider social capital (SC) strategies in driving both innovation and performance within complex organizations more strongly (Arena, Uhl-Bien, 2016). While some researchers found that once a firm had accessed superior knowledge through innovation, it could turn to optimization, achieving better quality and lower costs, which contributed to better business performance in return (Ahn et al., 2006). Other researchers like Smith and Tushman (2005) argue that there might not be just a single pair demanding balance as they indicate that managers need to respond to numerous pairs of contradictory goals at multiple levels across an organization. The implication for organizations is that they not only need to innovate, but balance often contradictory as well as diverse concerns to establish innovation in addition to optimization, in present and future, in order to be and remain effective yet efficient. In doing so, they acquire an ability of leaning into the future and sustain competitive advantages.

Though, in an organization, when managers experience conflict and tension they often respond to contradictory goals by seeking resolution. As the classical theory of management has long been advocating 'one best solution' (Smith, Lewis, 2011), managers develop exclusive preference for only one of those contradictory goals by eliminating further goals – although important. These exclusive

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choices make managers vulnerable to myopia, which prevents them from appraising long term implications of their choices, and generally end up deciding against innovation. Learning brings competence, improves confidence and enhances chances of success. However, because of this very success, new learning and development of new competences are precluded, which creates dysfunctionality (Parikh, 2016).

Organizational ambidexterity (OA) is defined as organizations' capability to simultaneously pursue exploitation and exploration (Gupta et al., 2006). It has been investigated in diverse disciplines (Marín-Idárraga et al., 2016) in regard to exploitative innovation resulting in incremental change (i.e. optimization) and explorative innovation leading to radical change (i.e. innovation). Given the circumstance that large firms are often faced with a challenge "to achieve breakthrough innovations while also making steady improvements to an existing business" (O'Reilly, Tushman, 2004), a source of sustainable competitive advantage has been recognized within organizational ambidexterity (Raisch, Birkinshaw, 2008). Researchers like O'Reilly and Tushman (2013) noted that prior research has reported wide evidence for the positive linkages between organizational ambidexterity and diverse outcomes (e.g. innovation, perceptual performance, sales growth, market valuation). Moreover, meta-analytic reviews confirmed those positive linkages (Junni et al., 2013; Mueller et al., 2013). The growing consensus on ambidexterity-performances' positive linkage at the organization level is undeterred by a shortcoming of existing literature at systematically understanding the ambidextrous processes within organizations (Marín-Idárraga et al., 2016; O'Reilly, Tushman, 2008). Innovation researchers have increasingly examined concrete foundations such as the cognitive styles of CEOs (de Visser, Faems, 2015) and introduced a link towards social capital. Past studies have been fragmented by focusing on a single aspect (Junni et al., 2015) and many antecedents of the developmental process of organizational ambidexterity are still unknown (Cantarello et al., 2012). This paper aims to theorize an integrated framework that reveals how organizational ambidexterity interconnects with social capital.

Social capital has been constituted as scarce resource which is accessible through social network (Granovetter, 1992). There are numerous definitions of social capital with vast similarities as well as distinctions (Inkpen, Tsang, 2005). Based on their focus, these definitions can be organized in three classes: bonding social capital or internal ties, bridging social capital or external ties, and mixed ties (Adler, Kwon 2002). The first class of social capital – bonding social capital – targets the internal characteristics such as relationships that facilitate the collective goals of the network or collective cohesiveness (Coleman, 1988). The second class of social capital – bridging social capital – targets external linkages and contends that valuable resources can be obtained through tying people or organizations in a network (Burt, 2000). The third class of social capital is neutral in the area of bridging and bonding. Nahapiet and Ghoshal (1998) characterized "social capital [a]s the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit." Research of Inkpen and Tsang (2005) adopt the given definition of social capital by Nahapiet and Ghoshal (1998) that focuses on both bridging and bonding and accommodates individual and organizational resources as well.

Organizational ambidexterity is focused at organization's ability to be effective yet efficient in its today's management of business and agile in coping with tomorrow's uncertain demand by utilizing exploration and exploitation techniques at a micro-level successfully. Social capital nurtures social cohesion of diverse groups, growth of entrepreneurial firms, superior managerial performance, enhanced supply chain relations, value derived from strategic alliances in dimensions of shared norms and values, trust, cooperation, and reciprocity at a meso-level. While some scholars have opposed that social capital is critical for organizational ambidexterity (e.g., Mom et al., 2009; Jansen et al., 2006), others have proposed task-contingent effects (e.g., Lechner et al., 2010; Vanhaverbeke et al., 2009). These contradictory yet alike propositions did accumulate in a call to uncover the liaison between social capital and organizational ambidexterity. While OA is mainly focused at the organization itself, SC is not as restrictive as it also bridges the gap between supply chain risk management alongside with strategic technology partnering capabilities (Kilubi, Rogers, 2018).

2. Social Capital and Organizational Ambidexterity – Two Sides of the Same Coin?

2.1. Methodology of Research

The methodology follows the basic procedure as outlined by Marek (2015) and is comprised of six consecutive steps. Firstly, the literature review of external and internal influences. Secondly, a reflective analysis to add influences not found in the literature. Thirdly, an analysis of influences that are grouped into named factors. Thereafter, the integration of these factors into a conceptual model showing external and internal focus. In order to, analyze the role of instructional design and technologies in the overall model, and its inclusion in the revised figure. To be lastly comprised in the development of recommendations for practice.

This literature review is guided by mixing methods of deductive and inductive reasoning. The reason for this approach is the focus on the specific phenomena in a particular context, corporate social capital and organizational ambidexterity. An abundance of sources in both topics calls for a deductive approach within a comparative literature analysis on the one hand (Wilson, 2010). On the other hand, it has been the subjective, inductive reasoning with a detailed observation, moving towards more abstract generalisations and ideas in a narrative description of a constant comparison. This mixed methods approach does not imply disregarding theories when formulating research questions and objectives. Furthermore, it aims to comprise meanings from the literature in order to identify patterns and relationships to build a theory. In doing so, existing theory is used to formulate the research agenda to be explored. Patterns, resemblances and regularities in premises are therefore observed that one may reach conclusions (Saunders et al., 2012).

2.2. Problem Statement

On August 19, 2019, 181 out of 192 chief executives (including Amazon's Jeff Bezos, Apple's Tim Cook, Bank of America's Brian Moynihan, Boeing's Dennis Muilenburg, General Motors' Mary Barra and JPMorgan Chase & Co's Jamie Dimon) signed a Business Roundtable (BR) statement in which they rephrased the purpose of corporations including five commitments: delivering value to customers, investing in employees, dealing fairly and ethically with suppliers, supporting the communities in which a company operates, and generating long-term value for shareholders (Fried, 2019). In general terms, if what the members of the influential business group say is the future, equity holders will no longer be paramount. This represents a very public rebuke of Milton Friedman's (1970) "shareholder capitalism" worldview which guided business decisions for half a century.

While shareholder primacy is what keeps managers accountable and allows financial capital to flow where it is needed in the economy, researchers advocate further business catalysts, namely human capital and social capital. The positive relationship between corporate social performance and financial performance is theorized by the 'social impact hypothesis' (Preston, O'Bannon, 1997), which is derived from instrumental stakeholder theory (e.g., Freeman, 1984; Cornell, Shapiro, 1987; Donaldson, Preston, 1995). The proponents of which argue that satisfying the needs of different groups of stakeholders will result in enhanced financial performance on the grounds of greater effectiveness and efficiency. In contrast, ignoring the interests of stakeholders might negatively affect corporate financial performance (Payne et al., 2011).

Furthermore, shareholder value is scrutinized in times of climate crisis and sustainability debates. Management boards and supervisory boards around the world are under ecological and social pressure – three sides. First, there are increasingly stringent regulatory constraints in most countries. Second, the outrage from Greta's followers does not stop at the top representatives of the economy (see: Siemens backs its €18 million Adani Carmichael coalmining deal (Miller, Smyth, 2020)). Finally, and thirdly, lenders now seem to be seriously addressing perhaps the most important issue of our time. In his annual letter to the CEOs of the world's largest companies, for example, Blackrock founder Larry Fink recently urged increased climate responsibility in the board rooms. More and more asset managers are making sustainability a strategic dictum. In this way, they force the managers of their portfolio companies to include the green and social footprint of their organizations in the strategic agenda.

This literature review has been conducted to list as many external and internal influences as possible. The problem statement was established by inducing the latest BR statement. Followed by the elaboration of shareholder primacy which led to the 'social impact hypothesis' and instrumental stakeholder theory. At last, nowadays strategic dictum of a green and social footprint shed light upon the topic at hand.

As expected, capital has a decisive incentive function in capitalism. This basic logic of a market economy system is meant within the meaning of the Paris Agreement on climate change mitigation and the UN Sustainable Development Goals. As of December 2019, the European Union also followed the logic of capital market incentives when they launched a debate on green monetary policy. The European Central Bank considered supporting the EU's Green New Deal by investing in sustainable investments. The result of such a structural monetary intervention would be higher returns for securities that provide capital for climate protection measures, for example in the form of green bonds. That is why serious demands for climate protection by the largest asset managers are all the more important and politically desirable. Because they also change the incentive effect of capital and can thus have a significant impact on the economy and society.

The one-sided focus on the shares' value in the concept of shareholder value developed into the semantics of unscrupulous management. And so, the term disappeared over the years from company presentations and general meeting speeches. But the 2020s could be the decade of a new, "Next Generation Shareholder Value" for two reasons. First, because the concept of shareholder value should be further developed. Second, because it should target the well-being of future generations. As sustainability is already a central component of any good equity story, business leaders can no longer afford to dismiss the topic of sustainability as a secondary one within corporate social responsibility (CSR). There is an urge to make it an integral part of business strategy, and for good economic reasons.

A new "NextGen Shareholder Value" would not only be painted green and socially. Its goal to maximize company value through effective sustainability initiatives requires both business and technological tools to combine measurable ecological and economic impact. There was a lot of talk about so-called "stakeholder capitalism" at the 2020 World Economic Forum in Davos (Edgecliffe-Johnson, 2020), arguing about the well-meaning ratio behind the term 'capitalism should serve everyone, not just shareholders', which did not overcome the apparent conflict between shareholders and other stakeholder needs yet. A "NextGen Shareholder Value" could make a decisive contribution. Action is therefore required!

Thus far, the problem statement was elaborated on external and internal influences as well as a reflective analysis adding influences not found in the literature, namely the UN Sustainable Development Goals (17 SDGs) together with EU's Green New Deal alongside with "Next Generation Shareholder Value" in the light of sustainability as a corporate social responsibility.

2.3. Results of Research

This section obtains results of research by means of analysed influences which are subsequently organized in named factors 'grand challenges' (GC). Pivotal elements are capital dimensions (human-, social- and organizational-capital) which forge ambidextrous capabilities which are matched in a novel pattern of 'ambidextrous social capital'. All factors are integrated into a conceptual model showing the derived external and internal focus (GC^{1 to 5}).

Explaining performance is a popular goal for organizational ambidexterity as well as social capital studies at different organizational levels (e.g., Florin et al., 2003; Reed et al., 2006). At the organizational level, performance can be measured in terms of subjective financial measures (e.g., Yiu, Lau, 2008), objective financial measures (e.g., Park, Luo, 2001; Rowley et al., 2000), innovation scores (e.g., Maurer, Ebers, 2006; Moran, 2005), as well as firm survival (Fischer, Pollock, 2004; Kalnins, Chung, 2006; Shane, Stuart, 2002).

In today's complex markets, survival of organizations requires a combination of both innovative strategic capabilities and efficiency. Therefore, it will be easier for the so-called ambidextrous organizations to develop explorative and exploitative activities simultaneously by offering superior performance and building sustainable competitive advantages (Jansen et al., 2012). These types of capabilities entail extremely complex mechanisms and processes which demand deeper efforts from research (Kang, Snell, 2009; Kostopoulos et al., 2015). This need is underpinned by Parikh's (2016) finding of managers' predicament when exposed to contradictory goals, by eliminating further goals in pursuit of just one goal. At the same time, managers need to move away from focusing on an isolated single knowledge asset in favor of combining them by aligning supportive knowledge assets with dominant knowledge assets (Lin et al., 2017). Literature provides multiple arguments around extending the process of adjustment between exploitation and exploration activities by targeting

at organizational knowledge stocks. Intellectual capital dimensions (human-, social- and organizational-capital) serve as distinct knowledge stocks at distinctive organizational levels (Subramaniam, Youndt, 2005) whom can play different roles when forging ambidextrous capabilities (Kang, Snell, 2009). Literature describes to what degree these intellectual capital dimensions accompany each other across distinctive organizational levels and lead to better organizational results in return (Yang, Li, 2009). This paper starts from the theoretical premise that organizations can deploy explorative and exploitative processes in a concurrent manner in virtue of matching certain patterns of ‘ambidextrous social capital’ by means of ‘grand challenges’ (GC). While each of the Business Roundtables companies serves its own corporate purpose, they shared a fundamental commitment to all their stakeholders as they did commit to (Fried, 2019):

- GC¹: “Delivering value to our customers. We will further the tradition of American companies leading the way in meeting or exceeding customer expectations.”
- GC²: “Investing in our employees. This starts with compensating them fairly and providing important benefits. It also includes supporting them through training and education that help develop new skills for a rapidly changing world. We foster diversity and inclusion, dignity and respect.”
- GC³: “Dealing fairly and ethically with our suppliers. We are dedicated to serving as good partners to the other companies, large and small, that help us meet our missions.”
- GC⁴: “Supporting the communities in which we work. We respect the people in our communities and protect the environment by embracing sustainable practices across our businesses.”
- GC⁵: “Generating long-term value for shareholders, who provide the capital that allows companies to invest, grow and innovate. We are committed to transparency and effective engagement with shareholders.”

In highlighting that each of their stakeholders is essential for the future success of their companies and they intend to commit to deliver value to all of them, it is worthwhile investigating the interplay with ‘ambidextrous social capital’.

Zhank et al. (2019) found that intra-industry ties help companies to build strong partnerships / relationships with suppliers and buyers and therefore address one grand challenge. In doing so, they provide opportunities for working with professional partners in solving common problems and exploitative innovation (ambidexterity). (Analogy with GC³)

Sidhu et al., (2007) expressed that cohesive intra-industry ties establish solid interdependencies with existing customers, suppliers and form a firm’s local search space, and so on. (Analogy with GC^{1&3})

Sarkees and Hulland (2009) established that an ambidextrous firm strategy has a positive effect on four dimensions of performance: customer satisfaction, sales revenues, profits, and new product introductions. (Analogy with GC^{1&5})

Adler and Kwon (2002) articulated that intra-industry ties provide social capital with cohesive benefits within a community. (Analogy with GC⁴)

Kostopoulos et al. (2015) argue that social capital also manifests itself in bridging ties that a unit can establish with external parties (e.g., customers, suppliers, firm employees outside the unit, alliance partners). (Analogy with GC¹⁻⁵)

Freeman (1979) erected positive relationships between corporate social performance and financial performance which is derived from instrumental stakeholder theory. (Analogy with GC⁵)

Lee and Schniederjans (2017) endow several grand challenges as well. Basic elements of social capital are triggered by establishing and sharing goals and values among members in the network, creating activity chains and building trust. As SC accumulates, it provides socio-economic grounds for sustainability. Accordingly, for nurturing a sustainable business, cooperation become imperative. The expansion of social capital accumulation as a prerequisite to CSR commitment states the case for firms’ need to be looking beyond short-term profits. (Analogy with GC²⁻⁴)

Subramaniam and Youndt (2005) draw upon the core ideas of the structural dimensions of social capital literature, as well as on the more specific knowledge management literature. These items assess an organization’s overall ability to leverage and share knowledge between and among networks of employees, customers, suppliers, and alliance partners. (Analogy with GC¹⁻⁵)

This section began by the elaborated analysis of influences and grouped factors which led to a conceptual model of external and internal factors. These results have been revised in the model and found to be inclusive in the overall literature, fostering ‘ambidextrous social capital’ as a common denominator of organizational ambidexterity at a corporate scope of social capital.

2.4. Discussion

Further discussion is imperative to endorse the consistency by disseminating organizational ambidexterity and corporate social capital aspects and how to proceed with determining aspects of organizations’ ability of leaning into the future and an overarching urge to sustain competitive advantages. The first aspect for HR practitioners is to consider the perspective – organizational ambidexterity allows to embrace the reality of day-to-day activities that are often populated with decisions that pull us in different directions. This then articulates our approaches as solutions to problems or design decisions are sought, which contemplate explorative and exploitative aspects. This may allow to postulate and consider challenges in different ways, if practitioners are not bound by one way or another. Recruitment and selection can be considered as an extended example. Smith (2017) embraces organizational ambidexterity, proposing that it is likely to recruit leaders with appropriate skills and abilities. However, this would need to go beyond traditional conventions of selection and recruitment. Three examples are articulated to be considered in practice:

1. Mixed Leadership Approach: Managers are actively sought with the ability to deliver leadership in terms of exploration and exploitation. Despite potentially ideal for a situation, this might be the hardest leader to find or develop.
2. Different Leadership Styles: A balanced range of leaders who emphasizes exploitation or exploration should be actively sought to recruit. How these leaders work collaboratively are of course future challenges relating to it.
3. Different Department, Different Approach: Different strategic focuses are promoted in different departments. For example, a finance department may favor an exploitative leader to achieve low-cost goals whereas a R&D department may favor an explorative leader to achieve innovation goals.

The conceptual methodology outlined by Marek (2015) followed the basic procedure of six consecutive steps that unlocked three implications and recommendations for practice within its basic findings.

3. Conclusions and Implications for Further Research

The presented review is not exhaustive in the sense of including all existing research but comprehensive in the sense of capturing the particular phenomena at the frontier of applied research, namely, organizational ambidexterity and corporate social capital in the light of its previously uncovered interplay. As reflected in the theme: ‘ambidextrous social capital’, the context of organizations’ ability of leaning into the future and the call for a "Next Generation Shareholder Value" have been presented as trending issues.

According to Kortmann (2012), organizational ambidexterity has started to be examined at greater detail in current research endeavors; its ambiguity and nebulosity is still criticized. At the same time, SC is being utilized in research extensively. Nonetheless, researchers have yet to fully embrace social capitals potential to bridge domains with its multilevel theoretical perspectives. If social capital is embraced as an inherently multilevel perspective, researchers suggest that problems associated with operationalizations’ and definitions will be clarified as well as eventually alleviated.

While numerous conceptual and influential empirical contributions to the area of social capital have been made, studies have exploited social capital in limited way and inconsistently. Gedajlovic et al. (2013) have particularly criticized social network research for falling short at measuring intervening mechanisms that are linking relationships with outcomes. Contributing to such a progression in the extant literature, this abstract has taken a step in highlighting new opportunities for research.

In line with the purpose of this conceptual paper, a scope for research and theory development linked to the identified themes has been detected and added to the body of knowledge. It provides a useful basis to develop leadership focusing on contemporary issues applicable for any sector. A significant contribution of this paper is, thus, to reveal a number of promising gaps which open

avenues for further research. As globalization has flattened the world and made the word ‘local’ a very relative term, solving common problems necessarily have to commence at a global level. Future research has to be global in outlook, yet scalable from local to global. The reasoned discussion presents a framework for further development on the subject of strategic management. It provides a reference for developing vision/mission statements and long-term performance standards. The challenge now is to establish a novel concept of ‘strategic social capital management’.

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26. BRAND ORIENTATION AND PRICING CAPABILITIES IN THE CONTEXT OF ORGANIZATIONAL BEHAVIOR

Abstract: The paper investigates concepts of brand orientation and pricing capabilities in the context of organizational behavior as part of the author's PhD studies. Major objective is to outline behavioral aspects in theoretical models of both disciplines that have been empirically tested impacting company performance. A literature review has been conducted for organizational behavior, brand orientation, and pricing capabilities. Whereas several concepts could be identified for brand orientation only two models exist for pricing capabilities. Organizational behavior is defined and summarized including relevant aspects as a basis. After definitions of brand orientation and pricing capabilities both concepts are outlined in the context of organizational behavior. Behavioral aspects have been identified in most concepts of brand orientation and pricing capabilities. Behaviors are embedded in brand orientation models mainly next to cultural approaches. In pricing, CEO championing could be identified as the most relevant behavior related to pricing capabilities. While there is considerable research available on brand orientation that also includes behaviors, it is suggested to conduct further research concerning pricing capabilities in general considering behavioral aspects in particular. As this research is solely based on literature review it is suggested to do further empirical research on existing models focusing on behavioral aspects. Furthermore, other disciplines with behavioral aspects impacting company performance should be investigated to give a broader picture of organizations. Additional studies on behaviors in different disciplines could support managers' decisions in business management.

Keywords: brand orientation, organizational behavior, pricing capabilities.

JEL Classification: D23

1. Introduction

People are the basis of every organization, its performance and success. It is crucial that people as individuals as well as working in groups are motivated and work accordingly in order to achieve performance goals. Their behaviors in an organization are crucial for business success. Organizations are usually structured in departments to achieve their goals, e. g. marketing. (Schermerhorn et al., 2012, pp. 4, 373) Organizational behavior is the context for this theoretical research paper in the fields of brand orientation and pricing capabilities. Both disciplines have been researched within the scope of company performance. Several concepts exist for brand orientation whereas two concepts have been identified for pricing capabilities with the majority of the concepts including behavioral aspects. (Gromark, Melin, 2011, p. 395; Johansson, 2012; Liozu, Hinterhuber, 2013) However, organizational behavior has not explicitly been investigated in concepts of brand orientation and pricing capabilities so far. This paper outlines behaviors in theoretical models of brand orientation and pricing capabilities that have been empirically tested impacting company performance. It emphasizes on its relevance by contributing to company performance according to identified studies and investigates behavioral aspects of brand orientation and pricing capabilities and how they are embedded in both concepts. This research is part of the author's PhD studies in international business management.

2. Methodology of Research

A literature review of organizational behavior, brand orientation, and pricing behavior has been conducted in January and February 2020 to identify concepts of both brand orientation and pricing capabilities as well as related behavioral aspects. Starting point has been available research of brand orientation and pricing capabilities that has been identified in 2019 to inform the research proposal for

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the doctoral dissertation of the author. Behavioral aspects have been extracted from available concepts and consolidated for both brand orientation and pricing capabilities. Underlying literature and research are incorporated in this paper in order to extract and investigate aspects of organizational behavior in existing concepts of brand orientation and pricing capabilities influencing company performance.

3. Introduction to Organizational Behavior

3.1. Definition of Organizational Behavior

Organizational behavior relates to the nature of organizations or what an organization is. It combines different disciplines. It is about how people act within an organization. (Dunford, 1992, p. v f.; Daft, Noe, 2001, p. 5) Table 1 lists definitions of organizational behavior from different point of views.

Table 1. Definitions of organizational behavior

Author	Definition
Daft and Noe (2001, p. 4)	Actions and interactions of individuals and groups in organizations. As a management discipline, organizational behavior is the study of human attitudes, behavior, and performance in organizations.
Mullins (2006, p. 4)	The study and understanding of individual and group behavior, and patterns of structure in order to help improve organizational performance and effectiveness.
Schermerhorn et al. (2012, p. 4)	The study of human behavior in organizations. It is an academic discipline devoted to understanding individual and group behavior, interpersonal processes, and organizational dynamics.

Source: own table

Organizational behavior can be approached from different disciplines such as psychology, sociology, anthropology as well as management, economics, or leadership. Mullins (2006, p. 7) distinguishes between three main disciplines: psychology (personality system), sociology (social system), and anthropology (cultural system). They are supplemented by related disciplines like economics and political science.

Organizational behavior regards three components: organizations, groups, and individuals. Organizations are social entities that have structure and one or more goals. They consist of individuals who are usually organized in teams or establish informal groups to address their needs. Groups involve behavioral aspects like leadership, management, decision making, conflicts, and political behavior. Individuals are the root of behavior in organizations. Every individual is unique and influences dynamics within an organization. (Daft, Noe, 2001, pp. 4 f.; Mullins, 2006, pp. 5 f.) Dunford (1992, pp. xii-xiv) further includes motivation, culture, power, control, and change in organizational behavior. Organizations are also influenced by their respective external environment that subsequently has an impact on organizational behavior as well. For this reason, it is a challenge to clearly distinguish between an organization and its external environment in terms of behavior. Organizations are open systems and thus permeable towards their respective environment (Schermerhorn et al., 2012, pp. 9 f.; Nerding, 2012, pp. 23, 27).

3.2. Aspects of Organizational Behavior

Referring to the iceberg model formal, aspects of an organization are considered to be the visible tip of the iceberg whereas behavioral aspects represent its covert part. Formal aspects are formal goals, financial resources, customers, technology, physical facilities, organization design, rules and regulations as well as surface competencies and skills. Behavioral aspects include attitudes, communication patterns, informal team processes, personality, conflict, political behavior and underlying competencies and skills (Hellriegel et al., 1998, p. 6. in Mullins, 2006, p. 9).

Mullins (2006, pp. 13 f.) discusses the concept of the psychological contract as one significant aspect of organizational behavior. The contract describes mutual expectations and satisfaction of needs that emerge from the relationship between an individual and an organization. According to different studies there is a link between the fulfillment of the psychological contract and behaviors as well as attitudes at work. Examples are organizational commitment, performance and staff retention. It needs to be considered that studies have been conducted with different methods investigating the psychological contract (Muresanu, 2017, p. 405).

In a changing economic world new trends arise that are also affecting organizational behavior. Financial crisis and remaining unemployment are parts of the change which itself gets faster. Trends inform what individuals expect and value in organizations as follows. Ethical behavior and sustainability get increasingly important. Leadership is not just a top-down act anymore and rather goes into different directions. Team work gets more important as well as more flexible structures and practices instead of traditional hierarchies. Moreover, younger generations expect more freedom and high tech. Information technologies including social media lead to evolving behavior. Career concepts change towards more independent work and continuous development (Schermerhorn, 2012, pp. 6-8).

4. Brand Orientation in the Context of Organizational Behavior

4.1. Definition of Brand Orientation

Gromark and Melin (2011, p. 395) have reviewed available definitions and concepts of brand orientation. The term itself dates back to the 1990s when it was shaped by Frans Melin and Mats Urde from the School of Economics and Management at Lund University in Sweden. The initial idea of the concept was, “how an organisation should work internally to build and sustain strong brands” (Gromark, Melin, 2011, p. 395). A more holistic definition was phrased by Gromark and Melin (2011, p. 395) after reviewing and synthesizing available research as follows:

“Brand orientation is a deliberate approach to brand building where brand equity is created through interaction between internal and external stakeholders. This approach is characterised by brands being the hub around which the organisation’s processes revolve, an approach in which brand management is perceived as a core competence and where brand building is intimately associated with business development and financial performance.”

Table 2 outlines different definitions of brand orientation.

Table 2. Definitions of brand orientation

Author	Definition
Urde (1999)	An approach in which the processes of the organization revolve around the creation, development and protection of brand identity in an ongoing interaction with target customers with the aim of achieving lasting competitive advantages in the form of brands.
Hankinson (2001)	The extent to which an organization regards itself as brands and an indication of how much (or little) the organization accepts the theory and practice of branding.
Bridson and Evans (2004)	The degree to which the organization values brands and its practices are oriented towards building brand capabilities.
Ewing and Napoli (2005)	The organizational wide process of generating and sustaining a shared sense of brand meaning that provides superior value to stakeholders and superior performance to the organization.
Baumgarth (2009)	A specific type of marketing orientation, which is distinguished by the high relevance accorded to branding by top management. It also implies a strongly systematic approach to brand management characterized by an offer that is relatively constant, consistent, and relevant to the buyer and clearly differentiated from the competition.

Source: own table according to Gromark and Melin (2011), p. 395

Referring to one of the first definitions for brand orientation by Urde (1999, p. 117) as cited in Table 2 this approach is seen complimentary to market orientation. While market orientation is considered to be less complicated and short-term oriented, brand orientation requires additional sophistication. Products need to be developed to be in line with the brand and address market needs.

4.2. Behavioral Aspects of Brand Orientation

Different schools of thoughts in brand orientation have been identified: philosophical, behavioral, hybrid (i.e. philosophical and behavioral), cultural, performance, strategic, marketing, omni-brand, and corporate brand school. In the behavioral school of thought brand orientation relates to its guiding function for behavior (Balmer, 2013, p. 729). It has its origin in research of Bridson and Evans (2004, n. p.) who distinguish between distinctive, functional, value adding and symbolic capabilities to define the behavioral part of brand orientation. Distinctiveness enables identification of a brand including its

respective organization, products, or services. It also leads to ownership from a legal point of view like logos or brand names. Functionality relates to a product's or service's performance and how consumer needs are satisfied. Value adding (or augmentation) means addressing customer needs going beyond functional aspects. Symbolism refers to representational and emotional characteristics as well as self-expression and self-image, personality, psychic value and icon. Figure 1 shows how brand behaviors are embedded in the brand orientation construct of Evans et al. (2012).

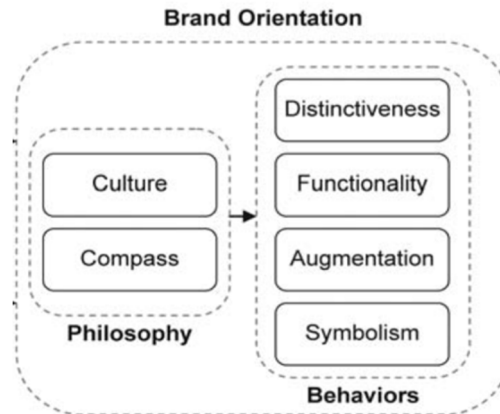


Figure 1. Brand behavior in brand orientation construct by Evans et al. (2012)

Source: own study based on Evans et al. (2012), p. 1470

Another concept for brand orientation developed by Hankinson (2001, p. 349) consists of the following themes:

- Understanding the brand
- Communicating the brand externally and internally
- Using the brand as a strategic resource to achieve organizational objectives
- Managing the brand

Communication and strategic use of the brand are characterized as the behavioral components whereas the remaining two items refer to attitudinal and managerial components, respectively (Hankinson, 2001, p. 355).

Gromark and Melin (2011, p. 396) comment on the brand orientation construct by Wong and Merrilees (2007). The researchers remark that its items capture organizational attitudes and behavior without distinguishing between the two terms. In total six items are defined as follows (Wong, Merrilees, 2007, p. 391):

- Branding flows through all our marketing activities.
- Branding is essential to our strategy.
- Branding is essential in running this company.
- Long term brand planning is critical to our future success.
- The brand is an important asset for us.
- Everyone in this firm understands that branding our product/service is a top priority for our business.

Baumgarth's brand orientation model is based on the corporate culture model by Schein including value, norms and artefacts. The concept is supplemented with behavior. The model refers to research that links brand orientation behaviors to the top management level. Norms and artefacts are hypothesized to have a direct influence on the behavioral part of the model. Rationale is that norms influence brand-orientated behavior through expectations and sanctions in case of violating corporate brand guidelines. In addition, artefacts have an influence on brand-oriented behavior through their communicative function. The model further assumes that only brand-oriented behavior can directly influence market performance and subsequently economic performance whereas the internal culture of a company is important to strengthen the brand (Baumgarth, 2010, pp. 657 f.; Hankinson, 2002, p. 41). Figure 2 shows how behavior is embedded in the model.

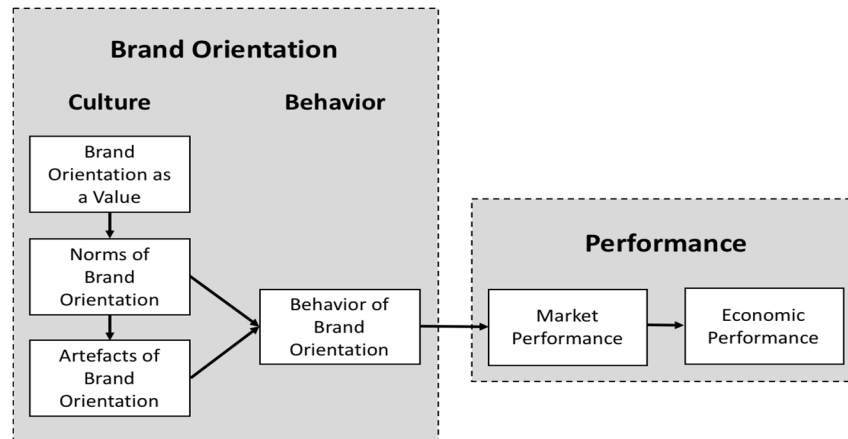


Figure 2. Brand orientation model by Baumgarth (2010)

Source: own figure according to Baumgarth (2010), p. 659

The concept of brand-oriented behavior in Baumgarth's model is tailored to each investigated sample representing media (professional journals), art (museums), and B2B (German business-to-business sector). It includes the following items for behavior taking the B2B model as an example:

- We invest in image advertising
- We teach our employees about the brand
- We instruct new employees about the positioning of our brand
- We conduct regularly market research studies of our brand (Baumgarth, 2010, p. 661)

In a study by Mulyanegara (2011, p. 433) about the influence of both market and brand orientation on perceived benefits the “perceived brand orientation” construct captures customers'/members' perceptions of the extent to which an organization engages in brand-oriented activities and behavior. The construct is composed of the following items:

- People come to the organization because of its reputation
- The organization possesses unique values which are transparent to the community
- Well known in the surrounding community
- Communication sends consistent messages about the organization to the community
- The activities/programs implemented by the organization have strong appeals to the local community
- Promotional materials create an image that is well understood by the members (Mulyanegara, 2011, p. 436)

In a different study the influence of service brand orientation on hotel employees' attitudes and behaviors in China is investigated. The study constructs the hypothesis that service brand orientation influences employee brand-oriented behavior which is confirmed in the respective sample. Whereas service brand orientation includes leadership, HR (human resources) practices, standards, and empowerment, brand-orientated behavior consists of brand allegiance, brand endorsement as well as brand-consistent behavior. (King et al., 2013, p. 176) The main difference to other concepts of brand orientation discussed in this paper is that brand orientation and brand-oriented behavior are two separate constructs.

5. Pricing Capabilities in the Context of Organizational Behavior

5.1. Definition of Pricing Capabilities

Dutta et al. (2002, p. 62) claim the need of companies to “routinely set prices”. In order to do so organizations have to adequately invest into resources and processes to meet this need. Pricing is therefore a capability that is relevant for company performance. It is related to the resource-based view as adequate resources and processes are needed in this regard (Dutta et al., 2003, p. 615; Johansson, 2012, p. 5). Table 3 lists definitions of pricing being considered as a capability.

Table 3. Definitions of pricing capabilities

Author	Definition
Dutta et al. (2002, pp. 61 f.)	Pricing is complex, and it's only growing more so as new tools and techniques become available. In order to be able to set the right price at the right time, any time, companies need to invest in resources, infrastructure and processes. These investments allow a company to create a pricing strategy by building the capabilities it needs to routinely set prices for all its goods and services and with evolving market conditions.
Dutta et al. (2003, p. 627)	[...] pricing capability – the systems and process – that managers at a firm choose in addressing the tension between the desire to change prices and the constraints on changing prices.
Johansson (2012, p. 5)	Pricing capabilities [...] covers the organizational process and mechanisms of pricing and, thus, how resources are deployed [...] in association with pricing. Pricing capabilities are thus directly linked to the field of strategy and the resource-based view [...].
Liozu and Hinterhuber (2013, p. 636)	Pricing capability refers to, on the one hand, the price setting capability within the firm (identification of competitor prices, setting price strategy, and translation from pricing strategy to price) and, conversely, to the price setting capability vis-à-vis customers (convincing customers on the price change logic, negotiating price changes with major customers).

Source: own table according to Dutta et al. (2002), pp. 61 f.; Dutta et al. (2003), p. 615; Johansson (2012), p. 5; Liozu and Hinterhuber (2013), p. 636

Dutta et al. (2003, pp. 615, 617) state that pricing capabilities implicate effective pricing processes managers need in order to set the right prices for customers and thus use resources effectively.

5.2. Behavioral Aspects of Pricing Capabilities

Pricing behaviors are explicitly studied by Cyert and March (1992, pp. 136-160) in the retail setting by validating a model concerning pricing decision making process. The study elaborates on the decision process and decision rules to set or change prices in order to meet sales objectives. It concludes that prices are decided through negotiation between departments to enable consensus and goals. Intraorganizational influences on B2B pricing strategies are also investigated in a more recent study by Lancioni et al. (2005, pp. 123, 130). A survey was conducted among managers influencing their companies' pricing strategies to identify departmental obstacles as well as strategies to overcome these obstacles. In conclusion, resistance to progressive pricing strategies from various departments was identified and considered to be self-serving behavior towards pricing that is unfavorable for company profitability.

In a literature review including a conceptual framework and directions, value-informed pricing (i.e. pricing based on perceived value by customers) was researched in an organizational context. It is suggested to use information management – i.e. acquire, distribute, interpret, and use information – to support pricing processes (Ingenbleek, 2007, pp. 441, 454).

In a study exploring the intersection of pricing strategies and pricing capabilities, challenges of implementing value-based pricing strategies as well as the strategic importance of pricing capabilities are discussed (Johansson, 2012, p. 4). The following informal and behavioral capabilities are identified – next to formal and scientific capabilities – that lead to organizational confidence contributing itself to the capability to do value-based pricing (Johansson, 2012, p. 7):

- Shared beliefs
- Unique organizational design
- Energizing teams
- Information interpretation systems
- Diffusion of knowledge and experience
- Positive communication
- Emotional 'contagion'.

Liozu and Hinterhuber (2013, pp. 634, 639 f.) claim that existing studies investigate pricing practices from an organizational decision process point of view and only very limited research links pricing with organizational behaviors. Their research bridges both disciplines by examining the impact of championing behaviors of CEOs (chief executive officers) in pricing on pricing capabilities and firm performance. The concept of championing behavior has been adapted from a measure of champion behavior developed by Howell et al. (2005, p. 649) and includes the following 6-items scale:

- I enthusiastically promote the pricing function
- I express confidence in what pricing can do
- I show tenacity in overcoming obstacles when changes in pricing are needed
- I get pricing problems into the hands of those who can solve them
- I get key decision makers involved in the pricing process
- I act as a champion of pricing.

Liozu and Hinterhuber (2013, p. 640) characterize CEOs championing behaviors successfully to be transformational leaders who can motivate their teams and organizations to overperform for business. The researchers assign to CEOs the role of organizational champions with specific behaviors to drive performance.

6. Discussion

Organizational behavior is very much related to management theory and practice “providing a behavioral approach to management” (Mullins, 2006, p. 4). Research addresses behavioral topics for parts of organizations rather than for companies as a whole (Mullins, 2006, p. 4). Against this background, behavioral aspects can be identified in the concepts of brand orientation as well as pricing capabilities.

Since considerably more research can be found for brand orientation compared to pricing capabilities more behavioral aspects are researched and/or discussed in different manners. Evans et al. (2012) identify behaviors for brand orientation that are embedded in a concept of brand orientation next to a “philosophical” approach including culture and compass. Baumgarth (2007) similarly combines behaviors with a cultural approach consisting of values, norms and artefacts.

Particularly, the championing behavior of CEOs could be identified as relevant behavioral aspect related to pricing capabilities by Liozu and Hinterhuber (2013). Not only (top) management behavior but also departmental behaviors relate to pricing and pricing decision processes as researched by Lancioni et al. (2005).

7. Conclusion

This is the first research investigating behavioral aspects in concepts of brand orientation and pricing capabilities to the best of the author’s knowledge. Thus, a comparison with existing research is not feasible. Behaviors are part of the concepts of brand orientation and pricing capabilities in the majority of identified research. In brand orientation, behaviors are mostly embedded next to attitudes, capabilities and artefacts. They are not always included in brand orientation concepts or at least not explicitly characterized. With regard to pricing capabilities, considerably less studies are being identified and available models explicitly mention behavioral aspects only to a limited extent.

As this research is solely based on literature review it is suggested to do further empirical research on the existing models with a focus on behavioral aspects. Furthermore, other disciplines including behaviors should be considered that have a possible impact on company performance as brand orientation and pricing capabilities are only two disciplines relevant to an organization. With regard to the investigated disciplines in this paper, further research is suggested for pricing capabilities in general as well as in the context of organizational behavior.

Additional studies could demonstrate the relevance of organizational behavior for company performance to inform managers’ decisions in business management.

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27. GREEN MARKETING PRACTICES AND SUSTAINABLE BUSINESS MODEL

Abstract: In this present scenario, the environmental impact of industrialisation and globalisation has become the main concern among the policy makers. The green marketing practices came into existence decades ago and many businesses and firms are adopting it in order to reduce environmental degradation. The companies relying on green policies leveraging the benefits of sustainable development as the consumers are showing positive attitude towards environment friendly products. This paper addresses the green marketing challenges in the current scenario and the prospects and opportunities associated with it. Through a critical analysis of the literature a sustainable business model has been developed and discussed. The main focus of this paper is to use green marketing practices to create sustainable business and the implications for the companies to support in sustainable economic development.

Keywords: environment protection, green business model, green marketing, green products, sustainable development.

JEL Classification: M31, Q01, Q56

1. Introduction

Since 1980s the ecological problems like global warming, climate change, increased pollution, and greenhouse effect that are the result of industrial activities became the major concern (Yakup, Sevil, 2011). Due to these environmental problems the concern for environment protection came into existence. The businesses and firms are now changing their marketing strategies in order to create a new market niche related to eco-friendly marketing. Green marketing practices are now being applied in the production process of many firms to address social integrity and to spread green messages among consumers (Nagaraju, Thejaswini, 2014). Also, many companies are now focusing on gaining profits for long term with the implementation of green marketing strategies along with satisfying consumers' needs and wants. Consumers today are progressively practising environment friendly practices and will pay more for nature friendly items. The expanding quantities of consumers who lean toward and will purchase these items are exposed to the purchasing procedure. Customers have diverse purchasing practices and these practices are always showing signs of change because of the accessibility of best choices to look over.

The firms which work for environment protection and design their products accordingly, have more chances of profitable sustainability than the firms that work only on their traditional processes. The value proposition regarding environment protection and eco-friendliness gives businesses more influencing power on consumers and to create their own market niche (Chandrasekar, 2010). The green marketing mix helps firms and businesses to get more competitive advantage over others. Also, as far as consumer behaviour is concerned the green marketing mix helps businesses to change their consumers purchasing behaviour, and as a result their changing tastes and preferences help companies to modify their product and services according to consumer's demand (Agyeman, 2014). It is clearly visible that consumer now-a-days are becoming aware and more anxious for the protection of environment. Approximately more than fifty Percent of buyers in 16 countries were indicated as more concerned for environment as shown in a study conducted in 1992 (Ottman, 1993).

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Green marketing helps businesses to achieve top line growth potentials and bottom line incentives. The capital investment is rather more in green technology, for instance solar panel, but in long term it will prove as an economical investment (Chandrasekar, 2010). Previously, it is believed that environmental sustainability tends to be a liability for the firms and companies as it brings with it additional cost (Kemp and Andersen, 2004). But in the last decade eco-friendly technology came out as the main driver for economic development (OECD, 2011).

Green Marketing is the marketing or promotion of a product that constitute environmental benefits. Today, consumers are becoming more responsible towards environment protection and changing their purchasing behaviour accordingly. Therefore, businesses and companies should be responsible to produce and make such products available to the customer (Saini, 2013). Hence, firms and companies can work towards protection of environment and benefitting consumer's health with the adaptation of green practices (Rajeshkumar, 2012). On the other hand, the impact of human activities on environment has increased the awareness regarding sustainability. So, in order to enhance performance of the firm to reach economic and environmental goal, it does not require implementation of the new technology, rather it needs a suitable business model to fulfil the requirements (Khalife, Dunay, 2019). The main purpose of this paper is to propose sustainable business model canvas of green products based on Osterwalder's and Pigneur's canvas business model. The first segment of the paper focuses on the problems related to environment and literature reference has been presented. The second segment explained the method of the research conducted and narrative literature review is used to assess the background and to analyse the problem. Next section explains the green marketing practices and how green marketing mix helps marketers to differentiate their green product from traditional product. In the next section canvas business model is explained followed by conclusion and recommendation for future study.

2. Methodology

This study is based on narrative literature review. It addressed the findings of the author in a summarized format including content of studied articles (Helewa, Walker, 2000). The researcher made the comprehensive explanation of the study after studying multiple related articles and papers. The main purpose of this literature review is to empirically state the present understanding of the subject on the basis of published articles and research. A narrative literature review helps the reader to make a perspective with the given information that derives from the comprehensive summary of the study (Day, 1998). Also, narrative literature review is considered as a valuable educational article as it consist information of different studies in one summarised format (Green et al., 2006). It presents extensive perspective of a study and sometimes the emerging problem or its solutions are described (Slavin, 1995).

3. Green Marketing Practices

According to American Marketing Association (AMA), green marketing is the form of marketing in which the products are marketed as environment-friendly and which includes activities like adjustment of products, green packaging, new strategies for advertisement and product modification in order to create awareness (Yazdanifard, 2011). Green or eco-marketing includes such activities that are intended to focus on satisfying consumer needs and wants along with minimum negative impact on environment (Polonsky, 1994). Pride and Ferrell (1993) defined that green marketing, also alternatively known as environmental marketing and sustainable marketing, refers to an organization's efforts at designing, promoting, pricing and distributing products that will not harm the environment.

Now-a-days, environment sustainability has become a challenge for most of the firms that want to build a sustainable business model along with decreasing harmful impact on environment. The most important concern among firms and consumer these days is environment sustainability (Nidumolu, 2009). As environmental issues influence the activities of human beings and also make an impact on the development of businesses. Green and environmental issues have gained importance in businesses across the world due to increase in consumer awareness (Prakash, 2002; Chen, Chai, 2010). Green products are nowadays preferred by consumers as well as the companies, as the environment protection is becoming a serious concern over the globe. However, eco-friendly products had effected the purchase decision of the consumer.

Green marketing practices involve the sustainable holistically thinking of the firms from its production processes to the product distribution to generate profit for the firm including environment protection in its process. The environmental marketing has tremendous benefits in itself like it is potentially profitable. As the companies use green marketing in the alteration of business and adapt green product development, it can be able to decrease operational and production costs in long term. Most of the companies modified their traditional technology into solar panel in their businesses to get cost benefit as an investment (Ottman et al., 2006). Some companies are attracting their consumers by giving pollution free messages in their advertisement and as a result contribute in enhancing consumer's knowledge of green products and environmental issues (Ankit, Mayur, 2013). Many companies however adapt the laws and regulations regarding environmental protection, like restriction and limitation of the use of hazardous and chemical constituents in their production process (Tsai et al., 2012), as a result it diminish the negative effect on environment along with gaining consumer's satisfaction towards green products. In many aspects traditional marketing is in contrast with green marketing. In Table 1, it is clear that green marketing not only focuses on firms profit and consumer satisfaction but also take into account environmental impact of firm's actions (Chamorro, Bañegil, 2006).

Table 1. Green marketing in contrast with traditional marketing

	Traditional Marketing	Green Marketing
Parties involved	Firm and customer	Firm, customer and environment
Goals	Customer Satisfaction Reaching firm objectives	Customer Satisfaction Reaching firm objectives Reducing environmental negative impact
Responsibility	Economic	Social responsibility Effect on all stakeholders
Marketing decisions	Manufacturing to consumption of product	Entire value chain involved from raw material to post consumption
Environmental Demands	Legal requirements	Environmental intention

Source: own study based on: Chamorro, Bañegil, 2006; Punitha, Rasdi, 2013

4. Green Marketing Mix

The green marketing mix also constitute product, price, promotion, and place (4P's) but marketers need to adapt this marketing mix in different way with traditional marketing mix. In green marketing these components of marketing mix are important for a firm to achieve its goals and gain consumer satisfaction along with environmental benefits.

The product of green marketing is termed as green product or eco-friendly product or environment friendly product. These products are produced in order to minimize the harmful effect on environment with its production, distribution and its consumption as well (Tomasin et al., 2013). Green products are biodegradable, recyclable and reusable in nature (Blengini et al., 2012). Hence, green products are believed to be such products that have very less negative effect on environment and on consumer's health (Shrum et al., 1995).

Another important element of marketing mix is the price of the product. The extra price of the product is only paid by the consumer when they perceive that the product will give them additional value (Surya, Banu, 2014). Drozdenko et al. (2011) conducted a study on 398 homeowners of Pennsylvania to evaluate the consumer perception regarding the pricing of green products. The results indicated that the consumers are willing to pay extra two thousand dollars on hybrid cars (green product), if they get one thousand dollar saving per year. Hence, the price of the green product is not a hurdle in its marketing, but how the marketers convince the consumers that extra price will give them additional value.

In green marketing mix spreading the green message is a challenge for marketers. Another element of marketing mix is promotion that consists of advertising, sale, consumer relation and direct marketing (Kotler and Keller, 2009). The promotion of green or environment friendly products is termed as green advertising. It specifies that the environment protection and reduction of energy was taken into consideration in its production process (Chang, 2011).

The availability of green products in the market is another challenge for the producers, as where and when to make such products available to the consumer. This component of marketing mix makes it easier for the firm to select the top market for its product to be available for consumer (Blackwell, 2006). Many studies focused on market and places which provides environment friendly products to the consumer who are willing to buy (Wanninayake, 2008; Purohit, 2011)

5. Sustainable or Green Business Model Canvas

The large as well as small and medium sized enterprises also face challenges to bring out advanced and sustainable business idea in the market (Andersen, Faria, 2015). Any business model refers to economic significance and technology is perceived as the association of technological change, innovation and capability to compete amongst competitors in the market (Chesbrough, Rosenbloom, 2002; Zott, Amit, 2007). Every business model is considered as an officially created measure including well established principles and goals that portrays strategies of the firm. It defines the degree to which a firm produces, delivers and improves its value along with social, technological, economic and environmental significance (Muhtaroglu et al., 2013).

The canvas business model proposed in this paper is based on Osterwalder's previous work in which this business model is suggested (Osterwalder, Pigneur, 2010). From the time of its introduction, this business model or template has become the widely used business model among other models (Khalife, Dunay, 2019; Muhtaroglu et al., 2013; Innovation, 2012; Authority, Alle, 2012; Kaplan, 2012) and big companies like Nestle and Proctor & Gamble have implemented this model to earn profit by creating new strategies (Muhtaroglu et al., 2013). This business model canvas became an ideal foundation in expansion of business along with incorporating sustainability as it is now being widely implemented and easy to adopt for numerous types of strategy makers (Joyce, Paquin, 2016). The widespread use and adoption of canvas business model by Osterwalder and Pigneur proposed that this model supports business innovation and is important for communicating and better understanding of a firm's business model (Abraham, 2013)

To see the implementation of business model canvas we can look at the interpretation of triple-layered business model of Nestle Nespresso business model (Brem et al., 2016; Joyce, Paquin, 2016; Gassmann et al., 2016). The canvas business model of green products constitutes nine building blocks to easily communicate a green business idea in order to get sustainable environment friendly business in the market. The green product has all its health and environment benefits (Lin, Chang, 2012). Also the manufacturing of green products does not require any environment degradation process (Chen, Chang, 2013). The business model of green products is circular in nature as the product can be recycled, remanufactured and biodegradable. As the green campaign is eminent in creating awareness of restoring natural resources, it is the time to re-establish the traditional business idea into green business. In figure 1, the canvas business model has explained the nine building blocks of sustainable and green business model.

5.1. Key Partners

To reduce the cost and risk of business, firms and enterprises create a strategic association with the people and organizations outside the business termed as key partners (Choi et al., 2014). With the help of advance communication technology, firms and companies establish their key partnerships like joint ventures, seller-buyer relationships, professional alliances etc., in order to attain economies of scale, to decrease risk and to enhance their competencies (Ladd, 2018). For instance, government can be the key partner in this business model so as to maintain its credibility of taking initiatives regarding green businesses. Other traditional business partners can join to re-establish their old production process with new green technology, and as a result they will also get benefits by the sales. Also, the municipalities and NGOs can be the key partner for the cause of environment protection (Dyllick, Hockerts, 2002). Green banks can be the partners by giving green loans to the company for investing in green technology and infrastructure (Biswas, 2011). The main objective of the green banks is good social and environmental practice, and before lending a loan these banks analyse all the environment friendly factors of the project and issue loan only when the project follow environment safety standards (Naidu, Paramasivan, 2015).

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Green Business partners Government Green Banks NGOs Collaboration with traditional business partners	Manufacturing green products Product design Environment friendly Packaging Re-manufacturing and Recycling Distributing	Environment friendly Product Recyclable Biodegradable Circular product Health benefits Disposable Customer satisfaction	Building trust with Health benefits Easy availability Environment friendly Easy distribution On time delivery Envt friendly Packaging	Retailers Wholesale distributors Individual customers Online shopping giants Grocery Chains etc
	Key Resources Natural resources Better performing materials Restoring and presrvng natural elements		Channels Through wholesale retailers Direct delivery to consumers Multinational product chains	
Cost Structure Raw material, production cost, packaging, delivery		Revenue Streams Product sales to consumers and retailers		

Figure 2. Sustainable and Green Canvas business model based on Osterwalder’s & Pigneur’s canvas business model

Source: own study based on Osterwalder, Pigneur, 2010

5.2. Key Activities and Key Resources

The key activities of any business are supported by the key resources such as financial, human, intellectual and physical capital that helps in producing goods and services (Ladd, 2018). The main resources used in key activities and value proposition are termed as key resources (Choi et al., 2014). In the proposed business model key activities would be manufacturing of eco-friendly products, product design, environment friendly packaging, distributing, recycling and remanufacturing. Key activities does not only related to the tasks and practices inside the firm, but also deals with the external constraints such as government regulation etc. (Ladd, 2018).

5.3. Value Proposition

The most important factor of any business is what additional value will be provided to the customers apart from the product (Choi et al., 2014). Value proposition of a good and service refers to the benefits consumers acquire, as it states the needs and wants of different customer segments (Ladd, 2018). The utility of provided value is evaluated by the consumers and then they determine whether to spend extra at the expense of additional value (Choi et al., 2014). The most important value proposition of this business is that the product is environment friendly and can be tagged as green product. Also it is a recyclable, biodegradable and circular product with lots of health benefits. The main characteristics of value proposition include design, performance and quality. The technology used in the production of product or service can be acknowledged by the value proposition and cost structure (Ladd, 2018).

5.4. Customer Relationship

For any business, customer relationship management (CRM) is among the most important constituents. It helps in retaining customers and also helps firms and businesses to advance their products and services according to the feedback and recommendations (Ramani and Kumar, 2008). Customer relationship management supports businesses in providing information about changes in tastes and preferences of the customers and helps firms to improve their understanding about the customers accordingly (Lin et al., 2010). The customer relationship can be maintained by building trust regarding health benefits, easy accessibility and delivery, and also with environment friendly packaging.

5.5. Customer Segment

A group of paying consumers that corresponds similar needs and wants is termed as customer segment (Ladd, 2018). Every customer is the one who pays for the goods and services provided by a business and in return obtain the value associated with the product (Choi et. al, 2014). In the proposed model, as far as customer segment is concerned the wholesale consumers, online shopping giants, grocery chains would be on top list. Also the individual consumers like health conscious, environment conscious green consumers. The product can be delivered through the proper channel of manufacturer to retailer and then to consumer. Also it can be directly delivered to the customer through online order placement.

5.6. Cost and Revenue Structure

The cost structure and the revenue streams is the key concern of any business. The cost structure of the firm is dictated by the resources, key activities, value proposition etc. (Ladd, 2018). The cost of this green product business would be the cost of raw materials. The production cost comes later is also very challenging but economical in long term as it require green technology. Then the cost of packaging and delivery should be taken into account which will be a big concern as it should be environment friendly packaging with no lower quality plastic bags involved. The revenue streams constitute transfer of money from consumer to the business in exchange of goods or services such as sale of assets, rent, advertising, fee of usage or commission etc. (Ladd, 2018). The source of revenue is a most important factor that obtained from the effective and successful supply of the product or service and the value proposition attached to it to the consumer (Choi et al., 2014).

6. Conclusion

As it is stated in this paper, that on-going environmental problems and adverse impact of human activities have created a major concern among policy makers and businesses. Therefore, firms and companies have started focusing on their actions and its effect on environment and on all stakeholders. These firms are taking green marketing as an opportunity to achieve their economic and environmental objectives. Also, the changing purchasing behaviour of consumers towards environment friendly product made firms realize their responsibility to act accordingly. As a result, companies now favour environment friendly products over traditional products to reach their goals and objectives and to create value proposition. Besides, in this era of digitalization and innovation, firms require suitable and sustainable business model to achieve significant goals along with environmental sustainability. The canvas business model is perceived to be an effective business model with nine building blocks to achieve successful and efficient business. This study proposed the canvas business model of green products in which all nine elements are observed and explained. With this concept green marketers can make their businesses environment friendly along with keeping in mind all elements of business such as value proposition and cost structure etc.

For future studies, this paper suggests case studies of the firms which implemented this canvas business model in their production process. Also, the canvas business model of green products can be explained and illustrated in more empirical and detailed approach.

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28. GLOBAL DIGITAL PLATFORM FOR MEDICAL KNOWLEDGE DISSEMINATION: A MULTINATIONAL PHARMACEUTICAL COMPANY STRATEGY FOR DIGITAL STAKEHOLDER RELATIONSHIP TRANSFORMATION

Abstract: These new technology scenarios are changing the ways value is created and captured. New companies are born with new and innovative business models and existing companies need to rethink their models when they become this digital landscape. The purpose of this research is to present how a multinational pharmaceutical company performed the digital transformation in its relationship with its stakeholders through a digital platform. The qualitative approach was used in this research and the method to be used will be exploratory and descriptive research., a structured questionnaire was applied to 5 company directors based on the business model. The choice of the digital platform has allowed a number of benefits, especially targeting stakeholders (doctors and health professionals) such as access to top quality medical content in a democratic and free way, without having to move.

Keywords: business model, digital platform, digital transformation.

JEL Classification: O00, O32

1. Introduction

Developments in new technologies such as IOT (Internet of Things) and Industry 4.0 are changing people's values and habits rapidly. Increasingly, customer opinion or the value they perceive is being the driving force behind companies for this digital transformation. These new technology scenarios are changing the ways value is created and captured. New companies are born with new and innovative business models and existing companies need to rethink their models when they become this digital landscape (Wan et al., 2017).

New technologies are imposing usage patterns on Smartphone users, and more and more companies are developing applications with their usage format. In the past, browsers such as Firefox and Chrome were the main programs for using Internet sites. You can currently use these apps, but it's simpler to click on the app icon and get direct access. According to Chew (2015), this evolution is due to the fact that companies are adapting to new technologies and becoming digitized and organized into a new form of digital organizations of the future called DOOTF.

Moyer et al. (2017) define that a platform business model is how an organization allows a business ecosystem to create value. Six of the 10 most valuable companies in the world are using platform business models. CIOs can use the platform's business models as a way to help change the way an organization creates value and becomes a digital business. The purpose of this research is to present how a multinational pharmaceutical company performed the digital transformation in its relationship with its stakeholders through a digital platform.

2. Literature Review

2.1. Digital Transformation

In the literature, it can be observed that different dimensions of digital transformation have been proposed and defined for a better understanding of the digitization. In that sense, in a special edition of the MIS Quarterly of 2013 based on the analysis of five specialized jobs in the field of digitalization,

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four dimensions of a company's digital business strategy were highlighted as key attributes for digitization (Bharadwaj et al., 2013). In the present study,

- Its scope, which needs to extend beyond the company's traditional boundaries;
- Its scale, with the emergence of platforms that create important network effects in a context of abundance of data;
- Its speed, whether to launch products or services, to make decisions, etc.
- The source of creation and capture of value (data, networks, digital architecture).

Digital business strategy is different from the traditional IT strategy in that it is much more than a multifunctional strategy and transcends traditional functional areas (such as marketing, purchasing, logistics, operations, etc.), various IT resources and processes (such as order management, customer service, and others). Therefore, digital business strategy can be seen as inherently cross-functional. All functional and process strategies are encompassed under the aegis of the digital business strategy, with digital resources acting as the connective tissue (Benzerga et al., 2018).

Digital Business Transformation is the application of technology for building new business models, processes, software and systems that result in more profitable revenue, greater competitive advantage and greater efficiency. Companies achieve this by transforming business processes and models, enabling workforce efficiency and innovation, and customizing client / citizen experiences (Schwertner, 2017)

According to Bounfour (2016), digital transformation is a new development in the use of digital artifacts, systems, and symbols within and around organizations. For Leignel, Ungaro and Staar (2016), the term digital transformation has existed since the 1960s, with the greater availability of large computers. More development stages in the 1980s as the e-mail or 1990s the emergence of CRM and Business Intelligence (BI) tools for connected objects, 3D printing, block-chain technology and artificial intelligence (AI), innovation in digital technologies and digital transformation has changed the way of collaboration, implementation at the level of the entire economy in a radical way (Leignel, Ungaro, Staar, 2016).

Digital transformation changes business and private life in the same way, in a radical and sustainable way. The economic potential is enormous. Topics related to the Internet have by far the most economic potential in the world. The world becomes more and more digital and this is the big business of the future. Digital networks and data intensive are the main attributes of smarter production, the so-called industry 4.0. But not just in technology, many things are changing, humans and society are also changing (Bauer et al., 2015).

In short, digital transformation means high-speed changes in cooperation due to the innovation and implementation of digital technologies and the integration into all aspects of human life and society in different dimensions (Schallmo, 2016).

2.2. Business Platform

Platforms are defined (Gawer, 2009) as building blocks on which a series of companies (a business ecosystem) develop complementary products, technologies or services, proposing these requirements for a platform:

- Must play a critical function of the general system or must solve a crucial technological issue of an industry,
- It should be easy to connect, " build " and provide space for new and unplanned use.

In the business model literature, an emerging model is the business platform (business platform), whereas business models on the one hand have one or several customer segments, which are distinct from one another, the model platform has two or several customer segments, which interact with each other using the business platform (ITÄLÄ, 2015). We can highlight as examples of this type of business model Facebook and Google. A digital business platform is "an integrated set of electronic business processes and technologies, applications and data that support these processes" (Weill et al., 2009).

Digital business platforms are changing the way products and services are created and delivered. They are threatening established firms within many industries (ITÄLÄ, 2015).

Itälä (2015) illustrated with the following events:

- AirBnB is a platform that connects these ordinary people who are willing to provide a room and those travelers who need a cheap accommodation.
- Uber is a platform that connects ordinary people who are willing to offer a taxi drive and customers who need from one place to another.

Interestingly, neither AirBnB nor Uber own their rooms or cars; they only connect owners and users in an interaction. Both AirBnB and Uber also create trust on both sides: service buyers can write reviews of their experience, and service providers can write customer feedback.

Venkatraman et al. (2014) defined as digital business innovation platforms "actions of a network of companies with complementary skills to co-create new business models that are intrinsically based on information and technology functionalities."

It is considered a form of open innovation where there is contribution from outside the company through the participation of consumers and suppliers in the development of the business or product, adding value and receiving the benefits in exchange for their participation.

Like any collaborative process, this approach goes through a process of filtering ideas. O'Hern and Rindfleisch (2009) argue that regardless of the situation, a process of co-creation needs inputs, which need to go through an evaluation process for the correct selection of the idea that will make a difference.

First, they conceptualized innovation as a platform beyond the conventional framework of innovation as a process. Innovation platforms enable innovations of business models driven and supported by information technology (Iansiti, Levien, 2004). Second, digital innovations are not created by autonomous companies, but by a network of companies in a business ecosystem that groups their complementary skills (Iansiti, Levien, 2004).

3. Methodology

The qualitative approach was used in this research and the method to be used will be exploratory and descriptive research. The sources of external evidence researched were: documentary analysis, which included a literature review. Sources of Internal Evidence: Research with computer users to identify the most important attributes related to digital transformation. In this sense, a structured questionnaire was applied to 5 company directors based on the business model.

The proposed model is structured in three layers that will be responsible for analyzing the three economic, social and technological levels. Each layer contains the nine Canvas blocks tailored to each area and divided into four dimensions: value proposition, customer, infrastructure, and profit equation.

The Economic Level of the Business Model Canvas (BMC) was developed by Alex Osterwalder and Yves Pigneur (2002), and co-created with a series of 470 practitioners from around the world. It offers a simple, visual and one-page screen on which to design, innovate and dialogue about business models (Burkett, 2013). Osterwalder (2004) introduced this business model to provide an efficient means of fully capturing key aspects of how a company can approach a particular business proposition and is composed of nine "building blocks" encompassing a relatively complete set. and comprehensive business planning measures. Canvas dimensions can be interpreted through the building blocks: as - core partnerships, core activities, and core resources; what - value proposition; for whom - relationship with customers, channels and customer segments; how much - cost and revenue structure.

The main point of the "TLBMC" social level is to extend the "BMC" to include stakeholders, while simultaneously capturing the influences between the organization and the stakeholders, capturing key social impacts from these relationships. , enabling a better understanding of where an organization's social impacts lie, providing insights to explore an organization's actions, and the business model to enhance its value creation potential by leveling the stakeholder approach with the nine components of the organization. "BMC" social level, thus forming the second level of "TLBMC" (Joyce and Paquin, 2016) as described:

Social value: refers to aspects of the organization's mission that focus on creating benefits for its stakeholders and society as a whole. For sustainability-oriented companies, creating social value is a well-defined part of their mission.

Employees: allows you to consider the role of employees as a key organizational stakeholder, and various elements can be included, such as employee values and types, demographic data such as salary variations, gender, ethnicity, and education within the organization, and provide a space to discuss how employee-oriented programs such as training, professional development, additional support programs contribute to the long-term viability and success of the organization.

Governance: Captures the organizational structure and decision-making policies of an organization. Organizations can vary widely based on various aspects of governance, including ownership type (cooperative, profit-oriented private ownership), internal organizational structures (organizational hierarchy), decision-making policies (transparency, profit sharing), and Each of these points can influence how an organization can engage stakeholders in value creation.

Local communities: Social relationships are based between suppliers and their local communities, however, these two stakeholders are characterized as communities by aligning the three layers of TBLMC. The success of an organization can be influenced by the development and maintenance of positive relationships between these two stakeholders.

Societal culture: Recognizing a potential impact of the organization on society as a whole, and how the actions of the organization can bring benefits to society.

Relationship Scale / Scale: Shows the depth and breadth of relationships an organization builds with its stakeholders through its actions over time, including the idea of developing long-term integrated relationships, and the extent of impact. geographical (local, regional or global).

End User: Person who "consumes" the value proposition. Here there is concern about how the value proposition addresses end-user needs, contributing to their quality of life, noting that the end-user is not always the customer, as defined at the economic level of the business model.

Social Impact Components: These cover the social costs of an organization. They complement and extend the financial costs of the economic layer and the biophysical impacts of the environmental layer. Some of the most common indicators include: working hours, health, safety, community engagement, and fair competition.

Social benefits: It is the positive social values that create aspects of the organization's actions, considering the social benefits that come from the actions of an institution. Just like the social costs, social benefits can be measured using indicators such as personal development and community engagement.

The main point of the technological level of "TLBMI" is to extend the "BMC" to include ICT, in order to verify the influences of its use in the construction of economic and social value propositions, capturing technologies, infrastructure and resources, enabling better understanding where an organization's technology benefits lie, providing insights to explore an organization's actions, and the business model to enhance its value creation potential by leveling the ICT approach to the nine technology-level components of the BMC ", Thus forming the third level of " TLBMC "as described:

Technological Value: Value created by ICT for the company to produce economic and social values.

Technology customer: ICTs expand business reach because geographic boundaries become less relevant and customer may be beyond enterprise boundaries, customer is Stakeholder using ICT service

Technology for customers: It is the use of ICT for customer relationships, as its use can redefine the notion of customer relationships, as they can understand the customer by outlining an information strategy, explore new ways to deliver value and expand range covering new and multiple channels.

Channel Technology: It is the use of ICT for product delivery to the customer, ICTs open up new opportunities to customize and individualize different forms of delivery, which will profoundly influence the customer experience of doing business with the company.

Technological activity: These are all necessary ICT activities and the links between them in order to create economic and social values.

Technological Capacity: These are the resources required for ICTs to deliver to social and economic value propositions to different clients. They can be material and human resources.

Partner Network: This item describes how partner companies are interconnected by ICT for information exchange.

Technological Cost Structure: This element measures all the ICT costs the company incurs to create, market and deliver value to its customers.

Technological Benefits: These are the benefits obtained from using ICT to create economic and social values.

4. Results and Analysis

4.1. Company

Empgra01 is a leading global healthcare organization that combines care and discovery to improve the lives of people around the world. It was founded over a century ago by a man committed to the creation of high quality medicines that are essential and today he is guided by this mission in everything he does. Around the world, employees work to innovate and deliver life-changing medicines to those in need, improving understanding and treatment of disease, and serving communities with volunteerism and philanthropy.

Empgra01 arrived in Brazil in 1930 and the branch was set up in 1944 in Rio de Janeiro. After nine years, the company's operations were transferred to the city of São Paulo, began to produce its medicines such as Merthiolate, Isedrin, Codestrina Syrup and Benzoped. Since 2002, when the factory underwent a 7-year restructuring, it has made room for the ISO 14.001 certificate in 2003. Empgra01 was named one of the 150 Brazilian Best Companies to Work for in 2017 and 2018 by VOCÊ S/A brazilian magazine, and was awarded one of the Best Companies to Begin Career in 2018.

The pharmaceutical company Empgra01 has just launched in Brazil its streaming platform on demand, called Empgra01 Play. In order to facilitate the access of health professionals and doctors to contents that deepen their knowledge, the virtual space will bring together videos about diseases, scientific articles, medicines, congress coverage and medical classes.

4.2. Dimensions and Elements

Value Proposition: The value proposition is to enable physicians to access updated content through a single-place streaming platform.

Excerpt from interview reports: "... According to research, 53% of doctors now prefer to use digital media to update their technical knowledge about treatments, diseases and new medicines. In addition, research has also pointed out that 55% of these professionals access videos in order to continue specializing in the area in which they operate ..."

Social Value: Providing information that they consider relevant to their clinical practice, recommending content according to their expertise, and providing better time management, ensuring that content is available whenever they want and wherever they are.

Excerpt from interview reports:

"... Apart from doctors in large centers who have access to content and always go to physical events, others do not have access to this learning..."

Technological Value: The technological value proposition is the ability to relate differently with its stakeholders through a digital platform.

The interviews showed that the use of the digital platform allows doctors and health professionals to have access in any city in the country. The statement made by the CTO is that without technology, this project would not be possible.

Customer Segment: Customers are the stakeholders of the company's ecosystem.

Some excerpts from the interviews:

"... Because at that time, companies that were making social investments were growing, and it was much more expensive for a company to have their own initiative... so... as they were partner companies they used the Company's platform... "

"... was a way for partners to say: I invest in social ... Without investing directly they invested in social, they gave money to the Company to invest in social ..."

Relationship with clients and Channels: The distribution and relationship channels are carried out by Plataforma, which is an innovation in the health area, not only for providing exclusive content and making it easier to search for information, but also for bringing professionals in this area closer together. adapt to the new demands brought by them. Some excerpts from the interviews

"For example, for a doctor from a city in the interior of Rio Grande do Sul (RS), it is not always easy to travel to a congress in São Paulo (SP). If this professional can watch some content of the event through the platform, he will be updated and can better manage his time "

End User: The end user is the doctor or healthcare professional. The service is completely free and registration on the site is only available to doctors and health professionals.

Societal Culture: Societal culture, according to Joyce and Paquin, (2016), is to recognize how the actions of the organization can generate benefits for society. The benefits of The platform for healthcare professionals is to provide information they deem relevant to their clinical practice, recommend content according to their expertise, and provide better time management, ensuring that content is available when they want and where they are.

Reach Scale: The Reach Scale can be seen by the 3000 doctors enrolled in the platform in less than a year and partnerships with societies and medical associations for content creation.

Technology customer: Technology customers are the stakeholders that use ICT services, in the case of Empgra01, services are concentrated on the digital platform and technology customers are the stakeholders.

Customer Technology and Channel Technology: Channel and customer technologies are realized by the Digital Platform. The platform was built using responsive web, which is a web design approach that makes web pages render well on a variety of devices and window or screen sizes. Another technology used was streaming, which is the technology of data transmission over the internet, mainly audio and video, without the need to download content.

Key Activities: Access to Lectures with experts, debates, studies and research, with content that will always be updated and without advertising.

Key Resources: Key Resources are the Digital Platform, development team, support team, and content creators.

Key Partnerships: Partners are medical associations and societies that help create content.

Governance: By committing to best corporate governance practices and believing that this is a form of value creation, governance is managed by the company.

Employees: Administrative employees are contracted by the company's CLT and the other teams are outsourced.

Communities: The relationship with the community is on more than 3000 medical or health professional enrollments in less than a year.

Technological activity: The technological activities performed by the platform are subscribers' access and access to content.

Technological capacity: IT infrastructure is outsourced to the clouds.

Partner Network: Medical associations and societies help create content.

Cost: The cost structure is IT infrastructure, support staff, development team, and employees.

Revenue: The company receives financial support from its maintainer, as it has no revenue.

Social Impacts: Social impact is content creation and congress content delivery.

Social Benefits: The main social benefit is to enable doctors and health professionals to update themselves anywhere.

Technology costs: At the technology layer, the Technology cost structure involves outsourcing infrastructure and platform development and human resources.

Technological Benefits: The technological benefits provided by the Platform are to be the main channel for dissemination and distribution.

5. Conclusion

The company object of the study implemented the digital platform in early 2019 and has spread to all countries where it has its headquarters. The Brazil team contributes to the leadership of the global project, as he is also responsible for the digital transformation of the company in Latin America and for the production of content and technologies from digital channels. The choice of the digital platform allowed a series of benefits, mainly for the interested parties (doctors and health professionals), such as access to high quality medical content in a democratic and free way, without having to move.

Without the digital platform, it would not be possible to generate value, because without the new technologies they would not reach the most distant points of the countries that are in the project and would not reach the large number of health professionals. The old method consisted of the company's commercial representative paying for congresses and events for doctors, but it reached only a select and small audience of the company. The company is not obtaining any direct revenue gain with the implementation of the digital platform, but it reaches the interested parties with its digital channels, causing a true digital transformation.

A suggestion for the next research is to check how much the digital platform contributes financially to the company.

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29. ENTREPRENEURIAL BEHAVIORS IN IMPLEMENTATION OF ENTREPRENEURSHIP IN ORGANIZATIONAL STRUCTURES AND PROCESSES

Abstract: Entrepreneurial behavior is a key to implementing entrepreneurship in organizational structures and processes. Both a person, but also a team of people or the entire organization could be entrepreneurial, if they are managed by entrepreneurial managers stimulating and supporting entrepreneurship of employees and co-workers. Entrepreneurial behaviors should be analyzed to determine how they create and develop new ventures and generate organizational growth. The main aim of the article is to identify the level of entrepreneurial behaviors intensity in small enterprises. Article is based on own questionnaire research, conducted among 160 small enterprises in Poland in 2019. Analysis of research results indicated the highest intensity of proactive and innovative behaviors, and the lowest intensity of the occurrence of autonomous behaviors and behaviors in the area of competitive aggressiveness.

Keywords: entrepreneurial behaviors, management, organizational entrepreneurship, small enterprises.

JEL Classification: L26, D23, M54

1. Introduction

In management sciences, being entrepreneurial is connected with having new ideas, recognizing possibilities and assessing the chances of their achievement, predicting results, as well as formulating goals and objectives on this basis. Therefore, the praxeological approach to the entrepreneur as the one who sets goals and cares for their efficient and effective implementation dominates (Moczyłowska, 2010).

Entrepreneurial behaviors generally refer to behaviors established during the entrepreneurial process (Kuratko et al., 2005). Broadly defining entrepreneurial behaviors, they include activities and events in which entrepreneurial actors introduce entrepreneurial pathways in organization (Bird, Schjoedt, 2009). Both a person, but also a team of people or the entire organization could be entrepreneurial, if they are managed by entrepreneurial managers stimulating and supporting entrepreneurship of employees and associates (Moczyłowska, 2010).

Entrepreneurial behavior is a comprehensive term that covers all activities undertaken by members of the organization related to the identification, evaluation and implementation of entrepreneurial opportunities (Goodale et al., 2011). Entrepreneurial behaviors explain what entrepreneurial entities do and how they adopt the entrepreneurial processes. A review of the literature in this area focuses on the behavior of entrepreneurs that can help them in proactive action on the path of entrepreneurship. These behaviors are perceived as specific and observable actions and tasks that help achieve goals and practice the entrepreneurship. Entrepreneurial behavior should be analyzed to understand how they create and develop new ventures and generate economic growth. At the management level, managers who demonstrate entrepreneurial behaviors consistently convey a strategic vision to their subordinates, and this generates consistent teamwork, supports innovation and creates favorable working environment in organizations (Kamil, Nasurdin, 2015).

To disaggregate entrepreneurial behavior, it is possible to adopt one of the classifications within organizational entrepreneurship. It seems particularly useful to use the dimensions of entrepreneurial orientation, which construct is closely related to the behaviors of members of the organization at various organizational levels. The multidimensionality of entrepreneurial orientation is widely

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described in literature. One of the most common approaches is the one of Lumpkin and Dess (1996), which distinguishes five basic dimensions: proactivity, organizational autonomy, competitive aggressiveness, innovation and risk-taking. This approach has been adapted and used to disaggregate entrepreneurial behaviors in this paper.

A detailed analysis of individual types of entrepreneurial behavior with specific recommendations for managing organizations is still modest, especially if it relates to the small and medium-sized enterprise sector. This generates a research gap that can be filled in a variety of ways, depending on the typology of entrepreneurial behavior. Adopting a typology of entrepreneurial behavior analogous to that of the entrepreneurial orientation construct is a novel research solution. Considering the above, the main aim of this paper is to identify the level of entrepreneurial behaviors intensity in small enterprises.

2. Theoretical Background

Entrepreneurship research refers to two main areas: capacity development and resource development, which researchers have carried out extensive research on, both selectively and in an integrated way. Shane and Venkataraman (2000) recognized identification and use of opportunities as the most important part of the entrepreneurial process, and a recognition of opportunities is usually seen as the initial entrepreneurial behavior. Sirmon et al. (2007), emphasizing the important role of resource development, opted that new ventures should acquire and integrate resources to build capacity, improving adaptability to the external environment to better deal with risks and market opportunities. However, many researchers prefer an integrated view of opportunity development and resource development (Zampetakis, Moustakis, 2007), believing that entrepreneurial behavior refers to a series of activities where entrepreneurial organizations creatively develop resources to capitalize on opportunities and generate added value. Dynamization of entrepreneurship development opportunities and resource development are difficult to separate because the assessment of opportunities can be achieved based on resource recognition (Haynie et al., 2009), while resource acquisition and integration exist throughout the process of creating opportunities and facilitate the effective use of opportunities (Haugh, 2005). Based on an integrated view of the entrepreneurial process, it can be concluded that the relationship between opportunity and resources evolves as a complex and dynamic interaction process, and therefore entrepreneurial behavior is a form of systematic, integrated developmental behavior taking into account opportunities and resources (Cai, Peng, Wang, 2018).

Lin (2006) indicated the possibility of analyzing entrepreneurial behavior from several perspectives. The first perspective refers to entrepreneurship as a process and focuses on the entrepreneur's starting path, acquisition of experiences, struggle for survival in the market, as well as how much the organization and the environment are complementary (Lumpkin, Dess, 1996). The second perspective analyzes the problem in terms of content, focusing on the scale of the entrepreneur's entry into the industry, business characteristics and available elements of resources (Bruyat, Julien, 2000). The third perspective is to study the factors influencing the behavior of entrepreneurial units at different levels of the organization, their causes, correlations with other organizational values and the use of cooperation networks, etc. (Lin, 2006). The fourth perspective refers to strategic behavior, i.e. attitudes in the face of uncertainty and risk, innovation and strategic renewal (Lumpkin, Dess, 2001). The last, fifth perspective compares the organizational culture and entrepreneurial spirit of enterprises to find out if there are differences in entrepreneurial and conservative (non-entrepreneurial) behavior (Lin, 2006).

Entrepreneurial behavior is certainly compounded by the support of appropriate character traits, among which three personality traits stand out (Okholina, 2010):

- a) The need for achievement - defined as the tendency to choose and persist in activities that have a moderate chance of success or maximum opportunity for personal satisfaction without undue risk of failure.
- b) The need for self-determination - a person believes that their behavior results from their own decisions and judgments. People with an inner sense of control believe that they can control what is happening in their lives.
- c) Tolerance for ambiguity - entrepreneurial people tend to see ambiguous situations as desirable. By tolerating more ambiguity, entrepreneurial individuals confront a less structured, more uncertain set of possibilities, and actually bear ultimate responsibility for their decisions.

The fact that the entrepreneurial features are endowed with entrepreneur-owner and top-level enterprising managers responsible for the strategic areas of the organization's operations. However, other employees of organizations, often referred to as intrapreneurs, may also have entrepreneurial features. Ross and Unwalla (1986) portrayed intrapreneurial personality as:

- results-oriented rather than action-oriented;
- questioning the status quo;
- motivated by solving problems, introducing changes and innovations;
- frustrated bureaucratic system;
- ambitious and competitive.

It is generally assumed that enterprise creation is not an unintentional act and that entrepreneurial behavior is intended (Jebarajakirthy, Thaichon, 2015). Thompson (2009) defines the entrepreneur's intention as a person's personal belief that he will prepare a new business venture and consciously plans to do it at some point in the future, which confirms the legitimacy of using the theory of planned behavior to theoretically explain entrepreneurial behavior. Based on this theory, it is argued that attitudes, subjective norms and perceived behavioral control associated with entrepreneurial activities affect the intentions of entrepreneurs and entrepreneurial behavior (Liñán, Chen, 2009).

Developing entrepreneurial behavior is a long-term process, not an intention of one moment (Fayolle, 2005). Creating entrepreneurial behavior takes time and it is a process of acquiring knowledge about entrepreneurship, shaping values, developing intentions and behavior through the emerging and mature stages of entrepreneurship. In this approach, entrepreneurial behavior begins with the acquisition of entrepreneurial knowledge, because it can be a pre-emptive element of attitudes, subjective norms and perceived behavioral control associated with the start of entrepreneurship (Krueger, 2007).

From the point of view of organizational entrepreneurship, entrepreneurial organizational behaviors presented by members of the organization, not just the owner or top manager, are of key importance. Therefore, we are talking here about intrapreneurs. It was pointed out that intrapreneurs act as entrepreneurs because they implement their own ideas without being the owner of the enterprise. Many researchers have tried to understand the elements that stimulate or influence entrepreneurial behavior within an organization. Areas such as the external environment, the organization and its architecture, organizational strategies, management activities, research and development activities and organizational culture were analyzed as factors affecting intrapreneurial behaviors. Basically, two main categories of conditions have been identified in the literature on intrapreneurial behaviors: one relates to the external environment of the enterprise, the other to its organizational features (Taştan, Güçel, 2014).

Organizational entrepreneurship can be formal or informal. In the formal approach to internal entrepreneurship (Ferreira, 2001), the organization strives to facilitate the liberation of entrepreneurial behaviors and initiatives in every aspect. To a greater or lesser degree, such organizations promote a friendly working atmosphere, new ideas, properly reward and motivate entrepreneurial employees, encourage experimentation, propose key projects to people who feel stimulated by challenges, eliminate or reduce barriers to entrepreneurial activity, maintain wide and open communication structures etc. With regard to social learning, the more the organization sends signals that entrepreneurial behavior is an important and strategic goal of the organization, and the individual level of entrepreneurial behavior is expected and rewarded, the more likely employees will see opportunities to behave entrepreneurially. Such signals can be sent by many types of human resource management practices, such as personnel selection, training, given assessment, awards or the work project itself (Gasda, 2012).

Although some employees have a natural will to act entrepreneurially, some entrepreneurial behavior can be stimulated by the right attitudes and actions of managers. Entrepreneurial behavior is initiated in existing organizations to increase profitability, strategic renewal, support innovation, acquire knowledge about future sources of income and international success (Taştan, Güçel, 2014). Burgelman (1983) emphasizes that especially middle managers play a key role in supporting autonomous employee initiatives and play an active role in influencing intrapreneurial behaviors. Managers have better conditions for understanding each member of the team and can make decisions to which employees should apply corporate principles, and for whom the same principles should be omitted for greater independence and freedom of action (Hashimoto, Nassif, 2014).

It should be added that entrepreneurial behavior, in addition to motivation itself, requires recognition of the possibility of such behavior within the organization. One of the concepts in this case is recognizing possibilities as a cognitive process (Baron, 2006) and recognizing patterns as a key ingredient in recognizing opportunities (Baron, Ensley, 2006). The “situation” inside the organization does not affect staff behavior per se, but the fact that a certain situation is seen against the background of cognitive diagrams or maps affects behavior. Perception of the situation allows the observer to learn constantly. Learning does not require independent learning, because learning can also result from observing the behavior of others in specific situations.

For small enterprises, formal human resource management practices are less likely, and therefore informal practices will be more relevant to entrepreneurial behavior (Gasda, 2012).

Employee entrepreneurial behavior is perceived as intrapreneurial behavior, which is defined as the identification and use of opportunities by individual employees for the benefit of the whole organization (de Jong et al., 2011). By detecting and using opportunities, entrepreneurial behavior changes an organization’s business model or competitive profile. In the context of organizational entrepreneurship, entrepreneurial behavior does not have to have spectacular, overall organizational overtones. They can focus on everyday entrepreneurship, which means performing tasks in an entrepreneurial way, i.e. in an unconventional and innovative way, characterized by the tendency of staff to innovate and spontaneously engaging in activities beyond designated organizational roles to promote the interests of the organization, and thus supporting internal entrepreneurship (Morris et al., 2007).

In an informal perspective, organizational entrepreneurship refers to the autonomous behavior of employees (Ferreira, 2001) and occurs when the organization is not conducive to creating an atmosphere conducive to innovation and creativity. Such adverse circumstances shape specific skills of employees. In the case of individuals with personality traits such as determination, perseverance, creativity and courage, entrepreneurial behaviors and initiatives arise, although this may involve a threat to work, a lack of support and encouragement, repeated rejection of ideas and suggestions, breaking bureaucracy and acting outside specific organizational standards. These entrepreneurial behaviors are not common, but they are valuable for all types of organizations (Hashimoto, Nassif, 2014).

When it comes to the individual’s motivation to act for entrepreneurship, entrepreneurial behavior can be considered a decision to cooperate in a social dilemma. The individual level of entrepreneurial behavior can bring profits to the organization, but also causes individual costs (direct costs, e.g. workload, risk taking and opportunity costs) (Amit, Muller, Cockburn, 1995). From the employee’s point of view, such action is rational only if these costs are compensated by awards under the organization’s motivation system (Gasda, 2012). The exchange of costs - rewards, however, is not purely economic and does not have to be immediate. First, this exchange can be described as social, because in addition to the exchange of economic resources, social exchange also includes socio-emotional resources (Shore et al., 2011), such as recognition, respect, positive interactions with colleagues, trust of superiors, etc. Secondly, social exchange processes can generate employee motivation for entrepreneurial behavior because employees believe that these behaviors at the individual level pay off in the long run. Commitment today will bring results in the future, and an entrepreneurial employee can win a competition race against time for promotion with passive employees.

3. Methods

The research referred to entrepreneurial behavior implemented in 5 areas of the company’s entrepreneurial orientation: proactivity, organizational autonomy, competitive aggressiveness, innovation and risk taking in organizational activities and processes. Based on an earlier review of the literature on the subject, it was decided to adopt a classification for entrepreneurial behavior analogous to that for entrepreneurial orientation.

In the area of proactivity, the survey questions concerned behaviors aimed at monitoring trends and determining the future needs of customers and / or demand conditions (P1), introducing products / services, administrative techniques or operational technologies (P2) and undertaking activities proactively using awards and reinforcements on the part of managers (P3).

In the area of organizational autonomy, the survey questions concerned taking independent actions (A1), behaviors that allowed the creation of small autonomous groups to stimulate new ideas and projects (A2) and independent decision making on an ongoing basis, without each time seeking the consent of superiors (A3).

Behaviors under competitive aggressiveness area consisted in striving to introduce / copy products or services at lower prices and copy business practices (C1), strongly respond to the attack of competitive rivals (C2) and activities aimed at taking over customers or pointing out negative competitive features to customers (C3).

Innovative behavior in the study consisted of activities aimed at investing by the company in new technologies, modern equipment and facilities, research and continuous improvement (I1), striving for innovation by entering it in the company's strategy, mission and development plans (I2), and also creativity and going beyond the minimum duties assigned to him (I3).

Entrepreneurial behavior manifesting in risk taking by members of the organization at various levels was verified by adopting a bold attitude to maximize the likelihood of taking advantage of opportunities (R1), undertaking actions aimed at managing risk (R2) and deliberate taking of risk in action, even with the knowledge that some actions fail (R3).

A survey was prepared and carried out among 160 small enterprises from the Silesian Voivodeship in 2019. A managerial approach was also used in the study. One of the non-probability sampling, i.e. modal instance sampling, was chosen as the method of selecting respondents.

To assess the severity of behavior in each area, three evaluation questions were assigned to each dimension. The 5-point Likert scale was used for assessment. For evaluation, the descriptive statistics were used. After data collection, they were entered into a statistical program Statistica 12.

The research should be treated as an initial study, and was carried out to identify areas of further study rather than to generalize findings.

4. Results

When analyzing the results of surveys, using descriptive statistics, attention should be paid to the diversity of results both between individual areas and within specific areas of entrepreneurial behavior.

Proactive behaviors occur in the surveyed enterprises to the greatest intensity among 5 areas of entrepreneurial behaviors. The average rating for proactive behaviors is 3.85 on a 5-point scale, with the high intensity of behaviors being particularly visible in terms of monitoring market trends and market demand, as well as proactive actions. The relatively low standard deviation indicates a large agreement in the opinions of respondents.

Table 1. Organizational behavior within proactivity (n=160)

	Mean	Median	Q1	Q3	Variance	St. Dev.
P1	4.07	4.00	4.00	5.00	0.72	0.85
P2	3.47	4.00	3.00	4.00	0.93	0.96
P3	4.00	4.00	4.00	5.00	0.63	0.79

Source: own research

Behaviors related to autonomy was another area of entrepreneurial behavior analysis. In this area, the average rating of respondents was 3.45 on a 5-point scale, and it was the second lowest assessment of the intensity of behavior. This could have been due to the nature of the research group itself - small enterprises - in which management is focused on the owner who is reluctant to accept independent actions and does not promote independent behavior.

Table 2. Organizational behavior within autonomy (n=160)

	Mean	Median	Q1	Q3	Variance	St. Dev.
A1	3.73	4.00	3.00	4.00	0.73	0.85
A2	3.34	3.00	3.00	4.00	1.02	1.01
A3	3.28	3.00	2.50	4.00	1.23	1.11

Source: own research

Behaviors in the area of competitive aggressiveness are least intensively presented in small companies. The average answer here is only 3.34, and the mark in the question about finding ways to beat the competition and indicating the negative characteristics of competitors to customers, as the only one fell below 3.00 (2.98). In this question, the high level of standard deviation indicates a significant diversity of respondents' answers.

Table 3. Organizational behavior within competitive aggressiveness (n = 160)

	Mean	Median	Q1	Q3	Variance	St. Dev.
C1	3.65	4.00	3.00	4.00	0.95	0.97
C2	3.40	3.00	3.00	4.00	0.91	0.95
C3	2.98	3.00	2.00	4.00	1.27	1.13

Source: own research

In small companies, innovative behaviors occurred at a relatively high intensity - the average rating is 3.80 on a 5-point scale. The intensity of innovative behaviors is second only to proactive behavior and to a minimal extent. Respondents confirmed the occurrence of behaviors aimed at introducing new products and improvements, and to the greatest extent to creativity and going beyond the minimum duties assigned to him (4.11).

Table 4. Organizational behavior within innovativeness (n = 160)

	Mean	Median	Q1	Q3	Variance	St. Dev.
I1	3.71	4.00	3.00	4.00	1.00	1.00
I2	3.58	4.00	3.00	4.00	0.84	0.91
I3	4.11	4.00	4.00	5.00	0.79	0.89

Source: own research

Risky behaviors in organizational terms were rated 3.62 on a 5-point Likert scale. Behaviors aimed at risk management, and therefore professionalization in the approach to risk, are most visible in this group. The relatively low level of standard deviations for this group in relation to the entire study indicates that the response variation is not very wide.

Table 5. Organizational behavior within risk taking (n = 160)

	Mean	Median	Q1	Q3	Variance	St. Dev.
R1	3.68	4.00	3.00	4.00	0.73	0.86
R2	3.78	4.00	3.00	4.00	0.65	0.81
R3	3.39	3.00	3.00	4.00	0.98	0.99

Source: own research

Summing up the results of the study of entrepreneurial behavior in small businesses, it should be noted that only proactive and innovative behaviors can be considered satisfactory here, while other types of behavior clearly require management actions to intensify them in the future.

5. Conclusion

Entrepreneurial organizational behaviors are not sufficiently reflected in the literature on the subject, especially when it comes to their occurrence in small enterprises, which are not inherently conducive to organizational entrepreneurship. This justifies the need to intensify research in this area, especially when it comes to the detailed identification of areas of occurrence of specific entrepreneurial behaviors, and even individual organizational activities.

When summarizing the empirical research carried out, it is important to underline the diverse assessment of the intensity of entrepreneurial behavior within five areas of entrepreneurial orientation. The highest intensity of behavior is characterized by the dimension of proactivity and innovation, while the lowest intensity is manifested by the dimension of autonomy and competitive aggressiveness. The advantage of the research is focusing only on small enterprises in Poland, and further research steps may be to extend the research to other countries so that it becomes possible to carry out a comparative analysis.

When it comes to possible applications of the research, it can be useful in management of a small enterprise, indicating areas that require additional management measures or tools to intensify organizational behavior in these areas.

At the same time, one should indicate the limitations of the conducted studies, among which should be mentioned the lack of representativeness of the research group and the non-random sampling method used. A certain limitation may also be the quite general form of survey questions, which could be clearly divided into a much larger number of specific questions.

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30. MILLENNIALS IN THE CONTEXT OF HUMAN RESOURCE MANAGEMENT

Abstract: The article presents the characteristics of Generation Y, several definitions of human resource management; through an attempt to answer the question on what is really important for this generation it indicates how to effectively and wisely manage the Millennials. Millennials occupy almost 50% of jobs on the market, thus they will undoubtedly influence business decisions related with managing the human capital in today's enterprises. Based on literature review and the survey, the authors created an employee profile representing the Y generation. The main purpose of the study was to identify employee expectations towards the employer and the vision of his own career. The results allowed determining employees' participation in company management, and life values of generation Y. The Millennials are aware of the so called „employee's market”, and working conditions in more developed countries, and simultaneously they are mobile and not afraid of challenges. Companies, apart from taking care of their own interests, should adjust to the expectations of this generation, because it constitutes a majority of the labor force on the present job market. The key is a responsible human resources policy, mainly aimed at creating proper working conditions thanks to which the company will win valuable and loyal employees.

Keywords: generation Y, human resource management, management, millennials.

JEL Classification: M51, M54

1. Introduction

Nowadays, each enterprise conditions its effective operation on many factors. This effectiveness of functioning in the contemporary environment influences, amongst others, the proper use of the basic factor that creates every organization – meaning the human work factor. Competition constitutes the principal characteristic of a market economy, which directly translates to competitiveness that must be an attribute of businesses aiming for success. It is becoming very clear that a competitive enterprise should be characterized by ability and flexibility to adapt to the changing conditions on the market, on which it functions, and strive for making business decisions that ensure achieving long-term competitive advantage (Kraszewska, Pujer, 2017). It is becoming obvious that an appropriate process of human resources management directly affects competitive advantage in the area of “(...) the functioning of the organization in account of existing competition, as well as minimizing the costs related with this functioning” (Kozioł, Piechnik-Kurdziel, Kopec, 2000). Millennials, also referred to as Generation Y, increasingly mark their presence on the job market. According to Stańczak from Bain&Company – one of the best consulting companies in the area of management – this generation in Poland already includes approximately 9 million people. This may mean that by the end of 2020 the Millennials will occupy some 50% of jobs on the market, thus they will undoubtedly influence business decisions related with managing the human capital in today's enterprises (Kłobukowska, 2017). This article presents the characteristics of Generation Y, several definitions of human resource management; through an attempt to answer the question on what is really important for this generation it indicates how to effectively and wisely manage the Millennials.

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2. Millennials vs. Human Resource Management. Literature Review

It is difficult to start the discussion on the subject of this article without defining the concept of human resource management. For example, one of the simplest definitions presented in the literature related with human capital management is: “human resource management (HRM) is about how people are employed, managed and developed in organizations.” (Armstrong, Taylor, 2020). Human resource management is directly connected with employment, remuneration, development and guiding people in the organization. This issue may be considered in account of internal and external contexts; depending on the adopted perspective of analysing this issue in the source literature, various definitions of the HRM concept are presented. Factors covering HRM’s internal and external contexts are presented in the table below.

Table 1. Factors covering HRM’s internal and external contexts

Internal HRM context	External HRM context
<ul style="list-style-type: none"> – Strategy; – Structure; – Culture of the organization; – Size of the organization; – Stage of the organization’s development; – Technology; – Management systems; – Values and management styles of managers 	<ul style="list-style-type: none"> – Economic factors; – Technological factors; – Legal and political factors; – Social factors; – Demographic factors; – Cultural and ethical factors; – and others.

Source: Own elaboration based on Piasecki, P., Ławrynowicz, M. (2017).

“HRM, in theory and in practice, encompasses a multidisciplinary field, bringing together a diverse body of scholarship from various social science disciplines that are concerned with managing work and people. An early definition of HRM by Michael Beer and his colleagues focuses on all managerial activity affecting the employment relationship: *Human resource management (HRM) involves all management decisions and actions that affect the nature of the relationship between the organization and employees – its human resources*” (Bratton, Gold, 2017). According to Armstrong, the management of human resources constitutes a strategic, coherent and comprehensive approach to issues related both the managing as well as developing human resources in company structures. However, the author notes that every aspect of this process constitutes an important element in managing the organization as a whole. According to Armstrong, human resources management perceives people as a valuable source of the company’s successes and treats them as a tangible asset, therefore it is very important for every organization and its proper operation to guarantee best leaders and possibilities to fully developed individual abilities (Armstrong, 1998). It is also worth noting the definition of HRM of P. Boxall, according to whom managing human resources is “the management of work and people towards desired ends, is a fundamental activity in any organization in which human beings are employed” (Boxall, 2008).

Armstrong defines the following goals of human resources management, as presented in the Figure 1.

HRM concentrates on people and on the organization. People constitute the main element of every organization. Therefore, it becomes clear that the organization with more productive employees has a bigger chance of success. In addition, the organization’s adherence to so-called good practices in regard to human resources contributes to the satisfaction of employees, who work more willingly and harder to satisfy the clients (Stewart, Brown, 2019). Successful corporate leaders recognize that their competitive edge in today’s market place is their people. They also acknowledge that few organizations know how to manage human resources effectively, primarily because traditional management models are inappropriate in our dynamic work environment (Bratton, Gold, 1994).

It is common and popular to say that people are our most valued asset (Marchington, Kynighou, Wilkinson, Donnelly, 2016). As already mentioned, the Millennials (also referred to as the Generation Y) more intensely mark their presence on the job market, hence this article is dedicated to them. “The Generation Y is defined differently in various literature sources, and the origin of generational cohorts’ analysis was initiated in the field of human resources management research. Then, it was extrapolated to other science areas” (Szmelter-Jarosz, 2019). Since there are visible deviations in the provided dates for this group, for the purpose of this article it was adopted that representatives of this generation

include people born in the years 1981-2000. These young people are characterized by a lower level of loyalty towards employers than the previous generation. People from the Generation Y are mostly well educated, focused on development and possibilities of obtaining new experiences, as well as developing their interests. They are also credited with flexibility and openness to change, readiness to learn, and reluctance to long-term obligations, to a higher degree than previous generations. These characteristics are connected with the need to adjust to the quickly changing environment. The Generation Y is focused on passion and friendly atmosphere at the work place; they like to work in groups but maintaining distinctiveness (Kaczyńska, Kałuziak, Stankiewicz-Mróż, 2015).

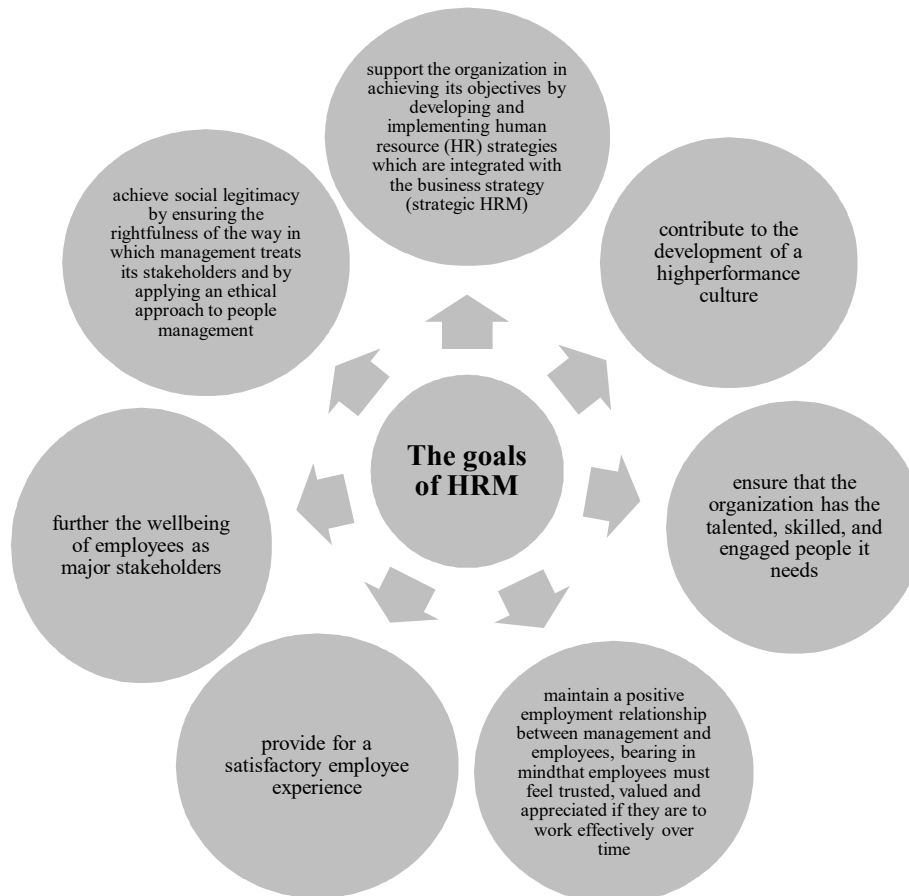


Figure 1. The goals of HRM

Source: Own elaboration based on Armstrong, M., Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. London: Kogan Page Ltd 15th edition.

Looking at the above considerations concerning human resource management it may be stated that Representatives of this generation do not have any significant difficulties with developing distance social and professional relations. They also demonstrate multitasking abilities, which are manifested through working for several employers or combining employment with own business activity. With the use of available tools, they are great at managing their time and possibilities in combining even several professions at one time (Piwowski-Sulej, 2009). Research results presented in global literature demonstrate that the principal differences between the Generation Y and previous generation relate to mentality, manner of work, view of the world, viewing oneself, sense of achievement, and own ambitions (Plink, 2009). According to a British-American author and motivational speaker, S. Sinek: "Apparently Millennials, as a generation – which is a group of people who were born approximately 1984 and after are tough to manage, and they're accused of being entitled, and narcissistic, self-interested, unfocused, lazy" (Sinek, 2018). This statement does not shed a good light on the Generation Y; taking into consideration that this is quite a significant group on the job market, an attempt was made to further characterize this social group. Persons currently aged 20 to 40 are the group of employees, who require a specific approach from the management. "There's a lot of debate

about the benefits and drawbacks of the millennial generation's arrival to the workforce. But their professional presence is indisputable: Millennials — defined as people born between 1981 and 2000 - make up more of the current workforce than any other generation. They are on track to comprise up to 50% of the workforce by 2020 and 75% of the workforce by 2025” (Mercier, 2018). As opposed to other generations, according to Espinoza and Ukleja “Millennials are the first generation that can access information without an authority figure. They are wizards with technology, visionaries with high expectations; armed with knowledge or the know-how to access it, they proclaim themselves as ready. Ready for any challenge, ready for more responsibility, and, as John Mayer sings: *Waiting on the world change*. They perceive themselves to be ‘in waiting’, held back by well-meaning elders whose best years have come and gone. Millennials respect their elders for what they done but relegate their utility to the role of mentor, career counselor, and cheerleader” (Espinoza, Ukleja, Rusch, 2010). It is therefore visible that today's youth is quite different than earlier generations. This is affected not only by the fact that this group is made of young people with not much life experience, who are only starting to form their social and economic position, because these attributes always differentiated the representatives of young generations. Today's youth is different mainly because it is functioning in the social and cultural area in a completely different manner, shapes their relations differently, and uses the technological progress in a special way (Howe, Strauss, 2000). The specificity of the Generation Y is undoubtedly influenced by the special historical context, within the scope of which young people are creating their identity; this is a generation that grew up in a completely different social and economic reality than previous generations (Kisiel, 2016). The system of perceiving the world and its borders is different for this generation. Raised in the era of the Internet, almost spending their entire lives in the cyberspace, representatives of Millennials appreciate independence and lack of barriers, and often have unrealistic expectations (Meister, Willyers, 2010).

3. Methodology

The article presents the characteristics of Generation Y, several definitions of human resource management; through an attempt to answer the question on what is really important for this generation it indicates how to effectively and wisely manage the Millennials. The aim of this paper was to create an employee profile representing the Y generation. The main purpose of the study was to identify employee expectations towards the employer and the vision of his own career.

The survey using the questionnaire was carried out in January 2020. The entire questionnaire contained 30 questions. This article uses only a fragment/part of the collected empirical data. The results of own research presented in this article are based on quantitative studies conducted in the form of a survey in a group of 75 respondents from the Silesian Voivodeship (Poland) – 58 surveys were completed correctly and delivered on deadline. Participants of the survey were the representatives of the discussed Generation Y group – for the purpose of this article it was adopted that representatives of this generation are people born in the years 1981-2000. Participants included women and men, who work in both private and public sectors. Some respondents were students at the time of completing the research. This article presents only some answers of the respondents, which in principle allow defining their priorities and characteristics related with the studied area.

4. Analysis of Conducted Research

Respondents were asked to define the main benefits of starting professional work. Most of them – as much as 63.8% - attach great emphasis to gaining experience through participation in projects, conferences, and training. Undoubtedly this results from the fact that the group of respondents includes young people, for whom this aspect constitutes an inseparable component of further development, possibility of getting a promotion, or finding a better job. The second most frequently selected purpose of undertaking work was the financial aspect; only 10.3% of the respondents were driven by prestige and respect when starting a job. None of the respondents indicated any other reasons than listed in the survey.

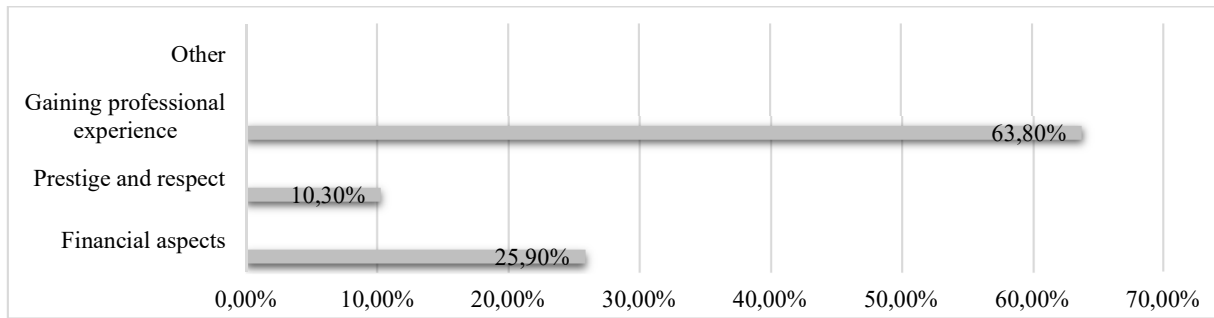


Figure 2. The main purpose of starting work by representatives of the Generation Y

Source: Own elaboration

The survey asked, amongst others, what mode of working is preferred by respondents. A little over half of them claimed that they prefer a flexible working time, and 41% prefer fixed hours. Only 4% of respondents had no preferences.

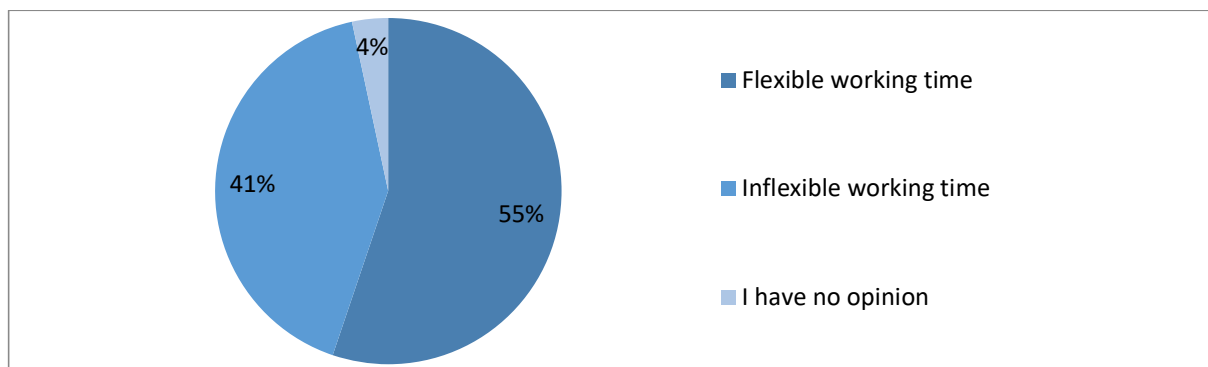


Figure 3. Analysis of the type of working time preferred by the Generation Y

Source: Own elaboration

The data in Figure 3 demonstrate a small difference between preferences concerning flexible and fixed working hours. Most respondents, however, selected flexible working hours, which may result from the fact that setting working time according to own preferences gives more mobility and freedom, as well as a possibility to develop own passions and interests. Today's young employees have a different vision of the company and a different manner of perceiving themselves on the job market. It is becoming noticeable that striving for professional success at all cost is losing in comparison with a balanced division into private and professional life. As demonstrated by the conducted research, Millennials do not want to work at the cost of their private lives. More than half of the respondents - 74% - are willing to work remotely during hours set by them, and 23% prefer to work in the company's seat.

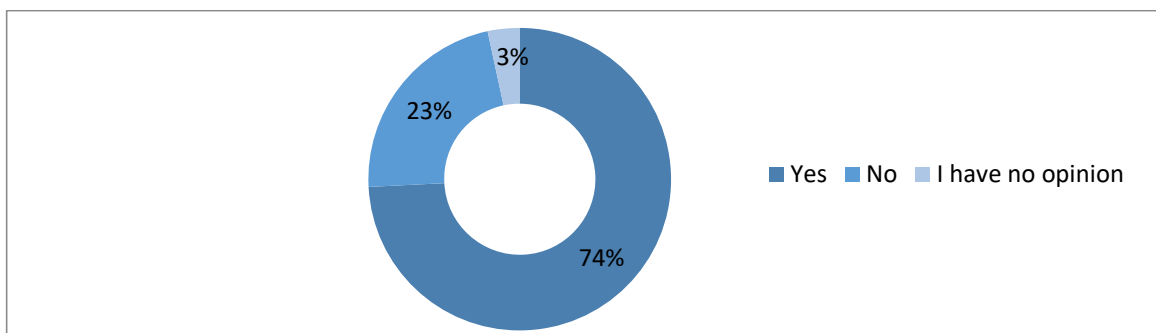


Figure 4. Willingness to work remotely (outside of the company)

Source: Own elaboration

As demonstrated by the conducted research, the Millennials want to co-create an organization in which they work and want to be a real part of this organization. They are eager to take on new challenges, they express own opinions related with the company’s vision, and, simultaneously, do not get attached to a company that does not respect their needs. The diagram below presents a list of answers to the question on how big is the influence of the possibility to express own opinions and observations on the co-creation of the company’s vision. For 19% of respondents this was very important, and 53% thought it was important. 28% of respondents decided that expressing own opinions and observations does not have any significant influence on co-creation of the company’s vision.

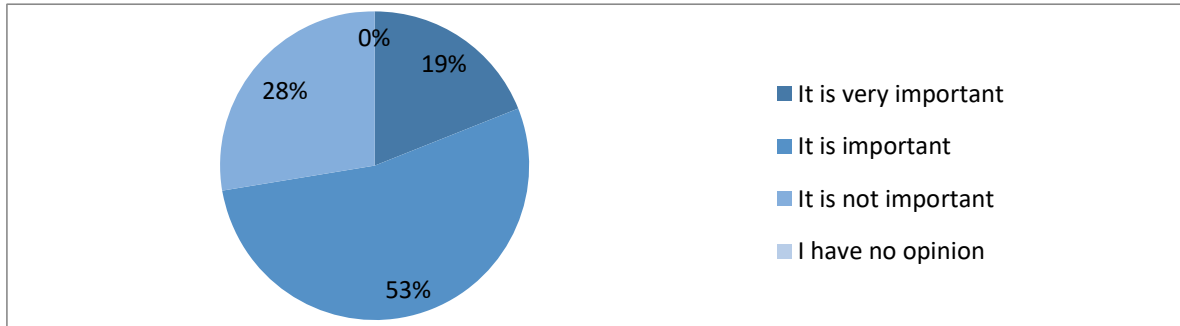


Figure 5. Influence of the possibility to express own opinions and observations on the co-creation of the company’s vision

Source: Own elaboration

Another important issue discussed in the survey were the most important values in the lives of the Millennials.

Data presented in figure 6 demonstrate that in spite of different outlooks on life, family is still the most important value – it was chosen by 47% respondents. Work came second, which surely results from the fact that ensuring decent living conditions requires substantial financial means. It is a little shocking that respondents placed work above health – we only have one health. It is possible that this was caused by the fact that respondents were young people, who rarely experience serious health problems in comparison with older generations, thus they do not appreciate health so much yet.

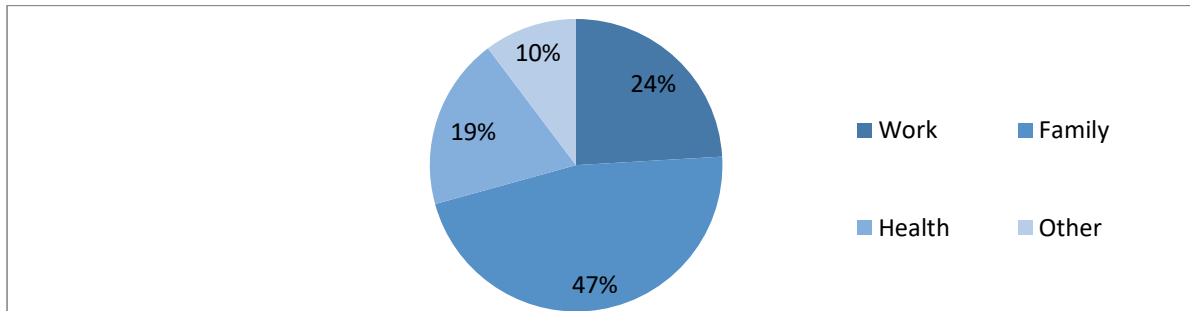


Figure 6. Values shared by the Generation Y

Source: Own elaboration

Analysing the above data on the Generation Y and concentrating on the issue of human resource management, it should be noted that the Millennials are usually very ambitious, well educated, creative, curious of the world, willing to take on new challenges, and aiming at achieving defined goals. They prefer working on projects, which assume achieving a specific goal at a specific deadline. The Millennials have high perceptions of themselves. They think that they work better and faster than other workers. They have high expectations of their employers, and they want direct and fair input from managers. They want managers to be involved in their professional development, because it is all about them in many ways – it is not just about the company. They seek out creative challenges and view peers as vest resources from whom to gain knowledge. They want to be recognized and valued the first day on the job. They want small goals with tight deadlines so they can see their own

development as they slowly take ownership of a new role. The Millennials are high performance (with a lot of potential) and high maintenance (Espinoza, Ukleja, Rusch, 2010). In terms of the human resource management process, particular importance is placed on the differences in the system of values of various generations (Korombel, Ławińska, 2019). Analysing the detailed characteristics of the Generation Y as well as the period, during which this generation was growing up, it may be noticed that undoubted attributes of the young generations include creativity, multitasking, and a brave approach to challenges. On the other hand, these people often have too high requirements and expectations. They were raised with a belief that they simply deserve many things – just like that. The Millennials talk about their expectations with ease, because they are aware of their own value. It may be stated that they are very talented but very demanding employees. The feeling of weariness, monotony, lack of private time – are some of the important reasons for leaving a job almost overnight (Hetig, 2019). The Millennials are aware of their own value on the job market and believe in their competencies. Therefore, they are undoubtedly a challenge for the managers of modern organizations, who may gain creative, ambitious employees willing to take on challenges, if only they listen to the voices and needs of this group. People from this generation are particularly open; they want to improve work in the company, and they should have a possibility to participate in managing the enterprise. This is made possible by applying, amongst others, a system of introducing changes through sharing ideas with the management.

5. Conclusion

As opposed to older generations, the Millennials are not easily satisfied with stability and safety. They are willing to take risk, and they ambitiously strive for achieving own goals, yet without losing the will to develop own passions and appreciating free time. Human resource management should, therefore, comprehensively cover also the personal development of representatives of the Generation Y. This is possible thanks to organized training, additional funds for education, and an appropriate and interesting policy of both horizontal and vertical promotions in the company. To work more effectively and efficiently, the Generation Y should feel that they influence the company's functioning and constitute its integral part. Young employees additionally appreciate a good atmosphere at the work place, access to new technologies, as well as a feeling of accountability and responsibility. Contrary to what may be expected, financial aspects have secondary importance for this generation, which definitely constitutes one of the main differences in comparison with earlier generations. Managing the Generation Y is very different than managing older generations and is much more difficult. This generation has a different system of viewing the world and its borders, including country borders. The Millennials are aware of the so called „employee's market”, and working conditions in more developed countries, and simultaneously they are mobile and not afraid of challenges. Companies, apart from taking care of their own interests, should adjust to the expectations of this generation, because it constitutes a majority of the labor force on the present job market. The key is a responsible human resources policy, mainly aimed at creating proper working conditions thanks to which the company will win valuable and loyal employees. Building a feeling of belonging, ability to affect the company's vision, creating a system of additional benefits, a transparent career path, and possibilities of continuous development and improving competencies based on modern technologies, flexible working hours and work conditions are only some factors that influence motivating the Generation Y. Coaching and mentoring are also very interesting and worth mentioning, since they allow for the development of the young generation in the organization. This is a good method to both raise self-confidence and to find areas where improving qualifications and skills are required. However, these elements are so interesting that undoubtedly they deserve a separate article and will be discussed in other publications of the authors.

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31. ROLE OF CORPORATE SOCIAL AND ENVIRONMENTAL RESPONSIBILITY IN PROFITABILITY OF MANUFACTURING COMPANIES IN EUROPE – CLARIFICATION OF ENVIRONMENTAL SUSTAINABILITY AS PART OF CSR/CSER

Abstract: Our future depends on resources and how we learn to manage them. This implies, we as humans and our human behaviors in combination with resources availability and management will or will not have a future. A major objective of this article is to review the differences between the Corporate Social Responsibility (CSR) in regard to the effect of inclusion of Environmental Protection and Management into the CSR of manufacturing companies and to examine the role of Corporate Social and Environmental Responsibility (CSER) on profitability of these companies. The research focuses primary on elaborating the differences of CSR vs. CSER and Social Responsibility vs. Sustainability. Definitions and involved elements will be reviewed regarding their possible influence on profitability and environmental activities of the companies. For this an initial literature review is conducted to sharpen the definitions and to lay ground for future data analysis. In result, the found evidence shows a need for a clear distinguishing of social and environmental aspects as necessary for establishing proper determinants of the environmental aspects within CSR. Consequently, the environmental aspects within CSR will become measurable and their impact on environmental efforts as well as on profitability can be determined. This paper represents a work in progress of a PhD dissertation and investigates the terminology and possible methods to be used for future empirical research.

Keywords: circular economy, CSER, CSR, environmental management, recycling, waste management.

JEL Classification: Q3, Q5, O13, P42

1. Introduction

Recognizing the human impact on Earth (World Economic Forum, 2015), three main issues arise: the climate change itself, caused by green-house effect, as well as multiple negative effects of Industrialization and Agriculture impacting the environment and humanity. Secondly, the arising scarcity of raw materials that already causes volatility of prices and has had and will have geopolitical impacts. Thirdly, with Industrialization and Globalization, we come to face social and environmental inequality on many levels, locally and globally. Some of the above-mentioned problems have conflicting goals and therefore require prioritization, innovation and smart solutions directly at the manufacturing level.

Sustainable resource handling and environmental protection is at center of many initiatives and is necessary and important for each producing company and industry. Improved production technology and already existing environmental management systems might be not enough so Recycling, improved Supply Chains, Substitution, Re-Design as well as new or changed mindset on company and industry-level will be critical to sustain each business and drive welfare for humankind and climate.

Cost effectiveness, environmental protection and welfare can be conflicting goals for an enterprise. In the last 50 or more years multiple concepts emerged on how to address and measure those topics on the enterprise level (Bansal, Song, 2017). One of those concepts is the CSR report, that has become a widely used and required report by business and societal communities in developed and developing countries. Even though, initially the CSR was used to reflect rather social concerns, it grew overtime to add environmental aspects (Linnenluecke, Griffiths, 2012). At the same time, the definition of sustainability became broader including not only environmental but also social aspects likewise in the everyday usage as well as in scientific community.

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Since some or most of the three above mentioned concerns for the humanity, climate change, raw material scarcity and social and environmental inequality, find to some extent its way into the CSR, the CSR can be considered an important element to assert its impact on the environmental activities and profitability of manufacturing companies. Particularly the environmental aspects and treatment of scarce materials as part of the first will be at center of later data analysis. The focus on the link of CSR/CSEER on environmental aspects in combination with treatment of scarce materials within European manufacturing companies has not yet been conducted. While the earlier research has shown mostly a positive relation between CSR and profitability of different manufacturing companies in various regions, as well as it has been found, that some aspects of CSR produce stronger positive correlation on profitability, the novelty here will be the specific combination of CSR impact on environmental activities and then subsequently on profitability of a manufacturing companies in European region.

This paper represents an initial element of the above stated research and aims at elaborating the differences of CSR vs. CSEER or Social Responsibility vs. Sustainability. The definitions and involved elements will be as well reviewed regarding their possible influence on profitability and Environmental activities of the companies.

2. Overview and Problem Statement

The initial question that started the research was whether an optimized metal recycling can help with sustainability and create higher profitability for manufacturing companies? A somewhat broader question behind it was: How could the environmental goals and company performance be improved at the same time?

In the ideal world, two things need be addressed in the company. First, there should be a clear strategy for social and environmental issues within a company, led by Top Management and reflected in the CSR report. In a multi-national company social and environmental requirements and understanding can even vary from country to country. And a smaller company will anyway be better off by combining the efforts. Additionally, a position of a Chief Sustainability Officer and a Corporate Social and Environmental Responsibility Committee that would combine both Social and Environmental issues would help to use the CSEER as an effective Management Tool and lead the efforts thru the company. This article will mostly focus on the issue of what helps and how best manage the Sustainability efforts in a manufacturing company.

Second part of the solution is of a practical nature and would depend on each company and how far their Strategic Management is evolved. Here, involved departments should receive tools necessary to carry out effective waste management. I.e., a predictive modelling and waste reporting should be established in Controlling. Clear guidelines and instructions would be created in the CSR committee and carried out in each department. The CO₂ impact calculation through avoiding fresh metal intake into the metal processing circle between 1st Metal Users and manufacturing companies by cutting out the smelters, miners and recyclers (transport, handling and capital cost can be saved and used as additional profit for both cooperating companies).

Hence, we arrive at Corporate Social Responsibility (CSR) and its possible impact on Environmental Management process within manufacturing companies. Through multiple previous empirical research studies, it is to be expected that CSR has a positive effect on profitability (i.e., Crane et al., 2008; Freedman, Jaggi, 2010; Khojastehpour, Johns, 2014, etc.). However, this would need to be proved within this research, as this evidence was not verified yet for manufacturing companies in Germany/Europe (at least no article was found in high quality journals, i.e. Emerald or similar).

At the same time, we would like to understand the difference between the Social and the Sustainability elements of CSR, and specifically focus on the measurable pieces of Sustainability. For this the article will review in the already published articles how far Social and Sustainability within CSR' structure function as a whole and how the Environmental aspects are exactly helping with Environmental Management within the companies and whether it for itself influences profitability.

3. Research Model and Theoretical Background

3.1. Research Model

To prove the main hypothesis “Companies will rather follow Social & Environmental responsibilities if it helps their profit: Corporate Social and Environmental Responsibility (CSER) helps manufacturing companies to improve their profitability”, an initial model was created to enable in-depth research of the main question, as shown below (Figure 1).

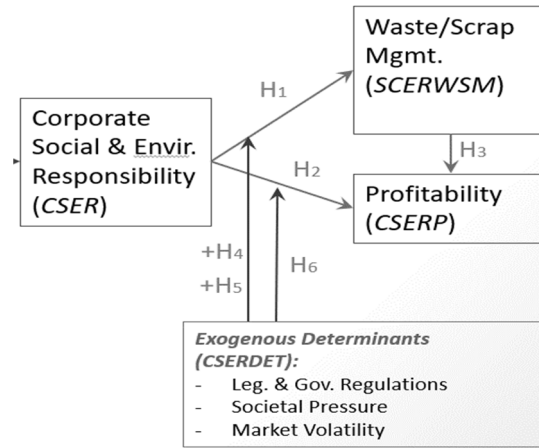


Figure 1: Initial research model CSER impact on waste management and profitability

Source: own elaboration

The model will be verified based on the published CSR reports of Tier 1-4 manufacturing companies and Original Equipment Manufacturers (OEMs). The selection of 50-100 such companies with known track record of published CSR reports from the past 8-10 years will be conducted. As well related secondary data for the environmental activities of those companies will be collected. The specific determinants necessary to fully develop the model will be established in the second phase of the literature review. The so collected 500-1000 observation will provide a reliable prove of the model. A regression analysis or panel analysis are considered fitting to conduct further studies.

Initial collection of the hypotheses to be verified has been established as shown below:

Overarching Hypothesis: Companies will rather follow Social & Environmental responsibilities if it helps their profit: Corporate Social and Environmental Responsibility (CSER) helps manufacturing companies to improve their profitability.

H1: CSER will have positive impact on Waste/Scrap Management (WSM) of a company.

H1ii: Parts of CSER, (i.e. & specifically, Environmental Management), have positive effect on WSM.

H2: CSER will have positive impact on Profitability.

H2ii: Parts of CSER, (i.e. & specifically, Environmental Management), have positive effect on Profitability.

H3: WSM have a positive impact on Profitability.

H4: Pressure from the Customers, Society and Stake Holders will positively impact optimization of CSER/WSM.

H5: Tougher regulations on CO2/others will positively impact optimization of WSM.

H6: Market Volatility will have either moderating or enhancing effect on Profitability.

The cause and effect model is described in the Figure 2. While the effect of the CSR/CSER can be expected to be positive on the profitability of a company, (while still needed to be proved in this particular case), the effect of the environmental efforts on profitability, specifically the example of waste/metallic scrap treatment can be moderated by the exogenous factors. This can be changes in the legislature of a country as well as market price volatility for scarce/commodity materials. The societal aspects, positive or negative perception of the topics or other political/geo-political events can have as well moderating effects on the CSR/CSER meaning for the company internally and externally and on the environmental initiatives at the same time.



Figure 2. Cause and Effect Model of CSER on Profitability

Source: own elaboration

3.3. Theoretical Background

To further define the model and causality as well as methodological approach, it is necessary to understand the impact of CSR/CSER on Waste management/Recycling within a company. For this, we first focus on relation of Sustainability, in this case the Environmental aspects and their management, and Social issues within CSR/CSER.

The guiding question for this approach is the difference that lies within purely Social topics vs. Sustainability or Environmental issues. As the main research topic is to understand whether Waste Management on the example of optimized recycling loops between two industry branches, manufacturing and 1st Metal Users, will improve environmental foot-print for both companies and their profitability, it is critical to distinguish the effect of the environmental management vs. Social Responsibility activities in its influencing the profitability. It is necessary to assure, the relations from various CSER aspects on profitability are clearly defined and measurable and do not mingle.

For this, a review of various articles from renowned publications (i.e. Emerald Insights, EBSCO, Science Direct, etc.) have been searched to find articles related to CSR and Environmental/Sustainable Responsibility and their relations. Following Boolean key words were used in combination: “CSR manufacturing companies Europe”, “CSR profitability manufacturing Europe”, “CSR "environmental management" Europe”, “environmental CSR”, “environmental management manufacturing Europe” leading sometimes to over 6000 hits. The initial research was limited to about 70 articles and a “cleaned up” approach for key word searching will be created later. The time limitation was not applied, as at first the author was interested in gaining overview of scientific landscape. The time limitation, however, will be applied later, to limit the search to the last 5-10 years.

It is notable that there is no one definition for Sustainability itself. The maybe most known definition from 1987 Commission’s report: Our Common Future (Brundtland, 1987 and Commission on Environment and Development) defines sustainability and sustainable development as the “development which meets the needs of the present without compromising the ability of future generations to meet their own needs.” As sustainability should refer to all three paradigms that need to be sustained: social, environmental and economic (Goodland, 1995), the Commission’s report definition as stated above references the social and ecological aspects as being interdependent from each other but is stating the equity in a separate context.

According to the latest research from Aminpour et al. (2020), to understand “what” should be sustained is critical to define priorities as the three paradigms mentioned above oftentimes compete and hinder a proper prioritization. Also, without clear definition measuring of the variables is not possible. This issue cannot be resolved presently as the differences in understanding of what is Sustainability are very broad and differ between developed and developing countries, but even in the

same country there are gaps in understanding. The findings of Aminpour's et al. (2020) conclude that Sustainability can be understood as Environmentalism, Common understanding, Neo-Malthusian, and Well-Being, thus clarification of the meaning of sustainability or different terminology is recommended.

In this and many other articles of the last few decades the definition of Sustainability is including the definitions and/or meaning of Environmental Sustainability and Social Responsibility, resulting in conclusion that scientist and practitioners need to better define "what" is Sustainability to be able to bridge the differences in understandings.

Similar critics to the combined meaning of Sustainability came from Linnenluecke and Griffiths (2012) as they point out after in-depth study of the Corporate Sustainability whereas here the term is used to describe a field of study. The scientist started with a key word search yielding 23,953 publications reduced after further review to 3117 publications across of 221 journals and other sources (books, reports) published between 1953 and 2011. According to this research field of Corporate Sustainability displays four "conceptual genealogies": corporate social performance theory, stakeholder theory, a corporate social performance versus economic performance debate, and a greening of management debate. The four fields are, however, close together and have few interferences with other disciplines. Strong focus in the existing literature lies on empiric examination of financial performance of a company vs. its environmental and social activities. Authors contemplate this to be a result of strategic management theory where specific variables can be directly influenced as opposite to tackling broad problems such as consequences of climate change. However, this scientific field could innovate, so the authors, if the Corporate Sustainability research would include insights, perspective and theories from other disciplines.

A historical explanation and a solution proposal come from Bansal und Song (2017), as they point out that the initial distinguishing of Social Responsibility and Sustainability derived historically from two different points of research and have merged to same field of study over the last 2 decades. In the modern view both CSR (corporate social responsibility) and CS (corporate sustainability) target a balanced approach toward economic success, social and environmental responsibility, independent of the concept or measurability of the different elements of CSR. However, the initial roots of Responsibility laid in the normative position questioning the moral of the businesses toward the society, whereas the sustainability research was based on the systems perspective and theory. With this the main critics on the combined approach is the unclarity of the theoretical concept and hence the diffuse measurability of the effects of various aspects of CSR as it combines topics that are both normative and systemic. To create clarity either the origins of the initial fields of study should be reviewed and accentuated or a completely new approach, i.e. accepting the paradox as conflicting concepts can co-exist.

A known example of such combined approach would be the triple bottom line from Elkington (1997), that suggests to the companies to focus and measure three types of performances, financial, environmental and social. It combines all three elements without considering that they do not relate to each other and thus, a company will only fulfill their social and environmental duties if this is not compromising their financial performance. The trade-offs, that are necessary on the pragmatics site to resolve the non-convergent goals, are not calculatable at the present leaving the scientist and the companies guessing.

Another consolidated approach is offered in Framework for strategic sustainable development (FSSD) by Broman and Robèrt (2017), and further developed to define Social Sustainability through a system approach by Missimer together with Broman and Robèrt (2017). This approach is pragmatically directed to the companies in the last 25 years, and for 4 years with Social aspects defined in line with the systemic measurements of ecological aspects. Further studies will be needed to find empirical evidence for the success rate, though some positive reports exist directly from participating companies, i.e. IKEA or Electrolux.

For this research, a reasonable approach would be to set aside the Social aspects within Corporate Sustainability and move on with defining Environmental aspects on a company level. Framework for strategic sustainable development (FSSD) by Broman and Robèrt (2017) could be utilized as an exemplary model for previously defined Waste/Scrap Optimization Management (WSM) as a specific part of FSSD with the focus on metallic and other material circulation in which a company is involved. This would allow to measure company's success for Environmental aspects in relation to manufacturing companies' profitability.

4. Discussion

Further discussion is necessary to validate the consistency by disseminating Social and Environmental aspects and how to proceed with measuring Environmental aspects as part of systemic approach, i.e., one manufacturing company engaging in recycling process with 1st Metal Users foregoing Recycling and Mining/Refining loop, thus, improving its carbon footprint by avoiding unnecessary transportation and high energy re-melting cost and lowering the cost of the metal by avoiding paying additional mark up and moderating market price volatility. Similar efforts for B2B initiatives on CSER levels are evaluated by Blenkhorn and MacKenzie (2017), where the framework for companies engaging on reducing energy, pollution and materials are described as well as positive effect for stake- and shareholders.

Established and less established systems within environmental activities of a company would need to be reviewed. Specifically, implementation of SA 8000 and ISO 26000 as guidelines for companies for CSER. However, both standards emphasize Social aspects and list improvement of Supply Chain from the point of view of Corporate Social Responsibility (Chiarini, Vagnoni, 2017). Nevertheless, those two standards are used in the Quality Management of companies with possible synergies between ISO quality management and environmental management standards are evident according to Castka and Balzarova (2007). To this regards, some more specific studies have been undertaking to determine the effect of ISO 14000 on profitability of small enterprises in UK (Quader et al., 2016). The conclusion of this study has shown a very moderately positive effect with the conclusion that the positive effect might be stronger in the future as the ISO 14000 will be implied for longer time.

Additionally, Supply Chains and Supplier Performance are considered another important piece of environmental protection management and CSER and will need to be determined to be in or out of scope of the present research. “Green” supply chains are an important element of CSER and represent an opportunity to move from company-centric to sustainability-centric approach (Carbone, et al., 2019), and to evaluate capabilities of “green” supply chains under resource-based view (Liu, et al., 2016).

5. Conclusion

The research so far has shown that the Corporate Social Responsibility and Corporate Sustainability represent merely the same concept but the understanding of the scientific, professional and individuals’ communities is widely differentiating. At the same time, the research of the impact of CSR on profitability has been able to show in majority of the studied cases a positive effect on profitability, while a few negative and some neutral effect were cited as well (Lee, Jung, 2016; Platonova et al., 2018; Valentin, 2018). In the same studies, researchers noted that some aspect of CSR exhibited higher effect on profitability while some had none. To be able to determine why some aspects have higher effect and whether CSR is at all the right tool to measure the sustainability factors of a company, it is critically important to re-define the Sustainability and to separate the environmental aspects from the social ones. The usage of narrower terminology with the proper choice of methodology to conduct empirical study should be established in order to prove the hypotheses laid out at an earlier point in this article.

Aside of a purer theoretical debate, a solution to environmental and social problems need to be systematically solved and new traps avoided. This represent two further open questions: Firstly, the aspects of strategic management of a company will need to be reviewed as to “what” and “how” to measure within environmental activities of a company to drive the right decision and to create a comprehensive “green” strategy; secondly, a review of interdisciplinary studies of the ecologically understood Sustainability will need to be conducted in order to identify a possible approach to define and measure related variables.

The author’s aim is to arrive at some point of her studies to a solid recommendation for the manufacturing companies as how to engage in the B2B sustainability efforts to preserve energy, material, and sustain social balance for all parties.

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32. ASSESSING THE LINKS BETWEEN CIGARETTE SMUGGLING AND CORRUPTION IN NON-EUROPEAN COUNTRIES

Abstract: The main idea of the article is to understand how non-European citizens assess the links between corruption and cigarette smuggling. The results of the article are important in formulating strategies to reduce corruption and smuggling, taking into account public attitudes towards corruption and cigarette smuggling. To complete the empirical study, a quantitative survey of 2011 respondents was conducted in Armenia and Georgia. After the study, the main conclusion was drawn that corruption in both the countries has become a huge social problem, where bribes are a usual thing in state institutions (hospitals, clinics and government institutions), which influences the thrive of cigarette smuggling. The means recommended to decreasing cigarette smuggling: „cigarette with excise” should be cheaper and the society should be educated about the harm done by consuming smuggled cigarettes. In both countries, on average 80 % of the respondents surveyed in the research claimed that they knew nothing about consumption of smuggled cigarettes and weren’t open-minded about corruption. All this leads to the conclusion that, despite the fact the survey was anonymous, the public mentality and the current political-economic situation in the countries presuppose fear and unwillingness to express their opinion about the negative phenomenon, which they often participate in and support.

Keywords: corruption, cigarette smuggling, Armenia, Georgia.

JEL Classification: D73, K42

1. Introduction

It is universally recognized that low salaries of officials make bribery the most common form of corruption in public institutions, and thus can be treated as one of the key reasons for rooting of corruption in general. Deep-rooted corruption not only deprives national budgets from significant inflows of tax revenues, undermines governmental ability to collect taxes and has a negative impact on the overall economic development of a state, but also promotes different types of illicit and criminal activities, such as illicit tobacco trade and tobacco smuggling.

Scientific literature (Haysom, 2019; World Bank Group, 2019) suggests that cigarette smuggling is due to corruption. According to FATF (2012), if historically cigarette smuggling mainly involved world-famous international brands that consumers were familiar with and that were easy to sell in black markets, the recent tobacco smuggling activities have additionally started covering cheap white, counterfeit tobacco products as well as smokeless and roll-your-own tobacco (TRACIT, 2019), which is due to the fact that corrupt authorities poorly control tobacco supply chains.

Although it is agreed that addressing the problem of tobacco smuggling calls for a number of political, legal, technological and tax framework-related measures (FATF, 2012; Antonopoulos, von Lampe, 2016; World Bank Group, 2019, etc.), the importance of consumers’ attitude should not also be overlooked because namely consumers’ involvement, attitudes and tolerance to the cases of corruption and cigarette smuggling can be the major obstacles to combating these phenomena.

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The main purpose of this article is to understand how non-European citizens assess the links between corruption and cigarette smuggling. The defined purpose has been detailed into the following objectives: 1) to reveal the main causes of illicit tobacco trade; 2) to review the results of previous studies on the links between corruption and tobacco smuggling; 3) to select and substantiate the methodology of the research; 4) to introduce the results of the empirical research on consumers' attitudes towards the relationship between corruption and tobacco smuggling in Georgia and Armenia. The methods of the research include systematic and comparative literature analysis and a representative quantitative method of questionnaire, when interviewing Georgian and Armenian population.

2. Theoretical Background about the Links between Smuggling and Corruption

2.1. Main Causes of Illicit Tobacco Trade

With reference to the definition, provided by the World Bank Group (2019), "illicit tobacco trade refers to any practice related to distributing, selling, or buying tobacco products that is prohibited by law, including tax evasion (sale of tobacco products without payment of applicable taxes), counterfeiting, disguising the origin of products, and smuggling" (p. XII). FATF (2012) defines illicit tobacco trade as the supply of smuggled tobacco products whether they are genuine, counterfeit or cheap white. Illicit tobacco trade, or tobacco smuggling, is practiced not only by economic agents not intending to properly register their activities with authorized governmental agencies, but also by legitimate (i.e. properly registered) agents that are involved in a shadow business.

Illicit tobacco trade is caused by a complex of factors which, on the basis of literature analysis, are briefly summarized in Table 1.

Table 1. Main factors causing illicit tobacco trade

Factors groups	Factors	Author(s), year
Financial-economic factors	Low costs of manufacturing, expected and gained profit from illicit tobacco trade, gains of selling without taxes, consumer profit, financing of illicit trade through criminal networks, cash-bases business	FATF, 2012; Alderman, 2012; MacGuill, 2014; Antonopoulos, Hall, 2016; Antonopoulos, von Lampe, 2016; Prieger, Kulick, 2018
Regulatory framework	Governance status (weakness in governance), weak government enforcement capacity, weak regulatory framework, corruption, poor tax administration, weak customs authorities, lack of control on tobacco manufacturing, ease of illicit operating	Blecher, 2010; FATF, 2012; Ross, 2015; World Bank Group, 2019
Juridical factors	Insufficient capacity of judiciary systems and law enforcement, poor prevention of organized crime, inadequate punishments for illicit operation	Alderman, 2012
Social factors	Social acceptance of illicit trade, availability of informal distribution networks	World Bank Group, 2019
Distribution factors	Exploitation of different forms of transportation and methods of concealment; criminal network formation and expansion	FATF, 2012

Source: compiled by the authors

The data in Table 1 indicate that the main determinants of illicit tobacco trade are attributable to such groups as financial-economic incentives, regulatory framework of a country or region, juridical environment, geopolitical environment, social environment and extent of distribution networks.

Financial-economic incentives along with underdevelopment of a national or regional regulatory framework are considered to be most influential determinants of illicit tobacco trade because, firstly, a significant difference between the prices of legally sold and illicit tobacco products fuels its demand, especially during the periods economic crises and post-economic crises when consumer purchasing power is decreasing (MacGuill, 2014; Antonopoulos, von Lampe, 2016), and secondly, weakness in government enforcement capacity doubled by corruption results in inefficient work of customs

authorities and poor control of tobacco sellers and manufacturers, which, in its turn, facilitates illicit operating in black tobacco markets (FATF, 2012; World Bank Group, 2019). Loopholes in a national or regional juridical framework, in particular poor prevention of organized crime and inadequate punishments for illicit operation, also promote illicit tobacco trade by comforting agents with the feeling that their activities are hard to detect and prosecute (Alderman, 2012). The impact of geopolitical environment should not be underestimated in case a country borders on neighbour countries with similarly weak governance and insufficient capacity of their judiciary systems and law enforcement which facilitate the movement of tobacco across borders.

Recognizing the importance of the above-mentioned most influential determinants of illicit tobacco trade, this article nevertheless focuses on the links between tobacco smuggling and corruption because, with reference to the evidence provided by the World Bank Group (2019), high levels of illicit tobacco products are linked more closely to corruption and tolerance of contraband sales rather than, for instance, to economic determinants: it was found that illicit tobacco markets are relatively larger in the countries that have relatively low tobacco taxes and prices, but the countries with relatively high tobacco taxes and prices tend to have relatively smaller illicit tobacco markets, which proposes that tobacco taxes and prices have only a limited impact on illicit tobacco markets at a national level.

2.2. The Links between Corruption and Tobacco Smuggling

Although the literature on the relationship between corruption and tobacco smuggling is comparatively scarce (most sources focus on the links between corruption and illicit trade in general or address the whole industry of illicit tobacco trade including not only smuggling, but also manufacturing, structure of the shadow markets and functioning of distribution networks), some studies on the topic under consideration have been found and analysed. The previous findings on the links between corruption and tobacco smuggling are reviewed in Table 2.

Table 2. Review of some previous findings on the links between corruption and tobacco smuggling

Author(s), year	Research method(s)	Results
Haysom, 2019	Case study (South Africa), critical assessment	Corruption provides power to beneficiaries in illicit tobacco industry to buy political protection
Shah et al., 2019	Visual inspection, time-series regression and multi-level regression analysis of the data on cigarette tax levels and the ratio of ad valorem to specific taxes at a national and mean EU level for the period 1995-2017/08	The <i>ad valorem</i> to specific cigarette tax ratio is not statistically significantly related to corruption rate in most EU member states; no evidence of any EU member states with higher corruption perception index to favour ad valorem taxes was found
World Bank Group, 2019	Statistical data analysis, critical review	High levels of illicit tobacco trade are linked more closely to corruption rather than to high taxes
Colledge, 2012	Literature review, critical assessment	Public corruption provides favourable conditions for tobacco smuggling between the USA and Mexico
Blecher, 2010	Estimates of illicit tobacco market using simulations of smoking intensity over the period 1997 to 2007	Illicit trade in tobacco is compounded by corruption and weak border control
Alderman, 2012	Law synopsis	Highly organized bootleggers' activities are heavily influenced by the ease of operating, among other factors, caused by the level of political corruption in the area
Lallerstedt, 2018	Critical assessment, case studies	In 2010, 136 EU border guards were prosecuted for corrupt activities, which speaks about undermining of border security through corruption

Source: compiled by the authors

As it can be seen in table 2, most studies that previously addressed the relationship between corruption (commonly caused by weak government enforcement and lack of political will) and illicit tobacco trade (tobacco smuggling) confirm that high corruption rate in a country provides favourable conditions for tobacco smuggling (Alderman, 2012) because it promotes formation of criminal networks (von Lampe, 2006) and empowers beneficiaries acting in the illicit tobacco industry to buy political protection (Colledge, 2012; Haysom, 2019). Haysom (2019) provides the critical assessment of the situation in South Africa and states that the links between the illicit trade in tobacco and corruption mainly emerge due to the inability of governments to effectively regulate tobacco industry which is extremely vulnerable to grey and black markets, i.e. the main problem is related to the incapability of governments to regulate legal markets instead of attempting to eradicate grey and black ones. Blecher (2010) and Lallerstedt (2018) also stress the negative impact of weak border control (according to the statistics provided by Lallerstedt (2018), the fact that 136 EU border guards were prosecuted for corrupt activities in 2010 shows that corruption of officials undermines the security of borders, and this problem can be observed not only in developing third countries, but also in developed regions, such as the EU).

Nevertheless, some other studies provide slightly different results. For instance, Shah et al. (2019), who researched the relation between corruption and tobacco tax structure in 28 EU member states for the period 1995-2017/08, found that *ad valorem* to specific cigarette tax ratio tended to decrease over the period under consideration and was not statistically significantly related to the size of corruption. Although this tendency was observed in almost all EU member states, it should not be overlooked that at an aggregate EU-level, the links between reduced corruption and a significant increase in the *ad valorem* to specific cigarette tax ratio, amounting to 0.04 per unit increase in CPI score, was estimated.

On balance, although previous findings indicate that corruption promotes tobacco smuggling by ensuring favourable conditions for the expansion of smuggled/untaxed tobacco distribution channels through criminal networks and by empowering the beneficiaries in the illicit tobacco industry to buy political protection, some cross-national differences in the nature and strength of the links between corruption and tobacco smuggling may emerge due to the degree of the prevalence and character of the black tobacco market in a particular country or region, which, in its turn, calls for a deeper insight in this issue.

3. Methodology of Research

Survey methodology was selected to find out the views of the country on the cigarette smuggling and corruption situation.

Survey was carried out on June, 2019. 1004 respondents aged 18+ were interviewed. Study was carried out as CATI Omnibus survey. CATI in market research stands for Computer Assisted Telephone Interviewing. CATI means that the interviewer conducting the survey over the phone follows a script on the computer while clicking responses and typing open-ended comments from the respondent into the program.

The questionnaire asked six questions to find out whether respondents were aware of who smokes smuggled cigarettes in their environment, the hot spots for smuggling cigarettes, their perception of corruption and its most common forms, and the main areas of their activity. Georgia and Armenia have been selected from non-EU countries on the basis of the following criteria: poor economic situation, high levels of corruption and high levels of cigarette smuggling from/ to countries.

Armenia is classified as a lower-middle income country where about 30 percent of the population lives below the national poverty line, meaning their income is about 100USD per month. According to the International Monetary Fund (2016), the Armenian economy has been declining in recent years due to regional and global economic conditions. According to the Fund, public debt is 55 percent of GDP and fiscal revenue is 22 percent of GDP, resulting in severe fiscal shocks for the country. Starting from 2018, Armenia became upper-middle income country. Analyzing Armenia from the aspect of cigarette smuggling, it can be stated that within five years cigarette smuggling has almost disappeared. According to data from the Transparency Organization in Armenia, high-quality, high-volume tobacco products, their low prices, the establishment of the most popular Western cigarette brands (Winston, Marlboro, Hill, Phillip-Morris) in Armenia and official distributors of these brands have resulted almost no cigarette smuggling into Armenia. However, smuggling from Armenia to other countries (Turkey, Georgia, Germany, Iran, Iraq) is thriving. In May, 2016 the Armenian

Parliament decriminalized smuggling of most of the goods (including cigarettes) to Armenia. Getting deeper in the corruption situation in Armenia, no significant changes have been observed so far, although the country implemented 2003-2007; 2009-2012; 2015-2018 anti-corruption strategies. In 2017 corruption indicator in Armenia was -0.56 (where -2.5 – highly corrupted; +2.5 - very clean, where the higher the index the less the corruption indicated).

Situated between Russia, Azerbaijan, Armenia and Turkey, Georgia emerged as an independent republic following the collapse of the Soviet Union in 1991. Georgia has a population of about 3.7 million people. By the level of its economic development, Georgia is considered to be under middle level of development. Smuggling has become a direct threat to the national security of Georgia. If we take a look to the history the statistics show that in 2003, contraband trade became a very serious problem in Georgia. Its catastrophic growth began in 1998, and in five years it has begun to threaten the very security of the country. It has stimulated corruption, has created powerful criminal clans, and has promoted the collaboration between the criminal world and political groups, central, regional and local authorities, and law enforcement structures of the country. It has also led some parts of the poorer population to become involved this criminal activity. According to the statistics service, in 2016 the import of cigarettes to Georgia decreased by 1.6% and totalled USD 107.3 million instead of USD 109.1 million in comparison with 2015. As for 2017, in January-August, imports amounted to USD 53.9 million. If cigarette consumption decreased by 25%, this should have been reflected first of all on importers. According to the state authority over the past year, cigarette consumption in the country has decreased by 25%. With a score of 58 (56 in 2017), Georgia is the leader in the South Caucasus in terms of improving corruption. However, the country is experiencing a crisis of democratic institutions. This is primarily reflected in the lack of accountability of law enforcement agencies, political interference in the activities of the courts and pressure on the institutions of civil society.

4. Empirical Research Results

The following hypotheses were raised during empirical study:

H1: The 'hot spots' for smuggling cigarettes are in markets and border areas.

H2: Corruption promotes the resolution of societal problems.

H3: Most often bribes are given by state inspectorates and hospitals.

H4: Higher salaries would reduce the consumption of smuggled cigarettes.

Table 3. A comparative analysis of quantitative survey results between Georgia and Armenia

Question	The result of Georgian public opinion	The result of Armenian public opinion
Are there people in your area who smoke smuggled cigarettes?	4.0 percent of respondents in their environment know people who smoke contraband cigarettes.	3.4 percent of respondents in their environment know people who smoke contraband cigarettes.
What do you think are the 'hot spots' (points of sale) for smuggled cigarettes in your country?	17.4 percent of respondents think that border zones of the country is the main point of sale for contraband cigarettes.	3.2 percent of respondents think that kiosks is the main point of sale for contraband cigarettes. 86.7 percent of respondents say that „None / Don't know“.
Which of the following approaches best suits your view on corruption?	Respondents who were asked to name statement, which most closely matches their opinion about corruption, most often named that „ Corruption is a big social problem “ (57.4 percent).	Respondents who were asked to name statement, which most closely matches their opinion about corruption, most often named that „ Corruption is a big social problem “ (52.0 percent).
In what areas are people in your environment most likely to be bribed?	4.2 percent of respondents think that people usually are giving "bribes" in state institutions . 79.0 percent of respondents said that it is hard to answer/they don't know.	15.3 percent of respondents think that people usually are giving "bribes" in hospital, clinic .

What do you think should happen to people around you not to smoke smuggled cigarettes?	Respondents who were asked to name, what should happen so that people would stop smoking contraband cigarettes, most often mentioned that „ <i>cigarette with excise should be cheaper/price should be lower</i> “ (22.4 percent).	Respondents who were asked to name, what should happen so that people would stop smoking contraband cigarettes, most often mentioned that there should be „ <i>more information on how smuggled cigarettes pose a much greater risk to health than officially purchased cigarettes</i> “ (7.2 percent).
In your opinion, which of the following are the most common forms of corruption in your country?	Respondents who were asked to name which forms of corruption is the most prevalent in their country, most often mentioned that it is „nepotism - placing one's own family member/friend/relative to a job or position“ (49.6 percent).	Respondents who were asked to name which forms of corruption is the most prevalent in their country, most often mentioned that it is „giving bribes (for medical treatments, public services“ (40.8 percent).

Source: compiled by the authors

When discussing the results, why respondents in both countries reported an extremely low percentage of people buying contraband cigarettes, interviewers provided the following type of explanation:

The results discovers Georgia situation. Generally, this survey's topics are very sensitive and our citizens aren't open during the interviews, so we have many "do not answer/ hard to answer", but the concrete opinions which are revealed in the survey are relevant for our country.' The Armenian interviewers did not provide an explanation.

In order to confirm or reject the hypotheses, the questionnaire data of the interviews were analysed:

- In the case of Armenia, H1 has not been confirmed, because out of 1007 respondents, only 136 (13.51%) reported a ‘hot spot’ for one type of smuggling and only 0.4% reported two types of ‘hot spots’ of smuggled cigarettes. Respondents generally reported that ‘hot spots’ were: in newsstands 3.18%, 95% CI = [2.18%; 4.46%] (95% confidence intervals (95% CI) for proportion calculated using SAS and Clopper-Pearson (Exact) criterion); official stores (2.09%, 95% CI = [1.03%; 3.17%]), people’s apartments (1.89%, 95% CI = [1.14%; 2.93%]).
- A very small minority of respondents reported ‘hot spots’ in the border area (0.7%, 95% CI [0.28%; 1.43%]) and in the bazaars (0.5%, 95% CI [0.16%; 1.15%]). Other places were named by 4.07% respondents. In the case of Georgia, **H1 has only partially proved its worth**. Of the 1004 respondents, 73.18% said they know no type of ‘hot spot’; 67.83% said ‘I don’t know/ Hard to answer’; 3.09% said ‘I have not heard of such places at all’; 2.19% - rejected to answer. The highest number of respondents reported ‘hot spots’ as border areas of the country – 19.62% (95% CI = [17.21%; 22.22%]). Other ‘hot spots’ were mentioned by a very small proportion of respondents: open market - from external vendors (2.39%); street (0.9%); individuals – in apartments (0.6%).
- **Hypothesis H2** was not confirmed in the Armenian and Georgian cases. Only 6.44% of respondents in Armenia believe that corruption contributes to many social problems; 8.81% of respondents believe that corruption contributes to some social problems. In **Georgia**, only 2.29% of respondents think that corruption encourages many social problems, and 1.89% think that corruption causes some social problems.
- **Hypothesis H3** is **only partially** validated in the case of Armenia. Respondents indicated that bribes are most often given in hospitals and clinic (15.29%, 95% CI = [13.12%; 17.67%]). A similar percentage (9-10%) of respondents indicated that bribes were given to: schools, universities, kindergardenstruction inspection, ministries (10.03%, 95% CI = [8.24%; 12.05%]); tax office, construction Inspection, ministries (9.63%, 95% CI = [7.88%; 11.26%]); Court (9.14%, 95% CI = [7.43%; 11.09%]). Few respondents reported bribes to the police (6.36%, 95% CI = [4.93%; 8.04%]). No respondent mentioned that bribes are given at Customs. 11.92% of respondents named other places to give bribes.
- **In the case of Georgia, the H3 hypothesis failed**. Only 5.18% (95% CI = [3.89%; 6.74%]) of respondents reported that bribes are mostly given by state institutions (tax office, construction inspection, ministries). As many as **92.33%** of respondents did not mention any bribe (77.99% - I don’t know / Hard to answer; 8.86% - I have not heard of such facts; 5.48% - rejected to answer).

- ***H4 has not proved true in the case of Armenia.*** Only 5.46% (95% CI = [4.19%; 7.05%]) of respondents believe that higher salaries would reduce the use of smuggled cigarettes. Respondents do not believe that the measures listed in the questionnaire can effectively reduce the use of smuggled cigarettes. For example, only 6.45% (95% CI = [4.19%; 7.05%]) of respondents believe that smuggling cigarettes can be reduced by bigger fines/ penalties. None of the respondents believe that smuggling cigarettes can be reduced by more information on TV, news, radio, newspapers, etc. Another reason was given by 7.25% of respondents. ***H4 has not proved true in the case of Georgia.*** Only 9.06% (95% CI = [5.21%; 8.41%]) of respondents believe that higher salaries would reduce the use of smuggled cigarettes. 22.91% (95% CI = [20.34%; 25.63%]) of respondents believe that smuggling cigarettes can be more effectively reduced. Cigarette with excise should be cheaper/price should be lowered. 19.62% (95% CI = [17.21%; 22.22%]) of respondents believe that the use of smuggled cigarettes can be reduced, making law on this issue stricter/prohibition/strict punishment (more engagement from the state); 13.84% (95% CI = [11.77%; 16.14%]) of respondents believe that the use of smuggled cigarettes can be reduced by *stricter control at border cross points/ stricter control, monitoring in general*; 10.86% (95% CI = [9.0%; 12.95%]) – by *bigger fines/penalties*. Other reasons that could reduce the use of smuggled cigarettes were rarely mentioned: 2.79% of respondents reported better quality of officially purchased cigarettes; 2.89% - getting more information on TV, news, radio, newspapers, etc., stressing that contraband is a bad thing; 1.1% - more information on how smuggled cigarettes pose a much greater risk to health than officially purchased cigarettes.

3. Conclusion

In theory, the links between corruption and cigarette smuggling reveal that corruption contributes to cigarette smuggling, which in turn funds criminal activities. Meanwhile, the results of the empirical study reveal very interesting results in selected countries. Although cigarette smuggling is widespread in Georgia and Armenia (the donor country), only a small percentage (4% in Georgia and 3.4% in Armenia) report being aware of smokers in their environment. In Armenia, the ‘hot spots’ of smuggled cigarettes are kiosks, official stores and people’s apartments, while in Georgia it is the border. Citizens on both sides point out that corruption is a major problem, with bribes being most prevalent in state institutions (Georgia) and hospitals and clinics (Armenia). In order to solve the problem, respondents say it is advisable to reduce the price of ‘cigarette with excise’ (Georgia case) and educate the public about the more harmful health effects of smuggled cigarettes (Armenian case). It is concluded that with decreasing levels of corruption in countries (especially in public institutions), the volume of smuggled cigarettes would decrease as well. *The limitations of the study* are related to the fear of individuals to express their views openly.

The practical applicability of the study manifests itself through identifying hot spots for cigarette smuggling, exploring public attitudes to corruption, the most corrupt government agencies, and the tools that will most effectively reduce cigarette smuggling in Armenia and Georgia.

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33. MONETARY POLICY FOR INVESTMENT PORTFOLIO AND ITS LINKS WITH MONEY LAUNDERING

Abstract: The scientific theme aims to predict the choice of gold investment strategies, taking into account money laundering issues. Scientific literature proposes many different presumptions concerning the most influential gold price determinants at national, regional and international levels, but the results of different studies are rather contradictory. This article is aimed at identification of which determinants have the greatest impact on the price of gold in the global context. The empirical research is based on the multiple regression model, where the presumable determinants of the price of gold include silver price, platinum price, palladium price, federal funds rate, euro area inflation rate, money supply (M3), interest rate (AAR) and euro rate (EUR).

Keywords: gold, monetary policy, money laundering.

JEL Classification: F37, G11, G12, G15

1. Introduction

Due to the political unrest in the Middle East, Africa and other regions, investors turn to gold as to an investment which can provide a safe haven, in particular during the periods of great political and economic turmoil. A safe haven is referred to as an asset that does not correlate (weak protection) or negatively correlates (strong protection) to any other assets during the periods of economic stresses and declines (Baur, Lucey, 2010). Gold has historically been considered the most popular form of such assets. Scientific literature is comparatively rich in the studies to cover different gold price determinants at national, regional or international levels, but the results of different studies are rather contradictory. *Research gap* manifests itself in the failure to investigate the determinants of gold investment in the context of monetary policy and money laundering.

This article is aimed at identification of which determinants have the greatest impact on the price of gold in the global context. For fulfilment of the defined aim, the following *objectives* were raised: 1) to review the theoretical reasons to treat gold as a safe haven; 2) to research the main gold prices determinants proposed in the scientific literature; 3) by employing a multiple regression model, to identify the main determinants of gold price fluctuations in the global context.

The methodology of this research includes systematic and comparative analysis of the scientific literature and multiple regression. The multiple regression model is based on the data for the period from January 2003 to December 2015, inclusive. Gold price (Gold) is the only dependent variable in the model. The presumable determinants of gold price cover silver price (Silver), platinum price (Platinum), Palladium price (Palladium), Federal Funds Rate (FFR), Euro Area Inflation Rate (EAIR), M3, AAR and EUR (the numerical values of the variables were extracted from the paid subscription database *tradingeconomics*, the European Central Bank database and *gold.org* database).

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The novelty and significance of the study is that gold is a significant investment for both households and the government, as investment in gold reduces the risk of portfolio diversification over the long term.

2. Theoretical Background Concerning Inclusion of Gold in an Investment Portfolio

The price of gold can fluctuate in accordance with market conditions. It is determined by a variety of factors, the number of which, according to Mamcarz (2015), is larger than the number of other asset price determinants and cannot be reduced to a single denominator. As gold is used as a standard of value for currencies and treated as a safe haven asset, it is extremely important to have a deeper understanding of the main gold price determinants to explain the fluctuations of current gold prices and make forecasts for the future. According to Gasparenienes et. al. (2018) Gold can help investors manage foreign asset risk at low cost, especially in countries with volatile exchange rates and high interest rates.

The need to protect assets against inflation is one of the most common reasons cited in the scientific and investment literature for holding gold (Wang et al., 2011; Beckmann, Czudaj, 2013; Ibrahim et al. 2014). Being a low-risk investment among fluctuating currencies, gold retains its value despite the impacts of political and economic crises. Hence, investors may become inclined to hold gold when they expect the value of different forms of money (e.g. paper money, currencies) to decline (Sepanek, 2014). Higher demand for gold during inflation periods may determine the rise in its price (Toraman et al., 2011; Ibrahim et al., 2014). The study, conducted by Ibrahim et al. (2014), revealed that there exists significant relationship between the gold price and inflation rate (LCPI).

Despite the fact that the gold market is more active than the markets of other precious metals (e.g. silver, platinum, palladium), in the periods of high inflation, the latter can turn out to be a more attractive investment (Kearney, Lombra, 2009). As a result, investors' interest in other precious metals may determine the changes in the price of gold. According to Shafiee and Topal (2010), the impact of mineral commodities on the price of gold may manifest as a long-term trend reversion component, a diffusion component and a jump or a dip component. The study, conducted by Eryigit (2017), who researched short-term and long-term relationships between gold prices, precious metal prices and energy prices by employing the data for the period 1990 to 2014, revealed that there exists a statistically significant short-term link between gold prices and silver prices and between gold prices and platinum prices, but no long-term causalities were found. It is also noted that the value of other precious metals is more prone to fluctuation than the value of gold (Kearney, Lombra, 2009; Sari et al., 2010).

Apart from the above-introduced main gold price determinants, some authors emphasize the impact of such factors as global crisis (i.e. gold prices tend to rise when populations do not trust governments or financial markets, and this phenomenon is called a crisis commodity), central bank instability (meaning that gold prices rise when a country's current monetary system experiences uncertainty), central bank strategy to purchase securities to increase the money supply (Sepanek, 2014), governmental gold reserves (Lili, Chengmey, 2013), stock indices (Anand, Shachi, 2012), the quantities of gold used in dentistry and jewellery industries (Baur, McDermott, 2010; Sepanek, 2014), gold supply/demand rate (Sepanek, 2014), seasonality, short-term media information and press releases (Mamcarz, 2015), the cycles of raw materials (Mamcarz, 2015) and many others. Within the scopes of this research, we will consider such plausible gold price determinants as inflation rate, interest rate, federal funds rate, prices of precious metals (silver, platinum, palladium), money supply and the value of the euro. The selection of the variables was based on the scientific literature analysis and the World Bank (2017) data analysis.

3. The Links Between the Investment in Gold and Money Laundering

“The negative consequence of money laundering is the loss of potential investment due to the shadowing of financial flows, the deterioration of the country's business reputation, which means that it is no longer interesting to foreign investors” (Levchenko et. al., 2019, p. 492-493).

When analysing the links between money laundering and the investment in gold (gold purchase), it must be noted that gold is still recognized as an extremely attractive vehicle for money laundering. Although recently a substantial part of financial crime has been linked to cryptocurrencies (in particular, bitcoins) (Baek, Elbeck, 2015; Thellmann, 2020), gold is still playing an important role

in the proceeds of money laundering and is, therefore, even called “the cocaine” for money launderers (Dizard, 2017). The trade in gold being a part of the mechanism of money laundering was noticed even back in 1999, when Kaplan (1999) found that the trade in gold was invoked to launder enormous amounts of dirty cash, and nearly every major money laundering case in the USA at that time was related to the trade in gold between the USA and Latin America. It was found out that dirty money (commonly earned from drug trafficking) was spent on buying different forms of gold, starting from gold bullions and jewellery, and ending with gold ingots and scrap. The gold was later resold, and the profits were represented as clean. Nowadays the scheme has hardly changed: as it was noted by Teichmann (2017), purchase of such valuables as gold and jewellery along with raw diamonds, antiquities, art and real estate are extremely suitable tools for money laundering.

The attractiveness of gold for money launderers is determined by several reasons. First of all, investment in gold still provides reliable returns (Dizard, 2017). For example, Lioudis (2019) provides the statistics indicating that the price of gold has increased by 315% over the past 15 years, and by 335% over the last 30 years. Barro and Misra (2013) also state that investment in gold is resilient to the detrimental effects of disasters and economic shocks. Therefore, gold’s expected real return rate is considered as the rate which is very close to the risk-free rate. Secondly, gold markets often rely on cash (cash-for-gold exchange) (FATF, 2015; Dizard, 2017) which is most acceptable method of payment when making dirty or illicit transactions. Finally, if many other types of transactions (especially made online) are easier to detect, gold holding and reselling provides a substantial degree of anonymity and difficult traceability (Masse, Le Billon, 2018; Shahzad et al., 2019). FATF (2015) also indicates poor regulation of the gold market and the entire gold mining industry with its potential to ensure that money launderers are continuously supplied with fraudulently stamped, smuggled and/or illegal gold commodities the origin of which it hard to trace.

The links between money laundering and investment in gold should not be misunderstood only as implementation of the scheme following which dirty money is collected, and then launderers use cash to purchase gold in its different forms. Money laundering through the gold mining industry is also a common practice. With reference to the FATF’s (2015) report, the gold industry provides wide opportunities to generate illicit profits. Large and medium scale mining is dominated by large corporations that “require significant capital which may be sourced privately or publically,” (FATF, 2015, p. 14). The capital required is often gained through bribery or substantial investment is made by illicitly operating individuals or organisations (for instance, Ponzi schemes). In addition, mined and recycled gold (e.g. recycled jewellery) has to undergo a smelting (refinery) process. In this case, a favourable environment for fraudulent activities is created when gold mining companies and refineries operate under different jurisdictions. The U.S. Attorney’s Office, Southern District of Florida, under the United States Department of Justice (2018) reports that criminally derived gold is smuggled through shell companies with false or incomplete documentation to third countries, and then is resold to refineries in the USA. The settlements for suspicious transactions in the gold industry often gain such forms as payments to shell companies with further withdrawals, granting zero-rate loans to foreign enterprises, international transfers and quick withdrawals of funds, division of funds to pay for merchandise, and transactions between domestic traders and unidentified third parties overseas (FATF, 2015).

4. Research Methodology

For this research, the model of multiple regression analysis was employed. In order to form a comprehensive dataset, the data for the period from January 2003 to December 2015 (inclusive) was involved. The data was extracted from the European Central Bank database, gold.org database and paid subscription database *tradingeconomics*. Gold price (Gold) is the only dependent variable (y) in the model. The presumable determinants of gold price in the model cover silver price (Silver), platinum price (Platinum), Palladium price (Palladium), Federal Funds Rate (FFR), Euro Area Inflation Rate (EAIR), M3, AAR and EUR. Variable M3 denotes the increase in money supply which can affect the aggregate demand and cause the inflation of product, service and resource prices. The links between gold price and M3 fluctuations will be researched. Variable AAR denotes the interest rate paid for over-2-year-term bank deposits, i.e. AAR shows the interest received by an investor on bank deposits. The changes in AAR, in turn, determine the changes in an investor’s (a money holder’s) benefits and affect the motivation to rely on bank deposits. We will research whether the decreases in

AAR cause gold price to rise (statistically significant links between AAR and gold price fluctuations will disclose the reverse interdependence between the demand for gold and the demand for bank deposits).

The model of multiple regression is expressed as follows:

$$\text{Gold} = f(\text{Silver}, \text{Platinum}, \text{Palladium}, \text{FFR}, \text{EAIR}, \text{M3}, \text{AAR}, \text{EUR}) + \varepsilon \quad (1)$$

When the right side of the model covers several presumed variables, the basic model of this type can be written down as an equation:

$$y_i = f(x_i) = a + b_1 * l_i + \dots + b_p * p_i + \varepsilon_{i,i} = 1, \dots, n \quad (2)$$

Correlation matrix for the interval variables has been presented in Table 1.

Table 1. Correlation matrix for the interval variables

	Gold	Silver	Platinum	Palladium	FFR	EAIR	M3	AAR	EUR
Gold	1.00	0.94	0.76	0.83	-0.60	-0.14	-0.58	0.85	0.98
Silver	0.94	1.00	0.82	0.76	-0.45	0.09	0.69	-0.38	0.89
Platinum	0.76	0.82	1.00	0.64	-0.21	0.19	0.63	-0.16	0.66
Palladium	0.83	0.76	0.64	1.00	-0.48	-0.29	0.77	-0.72	0.84
FFR	-0.60	-0.45	-0.21	-0.48	1.00	0.35	-0.53	0.62	-0.62
EAIR	0.14	0.09	0.19	-0.29	0.35	1.00	-0.42	0.68	-0.21
M3	0.85	0.69	0.63	0.77	-0.53	-0.42	1.00	-0.62	0.85
AAR	-0.58	-0.38	-0.16	-0.72	0.62	0.68	-0.62	1.00	-0.66
EUR	0.98	0.89	0.66	0.84	-0.62	-0.21	0.85	-0.66	1.0

Source: compiled by the authors

The data in Table 1 reveal a strong correlation between such variables as Silver and Platinum, while the correlation between EAIR and Silver is weak. The further research will disclose whether these variables will be included in the model together.

Limitations of the study: International Monetary Fund, World Bank, etc. in the statistical databases, the factors affecting gold are presented in different data expressions, therefore, the period under review covers 2003-2015.

4. Empirical Results of the Research

While forming the model of multiple regression, all presumable variables are included. Then the parameters of the model are evaluated (see Table 2).

Table 2. The values estimated for all presumable variables

	Estimate	Std Error	t value	Pr(> t)
Intercept	-1.091e+02	3.055e+01	-3.571	0.000482
Silver	1.158e+01	1.288e+00	8.993	1.11e-15
Platinum	1.747e-01	1.843e-02	9.481	< 2e-16
Palladium	-4.662e-02	2.870e-02	1.625	-0.106358
FFR	1.493e+01	2.072e+00	-7.206	2.79e-11
EAIR	-1.843e+01	4.942e+00	-3.729	0.000274
M3	6.801e-06	5.180e-06	1.313	0.191246
AAR	1.306e+01	6.930e+00	1.885	0.061466
EUR	8.461e-01	3.999e-02	21.158	< 2e-16

Source: compiled by the authors

Residual standard error is equal to 32.08 on 147 degrees of freedom; Multiple R-squared is equal to 0.9946; Adjusted R-squared is equal to 0.9943; F-statistic is equal to 3357 on 8 and 147 DF; p-value < 2.2e-16.

Value p for criterion F (ANOVA) in the last row (p-value: < 2.2e-16) is lower than 0.05, which indicates that the model contains statistically significant regressors. Column Pr(> |t|) in Table 2 shows that the model contains both statistically significant (p < 0.05) and statistically insignificant (p > 0.05)

regressors. The value of the adjusted coefficient of determination (Adjusted R-squared) is equal to 0.9943, which indicates that the model is reliable, but this single characteristic is not sufficient to treat the model as applicable. After omission of the regressors Palladium and AA3, the parameters of the model were evaluated again (see Table 3).

Table 3. New estimates for the model parameters

	Estimate	Std Error	t value	Pr(> t)
Intercept	-9.159e+01	2.909e+01	-3.148	0.00199
Silver	1.251e+01	1.229e+00	10.178	< 2e-16
Platinum	1.592e-01	1.854e-02	8.589	1.08e-14
M3	1.161e-05	4.980e-06	2.332	0.02103
EAIR	-8.615e+00	3.943e+00	-2.185	0.03047
FFR	1.456e+01	2.089e+00	-6.968	9.65e-11
EUR	7.722e-01	3.383e-02	22.826	< 2e-16

Source: compiled by the authors

Residual standard error is equal to 33.35 on 149 degrees of freedom; Multiple R-squared is equal to 0.994; Adjusted R-squared is equal to 0.9938; F-statistic is equal to 4138 on 6 and 149 DF; p-value < 2.2e-16.

The value of the adjusted coefficient of determination (Adjusted R-squared) slightly decreased to 0.9938, but the model stopped containing any statistically significant variables. In order to make a well-grounded decision on whether the model is applicable, we cannot lean only on the statistical hypotheses about a multiplier of an independent variable or the values of the coefficient of determination. We also need to verify whether:

- The residual errors are homoscedastic
- The residual errors are normal
- There are no outliers
- The regressors are not multicollinear.

For verification of homoscedasticity of the residual errors in the model, we compile the graph (see Figure 1).

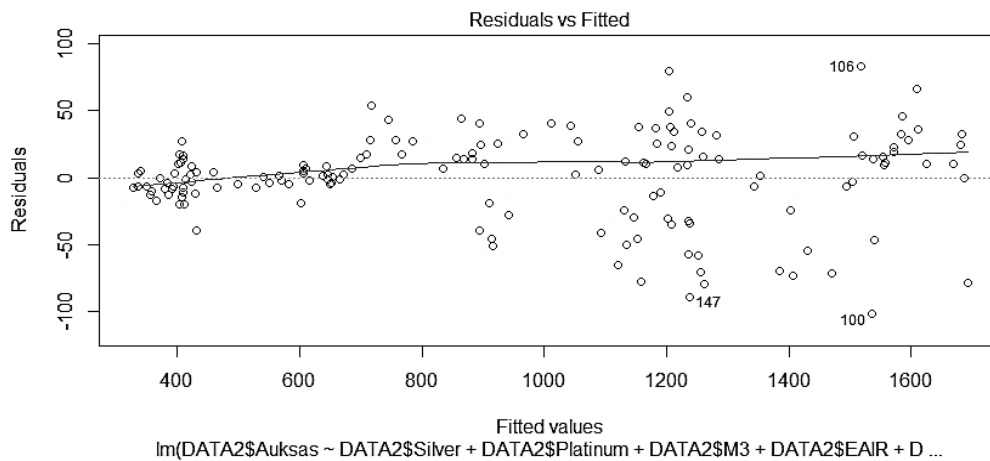


Figure 1. The graph of the residual errors

Source: compiled by the authors

Figure 1 shows that the dispersion of the residual errors in the model is comparatively even (the graph is line-shaped), which proposes that the presumption of homoscedasticity is satisfied. Further in the research, we assess the difference between the real values and the prognosticated values in the regression model (see Figure 2):

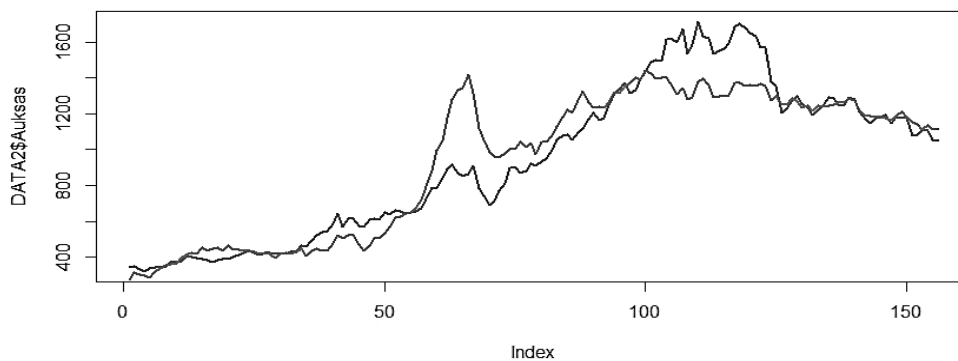


Figure 2. The difference between the real values and the prognosticated values in the regression model

Source: compiled by the authors

The data in Figure 2 propose that over the period between January 2003 and December 2015, gold price was affected by the following determinants:

$$\text{Gold} = -888.6 + 0.447 \text{ Platinum} + 0.00015\text{M3} + 46.18\text{EAIR} - 69.8\text{FFR} \quad (3)$$

An increase in the value of EAIR by 1 determines an increase in the value of the main determinant (Gold) by 46.18; an increase in the value of Platinum by 1 determines and increase in the value of the main determinant (Gold) by 0.447, and so forth. The major determinants of gold price fluctuations include Platinum, M3, Euro Area Inflation Rate (EAIR), and Federal Funds Rate (FFR). The impact of EAIR and FFR is the weightiest. A very strong correlation, which was captured between gold price and M3 ($r = 0.85$), can be linked to an increase in money supply in the market, i.e. the growth of M3 determines the growth of gold price. In the initial stage of this research, the correlations between the variables representing all the precious metals and gold price were strong and positive. Nevertheless, verification of the presumptions of the model revealed that platinum price fluctuations affected gold price fluctuations. However, the exact reasons of the links between precious metals and gold prices could be established only by conducting a more comprehensive investigation. With reference to the results of the research, the significance of the theoretical determinants of gold price fluctuation was partly confirmed: *the major determinants positively correlate to gold price in the long term*. Hence, gold can be treated as a high-class investment in the long run, especially minding the following global tendencies: an increase in the demand for gold in China and other developing economies as well as limited annual growth of gold supply. *The regression model proposed for identification of gold price determinants sufficiently well approximates the real values of gold over the values of the major determinants*.

The authors of the article concluded in previous studies (Gasparėnienė, Sadeckas, 2017) that when choosing gold as an investment portfolio diversification tool, it is important to evaluate the percentage of gold in the portfolio in order to properly balance it. Gold should be between 1 and 2 percent of the overall structure of low-risk investment portfolios; and 2-4% of balanced investment portfolio structures. Gold is less important in the structure of high-risk investment portfolios, as there is no need to offset potential risks for investors with high risk due to high returns, as this would imply a decrease in expected returns. In the stages of economic development, stagflation and recession, gold should account for 4-5% of the value of the investment portfolio and as much as 27 percent during the economic recovery of investment portfolio values. Looking at the benefits of gold as a portfolio diversification tool, gold's main advantage is not that it can increase the return on the investment portfolio, but rather that it can help reduce the riskiness of the investment portfolio.

6. Conclusion

The results of the scientific literature analysis propose that an asset which does not correlate (weak protection) or negatively correlates (strong protection) to any other assets during the periods of economic stresses and declines is referred to as a safe heaven. As the value of gold is hardly

affected by annual increases in supply or the changes in an economic cycle, gold has historically been considered the most popular form of safe heaven assets. Nevertheless, the results of previous scientific studies show that capability of gold to provide a hedge against undesirable asset value fluctuations depends on the situation in a particular market.

Gold can be treated as a reliable hedge against inflation only in the long run, but gold return has not proved to be able to offset inflation rates in stable price markets with weak inflation impulses. Therefore, gold may serve as a comparatively reliable measure of financial risk management, but not as a safe heaven.

In the empirical part of the research, the regression model that would allow to identify the major gold price determinants was proposed. As the maximum value of Cook's distance estimated for the final regression model does not exceed 1, not any outliers in the model can significantly affect the results. The model is applicable, but the value of the coefficient of determination is lower than the previous estimate. The values of the other estimates are also low.

The research allowed to identify the major gold price determinants which include Platinum, M3, Euro Area Inflation Rate (EAIR), and Federal Funds Rate (FFR). It was found that an increase in the value of EAIR by 1 determines an increase in the value of the main determinant (Gold) by 46.18; an increase in the value of Platinum by 1 determines and increase in the value of the main determinant (Gold) by 0.447, and so forth.

A very strong correlation, which was captured between gold price and M3 ($r = 0.85$), can be linked to an increase in money supply in the market, i.e. the growth of M3 determines the growth of gold price. In the initial stage of the research, the correlations between the variables representing all the precious metals and gold price were found to be strong and positive. Nevertheless, verification of the presumptions of the model revealed that platinum price fluctuations affected gold price fluctuations during the period under research. The exact reasons of the links between precious metals and gold prices could be established only by conducting a more comprehensive investigation.

The limitations of the study include 2003–2015, since the factors of interest in statistical databases are represented by different data expressions. The applicability of the study is useful for novice and advanced investors looking to incorporate a safe investment vehicle - gold - into their investment portfolio.

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34. CHALLENGES FACING SMALL AND MEDIUM-SIZED ENTERPRISES IN CROSS-BORDER COOPERATION

Abstract: Small and medium-sized enterprises (SMEs) play a key role in the national and international economics and one of the major challenges of SMEs are sustainable development, internalization and their approach to cross-border cooperation. This paper aims to establish key issues SMEs are facing in the process of cross-border cooperation and sustainable development. The paper is based on qualitative research exploring the concept of entrepreneurs' mindsets to the cross-border cooperation. The research views the concept of global entrepreneurs' mindset from the Czech Republic, Slovak Republic and Poland. The SMEs must develop their understanding of soft skills required for the cross-border cooperation. The research focuses on identifying the decisions and actions needed for SME cross-border cooperation. The research results are based on our quantitative research and bring new results which contribute to the expansion of the knowledge base and can be practically used (e.g. in the context of projects supporting cross-border cooperation in the new EU programming period 2021-2027).

Keywords: cross-border cooperation, entrepreneurship, SMEs.

JEL Classification: M10, M14, M16, O49

1. Introduction

Companies, especially SMEs, have a significant role as engines of economic and social development (Dziwiński, 2016; Okręglicka et al., 2015; Štverková, 2016). Small and medium-sized enterprises play a key role in the economics of the states and unions and represent 99% of all businesses in the EU. In the European Union, especially in the V4 countries, the small and medium-sized enterprises recognize the need to trade internationally and encouraged to develop cross-border business opportunities. In today's turbulent and dynamic business environment occurs - due to the globalization – the cooperation by the cross-border area or networking of small and medium-sized enterprises in different sectors and countries (Havierníková, Mynarzová, 2018; Kurowska-Pysz et al., 2015b). Entrepreneurship is accepted as a critical component of economic growth and employment creation (Pellešová, 2016; Štverková, Humlová, 2016).

State borders, long considered peripheral in every sense, have now become a major concern for doing the business for the small and medium-sized enterprises due to globalization. Cross-border cooperation and governance are central to the sustainable development of enterprises. There is increasing awareness that we have to understand the nature of borders and how they are changing in order to appreciate the need and the opportunities for cooperation across them. Borders are inherently ambiguous, paradoxical and contradictory in nature, and now they are also becoming increasingly differentiated from each other and in terms of their filtering effects on different entrepreneurial processes (Ruzzier et al., 2006).

There are a variety of reasons for small and medium-sized enterprises developing the cross-border approaches and cross-border business, including sourcing of products and components, seeking new markets and developing cross-border partnerships. From the competitiveness point of view therefore the development of cross-border cooperation and developing appropriate management capabilities is vital for small and medium-sized enterprises. We need to analyse how the function of the border to

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understand the obstacles to cross-border cooperation, how networks of trust can be established, and how sustainable development might be achieved (Svensson, 2015). Conversely, how cross-border cooperation and communities help in changing social and interstate relations.

It is necessary to focus on the border area, as 37.5% of the EU population live there, along some 38 internal borders forming geographical, language barriers, often causing scars of European wars. European Cross-border cooperation aims to tackle common challenges identified jointly in the border regions and to exploit the untapped growth potential in border areas while enhancing the cooperation process for the purpose of the overall harmonious development of the Union.

This paper aims to establish key issues SMEs are facing in the process of cross-border cooperation, internalization, and sustainable development.

The paper is based on qualitative research exploring the concept of entrepreneurs' mindsets to the cross-border cooperation and internalization. The paper is based on qualitative research exploring the concept of entrepreneurs' mindsets to the cross-border cooperation and internalization.

The research views the concept of global entrepreneurs' mindset from the Czech Republic, Slovak Republic and Poland, in the Euroregion Beskydy. The awareness of global issues of cross-border cooperation, knowledge about internalization, it means about the countries and cultures; development of competencies and aptitudes needed for working in a global context and for sustainable development. The SMEs must develop their own understanding of soft skills required for the cross-border cooperation and internalization. The research focuses on identifying the decisions and actions needed for SME internalization and cross-border cooperation.

2. Literature Review

Borders in Europe have become much more permeable over the past ten years as formalities have been simplified and many new crossing points have opened. At the same time cooperation in border regions has increased, thanks mainly to resourcing through EU 'Interreg' programmes, to include a range of business, cultural and conservation interests. In many cases, these arrangements have been formalised through Euroregions which have become an indicator of good international relations (Turnock, 2002; Sousa, 2013; Szczepańska-Woszczyna, 2014).

The analysis made by Dimitrov et al. (2003) suggests that border region small and medium-sized companies have a higher level of interaction than the respective average national enterprises in all countries and that trade relations and economic cooperation eventually depend on the level of specialization and the size of the markets.

The cross-border cooperation plays a major and relevant role within the integration process and for the internalization of small and medium-sized enterprises (Štverková et al., 2018; Kurowska-Pysz et al. 2018; Guo, 2018; Castanho et al., 2016; Castanho et al., 2017; Castanho et al., 2018; Horváthová et al., 2019). The cross-border cooperation is based on the creating a network of connections that help develop socio-economic cooperation important also for national and international economics and also understanding the need to solve problems in the institutionalized dimension (Kurowska-Pysz, 2015a; Perkowski, 2010).

There are many theoretical approaches and models of internationalization of companies in literature dealing with internationalization. As stated by Fonfara (2011), to understand the process of internationalization of an enterprise, it is necessary to identify and study its network of relationships with all entities, including customers, distributors, suppliers and competitors. As Balog (2016) stated, network organizations are more effective, more flexible than hierarchical, and resistant to external influences. An important prerequisite for business development, especially for small and medium-sized enterprises, is, therefore, the creation of networks and strategic partnerships.

Cross-border cooperation may involve a wide range of business activities, from formal small enterprises to supplier-customer relationships, strategic alliances, joint ventures to synergistic forms of cooperation.

2.1. Small and Medium-sized Enterprises

The small companies have been often presented as a hidden giant. The SMEs have the key position in the national economy in terms of creating healthy entrepreneurial surroundings; they are of high importance for the development of the national economy, regions, individual towns and villages. They help to create healthy entrepreneurial surroundings and increase market dynamics. The development of

small and medium-sized enterprises is generally regarded as the main factor of economic development and this in disregard of economic advancement of the country (Štverková, 2013; Blecharz, Štverková, 2014, Gorzeń-Mitka, 2019; Havierníková, Kordoš, 2019).

SMEs represented 99.9% of businesses in the Czech non-financial business economy. They account for 56.0% of total value-added and 66.4% of employment, very similar to the respective EU averages of 56.4% and 66.6%. In recent years, Czech SMEs in the ‘non-financial business economy’ has generated steady growth. In 2014-2018, SME value-added increased by 32.9%, with micro and small firms experiencing particularly strong growth of 39.3% and 38.7%, respectively. The proportion of micro-companies stood above the EU average. Annual productivity of Czech SMEs, calculated as value added per person employed, is €24,400, considerably lower than the EU average of €44,600. SMEs in Czechia employ an average of 2.4 people, which is much lower than the EU average of 3.9. The most important SME sectors, both in terms of employment and value-added, are manufacturing and wholesale and retail trade (EC, 2018a).

Also, data for SMEs in Slovakia indicate that they are also an important pillar and a stabilizing factor for the economy of the country and its regions. SMEs contribute significantly to Slovakia’s ‘non-financial business economy’. They generate 52.5% of total value-added and 72.0% of total employment. Although the SME contribution to total value added is lower than average for the EU, their contribution to total employment is higher than the EU average. Micro firms are particularly important for employment in Slovakia, providing 41.9% of all jobs. SME employment increased by 13.8% in 2013-2017. More recently, in 2016- 2017, SME employment increased by 3.0% and SME value added by 3.9%. In 2017-2019, SME value added is predicted to increase by 17.2% and SME employment by 4.4%. Slovak SMEs employ 2.6 people on average, lower than the EU average of 3.9. The biggest sectors for SMEs in Slovakia are manufacturing and wholesale & retail. Together, both sectors contribute around half of the total SME value-added and half of total SME employment (EC, 2018b).

In Poland’s ‘non-financial business economy’, SMEs accounted for slightly more than half of overall value added in 2018, a share of 52.9%. In 2014-2018, overall SME value added increased by 26.3%, while in large firms the rise was 23.2%. Overall SME value added is expected to rise in 2018-2020, exceeding the growth projected for large firms. By the end of 2020, it is predicted that SMEs will generate 98,700 jobs. In Poland’s ‘non-financial business economy’, SMEs accounted for slightly more than half of overall value added in 2018, a share of 52.9%. Although this share is lower than the EU average of 56.4%, they have gradually been converging over recent years. SMEs generated 67.1% of total employment in the Polish ‘non-financial business economy’ in 2018, similar to the EU average. Polish SMEs employ approximately 3.5 people, compared with the EU average of 3.9 (EC, 2018c).

2.2. Methodology

Business is a result of the development of socio-economic relationships. Entrepreneurship is seen as a permanent cyclical process of creating added value, satisfying needs and leading to the creation of personal well-being and social values. Cross-border economic activity is considered internalization entrepreneurship. Business development can be one of the indicators of cross-border cooperation, which leads to an improvement in the socio-economic situation of marginalized areas.

The paper is based on qualitative research exploring the concept of entrepreneurs’ mindsets to the cross-border cooperation. Qualitative research is a scientific method of observation to gather non-numerical data. This research answers why and how a certain phenomenon may occur rather than how often (Berg, Lune, 2012; Pokorny, Gondek, 2016). Due to the needs to fulfil the main aim of this paper, we focused on the evaluation of selected questions that related to the identification of entrepreneurs’ mindsets to the cross-border cooperation and internalization in the context of the sustainable development of business activities.

In developing this paper, the authors established a scientific hypothesis: The most important reasons that motivate small and medium entrepreneurs to cross-border cooperation are the common projects in the area of doing business and the increase of competitiveness on the global market.

The authors use multi-criteria decision making and Fuller's paired comparison methods. Weighted mean for the individual criteria was performed by the pairwise comparison method. The pairing was done in a binary fashion. Pair comparison is one of the techniques to compare proposed solutions to

a problem. All the criteria with which the solution is to be assessed are chosen successfully. Due to the requirements of the mutual comparability of weights of criteria determined by different methods, these weights should be normalized (the sum of the standard weights of the set of criteria is equal to one).

3. Results

For the research, firstly the pilot survey had been realized in Czech, Slovak and Polish small and medium-sized companies by an in-depth interview with founders or senior managers from 5 organizations from each state.

Based on the in-depth interview the authors summarized the necessary factors identified for the cross-border cooperation and internationalization by SMEs. There were found that it is necessary to have a vision of the company - it means the structured approach to leads to greater success. Secondly, the role of the owner is significant in building successful cross-border cooperation. Important is the knowledge base, access to the information, experiences for conducting cross-border cooperation and networking as a separate factor for sustainable development. The biggest limiting factor was defined as the limited resources of SMEs.

The qualitative research by questionnaire surveys was realized among 150 Czech, 150 Slovak and 15 Polish SMEs since September to November 2019. For achieving of the main aim of this paper, we focus on enterprises that operate in the areas Euroregion Beskydy. The structure of respondents presents table 1.

Table 1. Structure of respondents

Sized categorization	Czech Republic	Slovak Republic	Poland	Total
Micro	56	59	48	163
Small	66	47	46	159
Medium	28	44	56	128
Total	150	150	150	450

Source: author's research and calculations

Most of the respondents operate in the micro sector of small and medium-sized enterprises, especially 36% of respondent have less than 10 employees. Respondents were from a wild range of industries and services. Respondents were from a wild range of industries and services. They were chosen randomly, but from the Euroregion Beskydy, as this exploratory research was attempting to develop in-depth knowledge of the specific business activity and approaches for cross-border cooperation and internationalization in the Czech - Slovak - Polish cross-border area.

The authors verified, for the needs of this paper, the necessary factors identified by the research for the cross-border cooperation and internationalization by SMEs in 150 companies in each country:

1. to have a vision of the company - it means the structured approach to leads to greater success;
2. the role of the owner is significant in building successful cross-border cooperation;
3. the knowledge base, access to the information, experiences for conducting cross-border cooperation;
4. networking;
5. the limited resources of SMEs.

SMEs' assessed each reason by Likert scale: 1 - insignificant reason, 5 – the most important reason. Due to the rules of the VDA test, the expected variables of each factor must be higher than the value 80%, so it could be confirmed that this is an important factor for cross-border cooperation. The level of perception of the importance of the vision of the respondent's answers by Likert scale in grouped categories presents Figure 1.

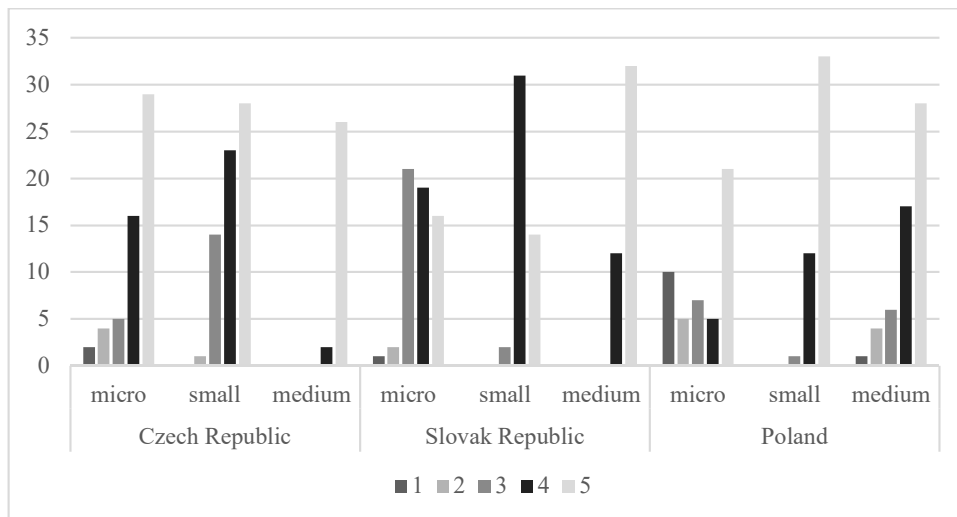


Figure 1. The level of perception of the importance of the vision in micro, small and medium-sized companies in the Czech Republic, Slovak Republic and Poland

Source: author’s research and calculations

The findings of the research made in Czech, Slovak and Polish small and medium-sized companies showed that in the business environment in all countries the owners consider setting up a business vision as an important part of the successful part for doing business. The results were verified that the structured approach to the scale and scope of the business is important. The resulting weight value determined from Likert's scale and the response rate is 4.2, which implies that setting up a business vision is considered by all entrepreneurs as very important overall. In the Czech Republic the resulting weight of importance for setting the vision is 4.89, for Slovak SMEs 3.22, therefore it is possible to say, that Slovak entrepreneurs consider the company's vision as an average thing and in Polish is the perception level on 4.11. Companies need to pay attention to company philosophy and set up a vision, the need for vision is important for having its identity and integrity of the employees. This increases the opportunity for successful internationalization because the employees know the strategic goals of the company and are able to do the right things.

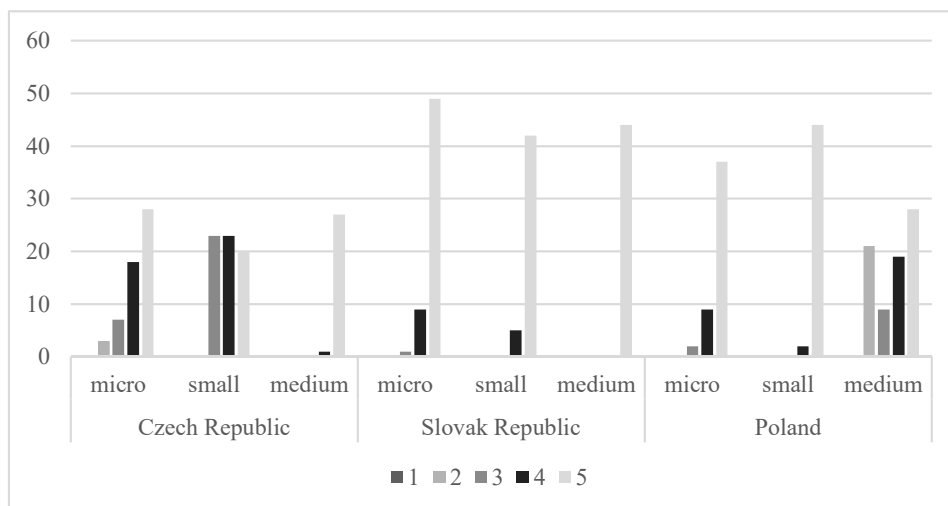


Figure 2. The level of perception of the importance of the role of owner in micro, small and medium-sized companies in the Czech Republic, Slovak Republic and Poland

Source: author’s research and calculations

SMEs recognize that the world has become much more competitive, thus the role of the owner and his approach to leading the business is very important, as is shown on Figure 2.

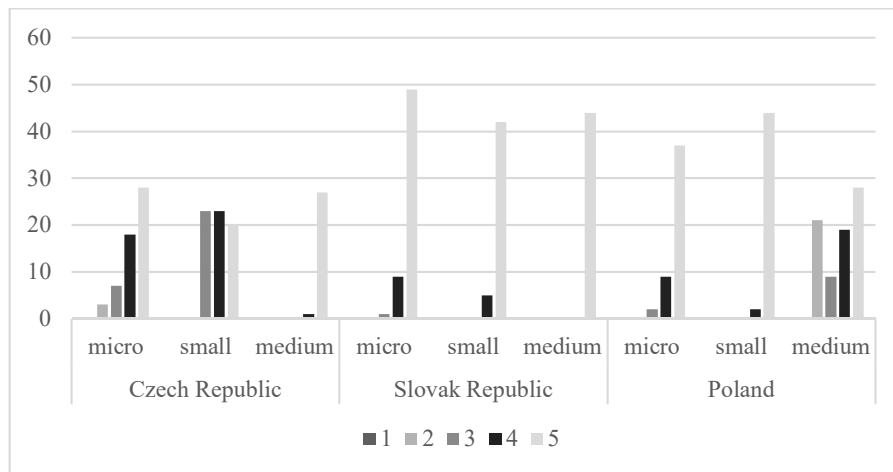


Figure 3. The level of perception of the importance of the knowledge base in micro, small and medium-sized companies in the Czech Republic, Slovak Republic and Poland

Source: author's research and calculations

Many respondents recognise the value of knowledge base, access to the information, experiences for conducting cross-border cooperation, this is visible on Figure 3. As the results of the research shows, it is necessary to create the network of supporting partners. This network should include resources for marketing, finance and management for all operational activities.

Authors are able to confirm that all chosen factors increased the rate 80% of importance for successful cross-border business and cooperation. Authors are able to confirmed the scientific hypothesis, that the most important reasons that motivate small and medium entrepreneurs to cross-border cooperation are the common projects in the area of doing business, in this we can see the role of the owner of the SME and his vision, and networking; and the increase of competitiveness on the global market based on the knowledge base.

4. Conclusion

It is also suggested that barriers to cooperation are important and can negatively affect the performance of border region enterprises. Overall, small and medium-sized enterprises are less concerned about the quality of infrastructure and more concerned about the general or the financial conditions prevailing in each country, indicating that the best policy for cross-border cooperation, rather than improvements in infrastructure, maybe the development of the economies in the region and the improvements in their economic environment.

Cross-border cooperation is an important aspect of the development of cross-border regions and should be supported by local institutions. The cross-border business should be considered as the cornerstone for the economic sustainability of cross-border cooperation. It is necessary to seek and activate the economic potential in border areas.

The SMEs ensure the social stability and the freedom, the cross-border entrepreneurship is important for their internalization. They give a chance to free finding of entrepreneurs, to self-realization of citizens in the economic sphere over the world.

At the global level, the increasing internationalization of the system of products and the services inevitably leads to the development of cross-border operations. Cross-border entrepreneurship offers opportunities for both regional development and individual business entities. As Pohludka et al. (2018) and Štverková et al. (2018) claimed that the cross-border entrepreneurship can be considered as a stimulus for the development of entrepreneurial activities leading to the development of the region.

Another significant aspect of cross-border entrepreneurship is foreign language skills in the Euroregion Beskydy. The problem is more on the area of Czech-Polish cross-borders than Czech- Slovak cross-borders, the solution would be Czech-Polish language courses focused on the basics of the language and further focused on the subject specificities. It is necessary to strengthen the foreign language competencies, in the Euroregion Beskydy authors recommended the language skills to deepen, but generally, it is important by Onyusheva et al. (2018) the English communication skills deepening.

The research priorities identified in this study relate to important shared challenges in Europe's sustainable entrepreneurship. This makes cross-border learning important, especially given the clear geographical variation in behaving and funding in the cross-border areas.

This types of integration generate a great impact on the region's economic competitiveness over the global economy, equitable economic development (Meyer et al., 2017; Štverková et al., 2018) and advantage to SMEs and other areas including manufacturing in the region as same as the challenges.

The limitations of this study suggest some directions for future research. First, this study only focused on cross-border entrepreneurship in Euroregion Beskydy – covering the Czech Republic, Poland and the Slovak Republic. This approach can also be used to examine the asymmetric effects of cross borders differences in other areas.

Entrepreneurship is an essential factor for competitiveness, because of new entrepreneurship projects increasing competitive pressures, which force other companies to react in the form of increased efficiency or introducing innovation, thereby strengthening the competitive power of the whole economy (Mynarzová et al., 2016; Havierníková, 2015).

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35. THE ANALYSIS BARRIERS TO DEVELOPMENT OF SMALL AND MEDIUM-SIZE ENTERPRISES IN ASPECT OF “FRIENDLY LAW PACKAGE”

Abstract: Small and medium-sized enterprises (SMEs) are the key element of economic development in the country. In a dynamically changing environment, having up-to-date knowledge about limitations and development supporting factors of small and medium enterprises may be a necessary condition for a competitive advantage or company remain in the market. This article analyses the impact on the management of SMEs introduced by the changes in legislation – based on the research carried out by the method of analysis and criticism of the literature. The literature studies consists on the issue of changes in regulations introduced by the so-called "Friendly Law Package" (PPP). The aim of this article is to present some barriers to the activity and development of small and medium-sized enterprises in terms of evolving legislation. The assessment of changes in legal regulations (force, in the dominant scope, since January 2020), in a relatively short period of time until the date of preparation of the article, does not indicate their positive reception in the activity of SMEs. Organizations operating in a changing market environment face constant changes in terms of law, finance, accounting, macro and microeconomic factors. Part simplification of the procedures is carried out in parallel with the introduction of new requirements, which causes a negative perception of SMEs business.

Keywords: barriers to activity, Friendly Law Package, SMEs.

JEL Classification: L26, K34, M38

1. Introduction

As a result of system and structural changes in the Polish economy, after 1998, there was an intensive development of the small and medium-sized enterprise sector. Researchers pay special attention to the impact of SMEs on the economic and social development of the country. According to Piasecki - position of SMEs is growing every year as a result of the development of the market system, which undoubtedly constitutes a factor stimulating economic development and enabling the realization of the adopted political tasks and social (Piasecki, 1999, p. 65). The development of the SME sector in Poland plays an important role in generating domestic product of GDP, employment and productivity. According to the report from 2016, small and medium enterprises constituted 99.8% of all companies in Poland (Tarnawa, Skowrońska, 2016, p. 5). However, researchers of the topic also point out numerous controversies and the weaknesses of the SME sector. The development process of the SME sector is deepening. The SME sector is a pillar of economic development in Poland (Wójcik-Mazur, Łukomska-Szarek, 2018, p. 20). Currently, the Polish enterprise sector is dominated by microenterprises, whose share in the structure of all enterprises is as much as 96.5%. There are almost 54 thousand small companies, which constitute 2.6% of the Polish enterprise sector. On the other hand, medium-sized companies constitute only 0.7% of the Polish enterprise sector, and additionally,

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a decrease in their number has been observed over the recent years. Therefore, it is easy to assess that the SME sector comprises 99.8% of enterprises (Zakrzewski, Skowrońska, 2019, p. 10-12). In order to assess their importance for the development of the country, the structure of their participation in the creation of GDP should also be analysed. As can be seen from the above quoted source:

- The largest number of micro-enterprises operate in services (53.0%) and trade (23.9%). Every seventh company operates in the construction industry (13.6%) and every tenth in industry (9.4%). They have the largest share in the creation of GDP of all enterprise groups - 31%, and assuming the value of GDP generated by the enterprise sector as 100% - 41%. Moreover, they have a significant impact on the labour market - in the enterprise sector they generate 40% of workplaces (the number of people working in such companies is about 4 million);
- Of all enterprise groups, small enterprises have the smallest share in creating GDP - 8%, and assuming the value of GDP generated by the business sector as 100% - 11%. They also have the smallest share in job creation - in the enterprise sector they generate 12.2% of jobs (about 1.1 million employees). An average small company employs 21 people;
- The share of medium-sized companies in the creation of GDP is 11%, and in the years 2007-2016 it increased by 1.9% (a 0.2% y/y increase in 2016). Assuming the value of GDP generated by the enterprise sector as 100%, this share is 15% (only small enterprises generate less). They have a slightly larger share in job creation than small companies - in the enterprise sector they generate almost 16% (the number of people working in such companies is about 1.6 million). The average company employs 105 people, while the average monthly salary per employee is PLN 4662 (PLN 270 higher than a year before and PLN 208 higher than in the average company).

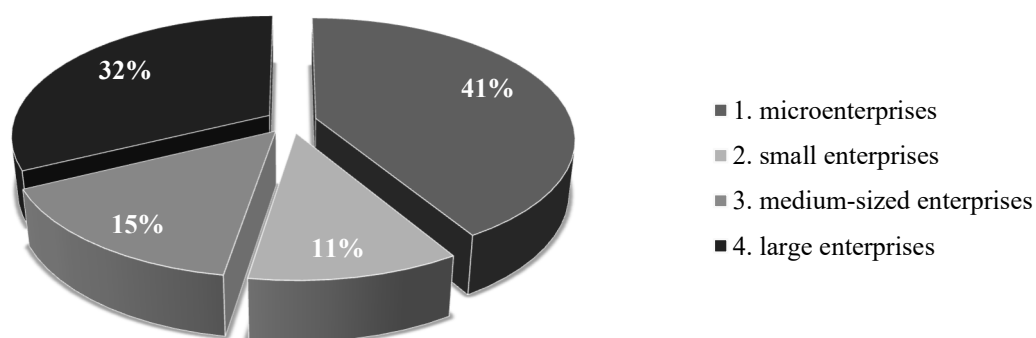


Figure 1. Share of enterprises in GDP creation (assuming the value of GDP generated by the enterprise sector as 100%)

Source: Own study based on Zakrzewski R., Skowrońska A. (eds.) (2019).

To sum up, the SMEs are responsible for about 70% of the GDP generated by enterprises, which, compared to 99.8% of the total number of enterprises, clearly indicates that their activities should be part of special protection by the legislative authority.

Continuous regulatory changes, especially in the fiscal field, since the change of regime, have led to expectations among businesses for a number of simplifications. The business activity is connected with engaging time and posts for the needs of internal organizational service related to the satisfaction of legal obligations. The potential of an enterprise is then engaged in activities that do not generate income and, consequently, do not favour GDP growth. Entrepreneurs have been pointing out for years the lack of legal stability and high tax burden and bureaucracy as the most important barriers to growth, which definitely puts Poland in last place in Europe in terms of the number of SMEs per 1000 inhabitants. It should be stressed that in absolute terms it is the 6th place in the European Union (Czerniak, Stefański, 2015, p. 2-3). The reasons for this state of affairs should first of all be seen in the external barriers to SME operations.

The organisation of the company's activities should be based on innovation and related investments with the development of the revenue sector, resulting in cost reduction and acquisition of sales markets, just as the implementation of the process of economic growth should take into account any improvements applied in management (Starostka-Patyk, Grabara, 2011, p. 375). A. Korombel presents

a statement that intangible resources play an increasingly important role in building the value of an enterprise, which is reflected in the number of organisations developing towards knowledge-based enterprises (Korombel, 2013, p. 46).

In an SME sector where the ratio of production workers to staff should be as high as possible, it appears that a number of jobs must be sacrificed to meet the requirements of changing regulations. It should be stressed that outsourcing of these functions is negligible in a small organisation. As a result, the company's commitment and financial performance is significantly reduced. In order to meet these expectations, a package of systemic "simplifications" and business-friendly solutions was created. It should be stressed that from the date of its publication until the date of entry into force of a number of legal articles of the same act, the following changes were introduced in other regulations: new tax return formulas were introduced, contributions of national insurance company was increased, the rules for calculating taxes were changed, the minimum wage and the unitary control file structure were changed. Uncertainty of future legal status blocks investments and innovation. Significantly rising operating costs and constantly decreasing productivity can lead to critical conditions, resulting in sharp reduction of SMEs numbers. Identifying key internal and external barriers and their analysis may lead to verification of legal changes introduced by the PPP package.

The first classification of management functions was formulated by Henri Fayol, in a book from 1909. *L'exposee des principes generaux d'administration*. He distinguished five basic functions, i.e., planning (closely related to anticipation), organising (i.e., all administrative activities), coordinating (resources and activities), leading (commanding, giving orders, leading to the execution of a plan), controlling (execution of a plan) (Fayol, 2015, p. 2). Together, with the development of management science, the list of these functions has changed. As Khaled Nawaser, Seyed Mohammad Sadeq Khaksar, Fatemeh Shakhshian, Asghar Afshar Jahanshahi stress, the development of entrepreneurship is a long-term, complex and comprehensive process (Nawaser, Khaksar, Shakhshian, Jahanshahi, 2011, p.112).

The management of changes in legislation, as well as the management of the company, should be based on the functions described above. This work is an attempt to analyse the implementation of the plan in the context of the functioning of the changes introduced by PPP package.

2. Internal and External Barriers in the SME Sector

Describing various aspects of small and medium enterprises, it is necessary to define the characteristics of these enterprises and the differences between them. Following the quantitative criteria of the Business Freedom Act, these enterprises can be differentiated according to the number of persons employed, net revenues or total assets of the balance sheet. Taking into account the qualitative criteria, an enterprise can be differentiated according to varied characteristics of the entrepreneur - the owner of the company, such as independence and the way of making decisions or solving problems (Lemańska-Majdzik, 2008, p. 136-137). The entrepreneur influences all the changes that take place in his company, is responsible for the effectiveness and efficiency of the implemented changes, i.e. for the whole process of change management (Skalik, 2007, p. 27). Rima M. Bizri, Alia Kojok, Abdallah Dani, Mohammad Mokahal and Mohammad Bakri are suponerating, that there are two trends in research on barriers to entrepreneurship - one emphasising the psychological aspects of inaction by entrepreneurs, the other emphasising the variables of the business environment (Bizri, Kojok, Dani, Mokahal, Bakri, 2012, p.81).

According to B. Nogalski and many others - SMEs are one of the basic elements of the social and economic policy of countries, while the development of economic entities can be identified as a symbol of healthy competition and one of the measures of economic growth, however, the condition for the active participation of SMEs in economic growth is the flourishing of these enterprises (Nogalski, Karpacz, Wójcik - Karpacz, 2004, p. 5). It is worth mentioning here the results of research conducted by O. Ławińska. The author - by analysing the technical infrastructure as a determinant of the development of small and medium enterprises - has shown that the authorities of the communes she studied did not show due care to provide conditions conducive to the development of enterprises (Ławińska, 2009, p. 46). Siti Fahazarina Hazudin, Mohd Aidil Riduan Awang Kader, Nor Habibah Tarmuji, Maisarah Ishak, Roslina Ali present the view that the greatest challenge for entrepreneurs at present is the very fact of company development on the competitive market (Hazudin, Kader, Tarmuji, Ishak, Ali, 2015, p. 438).

The dynamic development of knowledge and the growth of data on the functioning of SME's are leading to be cautious in formulating only positive conclusions about the importance of the small and medium-sized enterprise sector for the economy and economic growth (Greta, Kostrzewa-Zielińska, 2005, p. 104). Leona Achtenhagen, Sara Ekberg and Anders Melander stress the significant role of company founders in the case of microenterprises (Achtenhagen, Ekberg, Melander, 2017, p. 180).

Researchers draw attention to numerous controversies and weaknesses of the SME sector, a clear decline of such an appreciated economic role and a decrease in the generation of new jobs were noticed, as P. Dominiak writes about. Statistical data indicate that both the size of the SME sector and changes in their activity do not translate into macroeconomic effects (Dominiak, 2005, p. 103).

In the literature on the subject, the classification of barriers to the development of enterprises, taking into account the division into two groups of threats to the development of SMEs, external barriers, the source of which is variable and complex, and internal barriers resulting from the weaknesses of the enterprise (Matejun, 2010, s. 244).

External barriers are most often connected with the company's environment and the risk of factors influencing the company's functioning. You can analyse them at the national (macro) and local (micro) levels (Danielak, Mierzwa, Bartczak, 2017, p. 12). External barriers most often result from weak enterprises and are associated with a distorted structure of the organization and an imprudent strategy (Ołówko, 2016, p. 211).

On the other hand, among internal barriers to the functioning and development of SMEs, the weaknesses of a company are listed, which usually relate to its size, technology and production capabilities, strategy, structure (both the organizational structure, as well as e.g. cost structure), owners' and management's competences and employees' qualifications (Matejun, 2007, p. 122).

A study carried out by M. Matejun in 2007 showed that problems related to with the legal and tax sphere and complicated legal regulations are the most troublesome element of external barriers for persons running small and medium enterprises (Matejun, 2007, p. 120-129). The result of the study is confirmed by the research conducted in 2015 by "ARC Market and Opinion", on a group of 1.1 thousand owners, directors and persons responsible for running micro, small and medium enterprises.

The division presented above separates market, educational, social, financial, personnel and legal barriers. It should be noted, however, that all of the above are derived from the legal nature, as the fiscal and human resources sphere, among others, is anchored in the legal basis.

The functioning of an enterprise related to human resources issues requires extensive knowledge focused on, among others, compulsory training in health and safety at work, meeting the requirements of medical examinations, broadly understood insurance issues, Social Insurance Company, working time records, holiday plans, tracking professional activation projects carried out by Poviats Labour Offices, taking care of ergonomic standards of workstations, preparation of payroll - based on with dynamically changing fundamentals. Except of the requirements for specific industries. Failure of these obligations exposes the company to criminal consequences.

Functioning in the field of fiscal law requires administration and documentation appropriate to the type of business activity, keeping a number of separate tax registers, fixed assets register, equipment register, vehicle mileage register, stock levels whose scale and degree of complexity are usually not adequate and related to the size of activity. At the same time, should not forget that the activity of paying taxes and other contributions also involves the activities of the entrepreneur, not to mention cyclical tax returns, registers, unitary control files. From the fiscal and human resources point of view, outsourcing is of course possible, however it generates additional costs.

Even seemingly minor changes in conditions lead to far-reaching consequences. A good example is a mundane change consisting in adding the buyer's tax identification number to the receipt, which may result in the necessity to exchange thousands of fiscal cash registers, even if several years old, with the exchange procedure requiring both the purchase of the register and its registration with the tax office. It should be remembered that any change consisting in both simplification and introduction of additional requirements constitutes a barrier for the company. It requires the use of time in tracking and learning. Hence the well-known view of entrepreneurs limiting themselves to the statement "let nothing change, just let us work". Every entrepreneur running a business counts with an obligation to pay taxes. The sum of revenues and the sum of costs should be sufficient to calculate their amount. Does even the introduction of percentage indicators for taking into account particular costs lead to a real increase in tax revenues? Or would the simplification of procedures and a significant increase in

efficiency, related to the increase in revenue, result in an even greater increase in tax revenue? Unfortunately, we will not find an answer to this question in this article, because it would require extensive research and analysis. However, it should be clearly stated that the constantly increasing number of barriers in the external environment significantly limits the development of enterprises.

3. Description of Methods

The purpose of this article is to present certain barriers to the operation and development of small and medium-sized enterprises in terms of changing legislation. This article analyses the impact on the management of SMEs introduced by the changes in legislation – based on the research carried out by the method of analysis and criticism of the literature. The literature studies consists on the issue of changes in regulations introduced by the so-called "Friendly Law Package" (PPP). The assessment of changes in legal regulations (force in the dominant scope since January 2020), in a relatively short period of time to the date of preparation of the article, does not allow for an unambiguous assessment by quantitative methods. This paper focuses on the analysis of changes in the external environment of SME operations.

4. Friendly Law Package

Undoubtedly, given the "thicket" of legal regulations, start-up entrepreneurs may have many doubts and concerns about running a business. Lack of experience in performing the duties that the owner of the company has to meet does not make the task of novices easier. In the context in question, the reference to the - entering into force. As of 1 January 2020, the so-called Friendly Law Package, seems to be relevant for start-ups. Pursuant to the Act of 31 July 2019 amending certain acts in order to reduce regulatory burdens (Journal of Laws 2019, item 1495), the Act of 6 March 2018 was amended. - Entrepreneurs' Law (Journal of Laws 2018, item 646). Article 21a has appeared in the amended legal act. It provides for the implementation of the so-called "right to make a mistake". This legal structure, modelled on French and Lithuanian solutions, covers. There are entrepreneurs registered in the Central Business Activity Register and Information, who run their own business for the first 12 months from the date of commencement of business activity. However, if the infringement has started during the aforementioned 12 months and continues - exceeding the set period of "rights to make mistakes" - it is the entrepreneurs who cannot benefit from the implemented legal structure. It is worth noting that analogous rules apply to service providers who again, within 36 months from the date of termination or suspension of the business activity, have become owners of companies. Where service providers infringe legal provisions related to their economic activity and at the same time the infringement invoked involves, under 'normal' conditions, the imposition of an administrative fine or a criminal mandate, the competent authority should, by way of an order, call upon the providers to remedy the infringements and the consequences of their infringement within an officially appointed period. On the other hand, in a situation where the case is connected with a mandate procedure - it is allowed to give verbal instructions of an inspector, officer or representative of the authority (e.g. during an inspection) instead of an official, written summons of the authority. In this case, the body's employee is obliged to accept a statement from the entrepreneur in which the service provider undertakes to remove the infringements within the time limit set by the authority. Refusal to submit the declaration is tantamount to the impossibility of exercising the so-called "right to make mistakes". Removal of the infringement by the entrepreneur within the set time limit results in withdrawal from the authority's fine. However, the office may instruct the owners of companies committing offences. It should be particularly emphasized that an entrepreneur may repeatedly use the so called "right to make mistakes" while maintaining the price ranges specified in Article 21a of the Act on Business Law. It must also remember the so-called "yellow card rule", according to which the service provider cannot fail to comply with the same legal provision again. The infringer does not have to wait for a reaction from the competent authority. He may use a legal construction analogous to the so-called "active regret". When the owner of a company notifies an inspector, officer or representative of the authority of the removal of a violation of the provision and the consequences of non-compliance with the law, the authority is forced, as it were, to refrain from imposing a fine on the service provider if all the requirements are met. In order to take advantage of the legal structure similar to the so-called "self-acceptance", the following obligatory conditions must be met:

- the infringement and the consequences of non-compliance must be remedied within the time limits specified in Article 21a of the Act on the Law of Entrepreneurs,
- the offences must be related to the economic activity carried out,
- a "normal" breach of the law would entail the imposition of a criminal mandate,
- the entrepreneur concerned must obtain an entry in the central evidence of companies.

It is worth noting that the "right to make a mistake" is a legal construction which has numerous exemptions, such as:

- the criminal fine imposed as a result of a roadside check shall apply regardless of the rules laid down in the new legislation,
- the imposition of a criminal or administrative fine may constitute a sanction for non-compliance with the guidelines contained in the inspection recommendations,
- infringements consisting in conducting business activity without obtaining legally required permits, concessions, etc,
- the imposition of an administrative pecuniary penalty and a criminal mandate results directly from European Union legislation or from the ratification of an international agreement,
- it is not possible to remove the infringements or their effects (in such a situation it becomes unreasonable for the authority of the entrepreneur to force the removal of infringements or their effects),
- there is a serious breach of the law (the assessment of whether an action is to be classified as a serious breach of the law is a matter for the competent authority and depends inter alia on:
 - the duration and nature of the infringement, the behaviour of the undertaking
 - its intentional or unintentional nature, specificity and type of business activity). It is worth noting that the entrepreneur
 - if there are indications that a 'right to make a mistake' may be applied to him
 - may refuse to accept the mandate, immediately remedying the breach and its consequences.
 If the case comes to trial, the court should refrain from imposing a penalty on the owner of the company (Journal of Laws 2018, item 646).

Unfortunately, it cannot be omitted that the above regulation concerns a narrow group of entities. Already at the beginning, a thesis was formulated about the necessity to move in the "maze of regulations". This package concerns amendments to 69 legal acts and repeal of one. Apart from the above-described, very media oriented, changes were also made to the following acts: on public roads, on maritime areas of the Republic of Poland and maritime administration, on radio and television broadcasting, Energy Law, about the commercialization and restructuring of the state enterprise "Polish State Railways", Atomic Law, Horseracing Law, Aviation Law, and in a number of other acts which, due to their specificity, concern only individual, especially large enterprises, which constitute a small percentage of the entities in operation. The above changes may insignificantly facilitate the business of SMEs in individual cases.

In order to try an uncritical position in view of the changes made, it is necessary to replace those most relevant for SMEs. These are, among others.:

- consumer protection, i.e. the right of complaint, for companies registered in the central evidence of companies,
- extension of the deadline for the settlement of VAT tax on imports to strengthen the position of Polish ports in competition with foreign ones,
- changes in the way craftsmen's businesses are registered,
- changes in business succession,
- exclusion from enforcement of amounts necessary for the entrepreneur and his family to support themselves for two weeks.

Do these regulations reduce barriers to business development? In the opinion of the authors, they are only about regulating the existing requirements. Does their introduction increase the competitiveness of Polish SMEs? Certainly not. On the basis of conducted analyses, the authors perceive them as an example of imposing additional barriers, necessary to verify the following with

the introduction of new standards that will certainly not make it easier to navigate in the maze of regulations. The confirmation of the given state of affairs is the progressing significant increase in labour intensity of tax settlements in Poland. In this area, Poland stands out the other developed countries, because according to the Paying Taxes 2020 report, Poland needs on average as much as 334 hours per year for tax settlement obligations (in the report from 2019 the world average was 237 hours, and for EU and OECD countries 161 hours).

5. Conclusion

The Friendly Law Package seems to be relevant for business start-ups, which may reduce the incidence of external barriers somewhat by protecting. The following measures are necessary: the right to make a mistake during the first year of business activity, consumer protection, i.e. the right of complaint for companies registered in the central evidence of companies and extension of the deadline for VAT tax settlement in imports. These are ad hoc actions and do not prejudice the reduction of barriers. Reorganization of the rules of functioning of SMEs is the key to their development. The above-described changes prove that the system requires comprehensive reorganization, which cannot be replaced by ad hoc modifications. Conducting systematic, in-depth analyses of economic effects of introduced legal changes, based on known and existing solutions. The management system may result in improvements in the initiatives taken. A brief analysis of only the number of companies and their global share in the GDP structure is not a reliable indicator of the quality of legal changes. The expectations of entrepreneurs regarding the scope of changes are enormous. There is a view that simplifying the rules will lead to a reduction in budget revenues. It should be stressed, however, that the lack of in-depth research in this area does not lead to a clear-cut decision. Therefore, it is wise to focus on macro analyses. Are the solutions adopted in Poland more competitive than in neighbouring economies? Do the undertaken legal acts lead to GDP growth? Comparing even the tax-free amounts in different EU countries leads to the conclusion that there is still a lot to do in the field of actions aimed at reducing barriers for entrepreneurs.

Simplification of a negligible part of the procedures in one legal act, together with the introduction of a number of additional obligations and regulations, results in a negative perception of the complexity of running a business by SMEs - at a level practically unchanged for years.

Technological progress offers great opportunities to simplify procedures. Limiting the necessary documentation to bank account statements, with the simultaneous obligation for electronic payments, can lead to unprecedented simplification. Indeed, not all industries, especially the retail sector, can operate on the basis of such procedures, but the declining role of cash and its substitution with electronic money can lead to a number of pilot schemes viewed positively by entrepreneurs. A company that will focus its activities on generating income in a simple way and transparent will achieve higher revenues even if it fully calculates the costs incurred, it is the revenue of the state that does not have to be lower due to the scale of the revenue.

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36. THEORETICAL ASPECTS OF USING BEHAVIORAL ECONOMY KNOWLEDGE IN MANAGEMENT

Abstract: Behavioral economy has become an increasingly common term and current topic in recent years. It is important to realize the fundamental difference between the behavioral and traditional economists' view of irrationality and rationality. Traditional economy assumes that people behave in an absolutely rational way, while behavioral economy is aware that there are many different factors that influence our decision-making and actions. In the following article we want to point out the use of knowledge of behavioral economy in management. The main aim of this paper was to find out what are possible ways of using knowledge about behavioral economy in management. Based on the achieved results, it can be concluded that aspects of knowledge about behavioral economy can be used also in management, for example in game theory or heuristic methods. Of course, in combination with other inseparable tools used by management.

Keywords: behavior, behavioral economy, game theory, management, psychology.

JEL Classification: A14, M54, Z13

1. Literature Review

Doubts and findings of some economists that the theoretical assumptions of neoclassical economy “do not agree” with the real behavior of people. They were the basis for the gradual development of behavioral economy, which examines the functioning of the standard economic model of behavior and decision-making empirically and experimentally. It also disagrees with the claims of neoclassical economy that “market forces and learning have ruled out the meaning and nature of human behavior”. Behavioral economy tries to point out the unrealistic claims of classical economy that it wants to modify (Bačová, 2008). Numerous thoughts in this economy are not new, they return to the bases of neoclassical economy and profit. Exactly when concerns about earning money first appeared as a remarkable field of study, but at that time man's thinking had not yet been explored. Adam Smith, who in his book *The Theory of Moral Sentiments*, known as the “invisible hand,” states that the mental principles of individual leadership are apparently as great as their monetary observations (Heilbroner, 1982). Economists are increasingly focusing on how people actually respond, what their natural behavior is when they are offered options such as pricing. The field of behavioral economics recognizes that context is the basis of price interpretation. Patterns of cognitive responses to prices have been identified in the economic and marketing literature. Many of them are based on heuristics. These are simple procedures (“basic rules”) that simplify the cognitive decision-making process. However, such procedures are imperfect and the use of heuristics sometimes leads to “wrong” decisions. Fortunately, this error is often systematic and therefore predictable (Jeong & Crompton & Hyun, 2020). However, heuristic methods, as well as the very idea of influencing human behavior, are often the target of critics. Because they can act as violent and coercive and people don't act in the way they really want. They say it is disrespect or even violation of the rationality of humans (Engelen, 2019). Rationality itself can be interpreted as positive or descriptive. Efforts to test rationality interpret the notion in a descriptive manner. In short, rationality is presumed to characterise how people actually go about the business of reasoning. By contrast, a normative interpretation of rationality is concerned not so much with how people actually reason as to how they should reason (Sent, 2018). Limited

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rational behavior, according to Coricelli & Nagel (2011), can be observed in experimental games, but also in real life situations. Neuroeconomists can help to understand the mental processing that underlies limited rationality and out of equilibrium behavior. It is therefore important and desirable to link behavioral economics with other disciplines as well. The forgiveness of scholaristic psychology by economists may be somewhat incomprehensible, begun by the neoclassical transformation that developed a record of economic behavior, which was created on the basis of environmental data, ie the brain science of homo economics (Rehman, 2017). This neoclassical model makes specific assumptions in human behavior. Where people have well-defined preferences and impartial beliefs and expectations, they also make optimal decisions based on these opinions and preferences. So they choose the best, not what is tempting at the moment. Although they may act selflessly, especially towards close friends and family, their main motivation is private interest (Simon, 1987). Based on these assumptions, they are defined as Homo economicus, behavioral economics replaces in the future "economicus" - economic, for Homo sapiens, otherwise known as "people". In the past, we have come across different views on the importance of using and interconnecting psychology and economy. In 1906 Pareto wrote that "The basis of political economy and, in general, of every social science is obviously psychology (Wicksteed, 1906). John Maurice Clark (1918), John Bates Clark's son, commented: "The economist may try to ignore psychology, but it is absolutely impossible for him to ignore human nature." Human behavior varies depending on circumstances, location, time, societal influences, emotional judgments, prejudices, and how they make decisions. The consequences of involuntary and organizational processes lead to choosing one particular option rather than following a basic model that most believe (Rehman, 2017). Salinger defines "limited rationality means that individuals (or firms) act purposefully, but not necessarily, as if they were fully informed and perfectly rational". Simon has identified some of the limitations faced by decision makers: only limited, often unreliable information on possible alternatives and their consequences, the limited ability of the human mind to evaluate and process available information, time limitation. Inability to terms with these emerging constraints leads to a management disorder known as 'paralysis of analysis'. This concept represents over-analysis (thinking). In such a case, the decision or action is difficult to implement and therefore does not lead to any result. This may be because the decision is too complicated and has too many options. One is trying to find an optimal or "perfect" solution, but for fear of making a bad decision that can lead to erroneous results, one is still trying to find a better solution. In practice, we have a common myth that if the consumer has more choice from the seller, the sales will increase (Kurien, Paila, Nagendra, 2014).

It is not possible to talk about rational behavior of human. However, the behavioral economy approach has some limitations. From a political point of view, we might fear that those who design strikes, for example, take control of the invisible hand and lead it too much towards paternalism. Another example could be parenthood, where the child is led in different ways (but not always correct and successful). Psychology focuses on the "actor" seen as a relatively discrete bounded entity, self. The treatment of cognitive abilities and emotional pressures of a self-sufficient being is considered a decision (Keane, 2019). Another problem that occurs and arises is in the area of coordination. This predominates in the economy, but is particularly difficult to achieve in the event of a conflict of interest. If such conflicts cannot be resolved using the available options, some people may seek compromise options, while others may try to find alternative ways to resolve the conflict. For example, a married couple who have different food and taste preferences may choose to go to a restaurant that is not necessarily one of their favorites, but they consider it acceptable. Another example is firms applying for a government contract. If a government contract is only offered once, it may be acceptable to deal with a low bid that gives each company an equal chance of winning. However, if the government demands long-term demand from these firms, they can instead coordinate the price conspiracy by contacting the lowest bidder (He & Wu, 2020). Tibor Scitovsky talks about a model of human behavior that differs from standard economic theory. It begins with the basic distinction between "comfort" and "stimulation". While stimulation is ultimately more satisfying and creative, it often falls into comfort and, consequently, into impoverished life. The analysis of society, according to Scitovsky, has far-reaching consequences not only for the idea of rationality, but also for the concept of usefulness itself. So we are talking about the importance of freedom and the possibility to change our preferences (professional athlete (awards, wealth, fame) = change to family life) (Scitovsky, 1996). If we focus on the philosophy of mind, there is a link between the rationality of the system and our ability to interpret the behavior of the system in terms of intentional states, for example

when a manager raised a price to increase profit. Here we describe the manager's behavior in terms of the beliefs and desires he has. He wants to intensify the profit and believes that the increase in price (state) will achieve more profit (his desire). Philosophers like Davidson and Dennett have created that we cannot explain or predict "irrational behavior" intentionally. This statement is part of the theory of interpretation. Interpretation begins with observing the behavior of the system and ends with the attribution of intentional states to the system, which makes it possible to explain what the system is doing and to predict what it will do in the future. We note that the explanation and examples of behavior refer to the most significant events that caused this behavior. If behavior is a case of deliberate action or the formation of faith, which are the reasons why he / she only performed this act or shaped this belief. According to most philosophers, the reason is a combination of these intentional states (beliefs, desires, emotions,...), that motivate the system to behave as it does (Bortolotti, 2004).

But the question is what is moral? Being moral is difficult and people are often not moral. This requires internal conflicts of will between competing desires and commitments. We face a struggle with hard questions, and even if you do your best, it can leave you feeling dissatisfied, guilty, or insecure (Frank, 2020). A certain solution and help can be “nudge”. Nudging’ is a term used to describe an approach to behavioural modification, without the use of force, by both private and public actors. The term was coined by Cass R. Sunstein and Richard H. Thaler, who argue that it is not only possible, but also legitimate, to ‘actively influence’ behaviour. Furthermore, they argue that this can be done while respecting people's freedom. The art of influencing behaviour is not new, but the new combination of insight from behavioural economics, cognitive psychology and social psychology made Sunstein & Thaler's theory an important addition to existing knowledge (Sætra, 2019). The authors define this theory as an aspect of choice that drives people's behavior in a predictable way without prohibiting any options or significantly altering economic incentives. This technique occurs in many forms, which are briefly summarized in the article by Sustein Nudging: A Very Short Guide. Examples include setting default rules, framing, social evidence, simplifying procedures, increasing the ease and convenience of desired behavior, using alerts, disclosures and reminders, triggering implementation intentions or requesting provisional commitments. For example, the study revealed that if you ask people to sign at the top of the information form and not at the bottom, ethics is emphasized in the beginning and significantly reduces cheating (Tans, 2018). Nudges should not be viewed as panaceas, rather, they should be assessed as other alternatives (Weimer, 2019). Peter Drucker, says that knowledge worker productivity, unlike worker productivity, is one of the biggest challenges of the 21st century. Prioritizing the humanities, especially behavioral and psychological studies, makes it possible to increase the productivity of these workers. In the current situation of many companies, it was the knowledge worker's productivity that became the main driving force. Managers are not only focusing on increasing cost and capital efficiency, but increasingly focus on enhancing the potential for further innovation and digitization. Taken together, these aspects form the core of value creation for customers, shareholders and employees. Managers and companies that succeed, remain competitive and grow profitably, others who fail to adapt may even cease to exist (Ebert, Freichbichler, 2017). It is important to mention and point out that organizational creativity itself plays a crucial role in the performance itself. It provides an important competitive advantage, but also ensures that the organization is effective. The lack of creativity makes the organization unable to adapt to changes coming from within, but also outside of society. General purposes of company change are included in performance aspects such as improvements, innovation, organizational survival and organizational efficiency (Indriartiningtias, Hartono, 2019). The current issue is also an effective system of vocational education, which helps, for example, the creative industry itself, but also the improvement of intellectual property. Creative industries include concretising the image through any form of economic return. However, the nature of the goods, based on experience, makes the pattern of demand unpredictable and the manufacturing process difficult to control. Uncertainty in the demand for creative products presents managerial and organizational challenges (Cerneviciute, Strazdas, 2018). Today, creativity is becoming the driving force of both businesses and the economies themselves. It creates a solid bridge between art, culture, business and technology (Strunz, Vojtovič, 2014). Emotional intelligence can also be another area of interest. This largely affects the performance of a company with multiple work teams, increasing the risk of conflicts in the workplace. Trust is believed to play a mitigating role (Khosravi, Rezvani, Ashkanasy, 2020). It is the knowledge and tools of behavioral economics that can be used also in this area, to capture and prevent various problems in the workplace, but also motivation or sales in the company.

2. Aim and Methodology

The main goal of the paper was to find out what are the possible uses of knowledge of behavioral economy in management. Since we live in a world full of compromises and decisions, we can apply the elements and considerations of this discipline to management. We used several different methods for processing the following paper. These are mainly methods that were necessary for obtaining information and resources, but also for processing already acquired knowledge and its subsequent comprehensible interpretation. Based on the analysis of available information about behavioral economy and its methods, we tried to find suitable tools that can be applied in management. By means of synthesis we were able to observe individual relationships between facts and their nature of mutual relations. At the same time, we also used deduction as a means of logical analysis and induction as a thought process, through which we obtained from facts found about individual facts and subsequently obtained statements describing general facts and regularities.

3. Result of Research

The general characteristics of management correspond to a certain mission to be able to manage business activities and achieve the set goals of the organization. Peter Drucker defined management as "the process of coordinating the activities of a group of workers, which is carried out by an individual or a group of people in order to achieve certain results that cannot be achieved by individual work." Management can therefore be understood as a process of achieving set goals through people and effective integration and coordination of resources. The current workforce, which focuses mainly on skills and the growing emphasis on knowledge creation, deviates from the low-skilled industrial era of the early 20th century. Studies on behavioral sciences question the traditional style of management. For example, the assertion that individuals are rational economic beings that are not motivated to work without outside incentives. It is clear from this assumption that new aspects of governance need to be considered to meet the challenges of the 21st century. The difference in behavior and human motivation leads to the discovery of alternatives in management, as well as the use of elements of psychology and behavioral knowledge. One possible application is **heuristics**, which is a way of solving problems and facilitating timely decisions. It uses a shortened "discovery" procedure, usually starting with a rough estimate, which is gradually refined. In psychology, it is a thought activity that creates relatively imperfect (partial) arguments, which in turn stimulate our thought processes and thus complete the ultimate intention (solution). Companies are striving to incorporate behavioral economy to increase sales of their products.



Figure 1. Heuristic decision making

Source: Own source

An example of such an integration can be seen in Figure 1. The manufacturer is launching a new phone worth € 500, the initial response to the price of the phone could be negative. However, if the handset is priced at € 650, and then drops rapidly to € 500, customers believe it will save and tend to increase sales. There is an activity where on the basis of certain arguments (even only partial - price) the final intention (solution - in our case purchase) is achieved. However, if the decision taken leads to errors, heuristics can lead to a so-called. cognitive bias. We are talking about a systematic, repeated mistake in thinking, deciding on estimates, memories and other thought processes. Conclusions on

situations, but also on other people, can be drawn illogically. Another possibility is the use of **game theory**, which conducts experiments and analyzes people's decisions in irrational selection. At the same time, it is a theoretical framework for conceiving social situations between “competitive players” and creating optimal decision-making of independent and competitive actors in a strategic environment. It is an abstract model of decision-making, not a theory of life of decision-making itself. Therefore, although game theory may assume that the outcome is a reality, except when the model is inaccurate (Hatfield, 2012). Since game theory is an interface between mathematics and management, it must necessarily adopt a terminology that is both familiar (Kelly, 2003). **Prison dilemma** is one of the areas of game theory formulated in 1950 by Merrill Flood and Melvin Dresher. His wording was tuned by Albert Tucker as follows: “Two suspects are detained by the police. The police do not have enough evidence and will therefore visit both prisoners who are separated to offer them the same agreement. If one of them testifies against the other (betraying the other) and does not disclose anything (will cooperate), the traitor will be released and the fellow prisoner must be sentenced for a full ten years. If they do not testify, they will only be sentenced to 6 months in prison. If prisoners betray each other, they will be punished with a 5-year sentence. Both prisoners must decide whether to keep silent or testify, knowing that the fellow prisoner will not know of treason before the investigation is completed. How should prisoners act?” (Mérő, 1998) At first glance, the observer feels that it is best for both to remain silent, at which time they leave with the lowest penalty (for 6 months). However, from the individual point of view of each of the detainees it looks different: if he is silent, he may be punished for 6 months or 10 years. If he speaks, he may be released or given a 5-year sentence. A rational individual decision is therefore betrayal, which is always more mathematically advantageous, no matter what strategy the other prisoner chooses. Although there has been a consensus in the literature that adding an opportunity to leave is beneficial for cooperation, there is little research on its impact on social security (Haesevoet and collective, 2018).



Figure 2. Game theory in price (prisoner's dilemma)

Source: Own source

A classic example of this dilemma is found in the real world in a market where two competitors are fighting. Many sectors of the economy often have just two main rivals. For the needs of the following article, we will not specify the trademarks and we remain in the example of the sale of phones. An example would be as follows in Figure 2. There are two leading mobile phone companies on the market and have their iconic product to sell. We will call them Company A and Company B. Suppose Company A is considering a rapid reduction in the price of its iconic product, if it does so Company B may have no choice but to follow this decision and also reduce the price to maintain its market share. However, this can result in a significant drop in profits for both companies. This is often called a mistake because it violates the basics of an implicit agreement to maintain high prices and maximize profits. Thus, if Company A decreases its price but Company B continues to maintain high prices. The first one breaks the agreement and the other cooperates (by keeping the spirit of the implicit agreement). In this scenario, Company A can earn additional profits by selling more iconic phones.

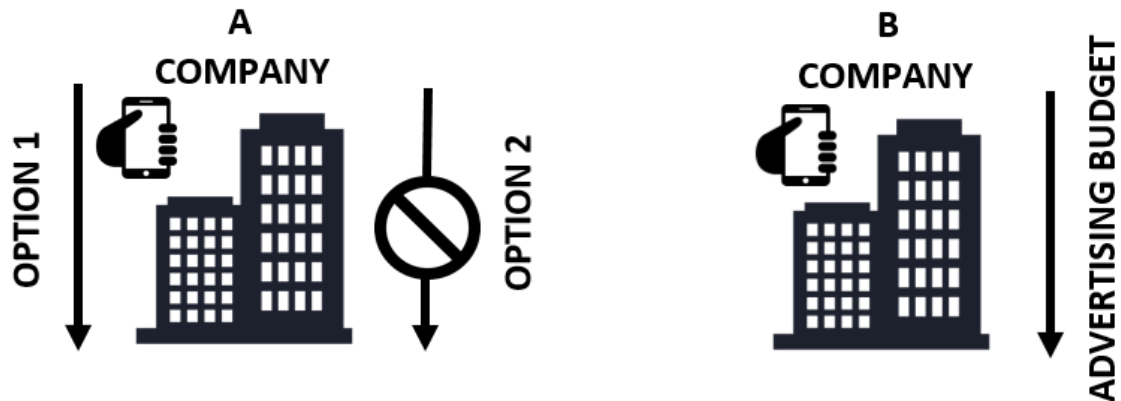


Figure 3. Game theory in advertising (prisoner's dilemma)

Source: Own source

Another example is that if A and B have an implicit agreement to leave the promotion budgets unchanged in a given year, their net income may remain relatively high. However, if someone violates and increases their advertising budget (Company B), they can earn more profits at the expense of the other company, as higher sales offset the increased advertising costs. However, if both companies increase their promotional budgets, increased efforts can offset each other and prove ineffective, resulting in lower profits (due to higher advertising spend), than would have been the case if the budgets had not changed.

4. Conclusion

We face decisions almost every day. Sometimes these decisions may be easier, but sometimes we face a big challenge. While we may be trying to find the best solution, each situation requires a different way of acting in a particular situation, and different factors affect this. The same applies to management. Here comes the question of accepting responsibilities, the more responsibility comes, the more contradictions we have to address. Wise decisions should seek to ensure that overall benefits outweigh costs and lead to a reasonable compromise. The best decisions should not lead to a perfect, ideal outcome as much as possible to make the best use of available resources. Our decisions are influenced in addition to our rationality, respectively, from the point of view of the behavioral economics of "irrationality", our emotions, past experiences and various distortions. Behavioral economics offers a wide range of tools that can greatly help decision making in management. It helps us better predict how people make decisions in different situations, but also about the mistakes people make. In this article we wanted to point out the use of heuristic methods, which are a way to solve problems and facilitate early decisions. It is precisely because of their shortening of the "discovery", procedures. They begin with a rough estimate and then gradually refine. The disadvantage is that using heuristics can lead to incorrect decisions. This error rate is often systematic and therefore predictable. At the same time, we also focused on the use of game theory, which is the basis of experiments and analysis of people's decisions in irrational selection. Game theory is the interface between mathematics and management, which should make reality a reality. Of course, the exception is when a model is poorly applied or unpredictable variables enter it. According to criticism, the use of heuristic methods and game theories is associated with influencing human behavior. Thus, it can largely act as a violent and coercive method. People will not act in the way they really want. They claim that this is a disrespect or even a violation of the rationality of people. Based on the achieved results, we conclude that it is possible to use aspects of knowledge of behavioral economics also in management. Of course, they need to be combined with other inseparable instruments and consideration should also be given to respect for fundamental human rights and freedoms.

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