UNIVERSITY OF ECONOMICS IN BRATISLAVA

FACULTY OF COMMERCE

TRENDS AND CHALLENGES IN THE EUROPEAN BUSINESS ENVIRONMENT

PROCEEDINGS

of the 6th International Scientific Conference

on Trade, International Business and Tourism

October 17 – 18, 2019

Mojmírovce, Slovak Republic

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Publisher: Vydavateľstvo EKONÓM, University of Economics in Bratislava
Slovak Republic
Publishing year: 2019

ISBN 978-80-225-4646-1

Suggested citation:
AUTHOR, A. Title of the paper. In: *Trends and Challenges in the European Business Environment : Proceedings of the 6th International Scientific Conference on Trade, International Business and Tourism.* Bratislava : Vydavateľstvo Ekonóm, University of Economics in Bratislava, 2019, pp. xxx-xxx, ISBN 978-80-225-4646-1

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PREFACE

The objective of the conference is to further develop scientific discourse, extending knowledge bases and trends in the field of business management, marketing, international business and tourism as a result of scientific research and awareness of the European business environment as well as practical experience. Jointly they reflect on initial specifics of the European countries, drawing links that determine readiness of the European countries to respond to recent trends and challenges in relevant business areas. Presented findings are derived from preliminary just like finalised outcomes of authors' research conducted in the framework of the following research projects:

- APVV 16-0232 consumer society and consumer regions. Stratification of postcomunist society
- Erasmus+ No. 2017-1-CZ01-KA203-035428 MIECAT: Methodology of Interpretation of European Cultural Heritage through Attractions in Tourism
- Erasmus+ No. 2017-1-PL01-KA203-038527 DT. Uni. - Design Thinking Approach for an Interdisciplinary University
- GREG 2016/2020 Future of Europe – tracking European Dynamics. International project of scientific network of Visegrad Group countries
- KEGA, no. 020EU-4/2019 Publishing of a new textbook from the subject Basics of Law in English for international students and Slovak students studying in English
- PMVP I-19-102-00 Modern stochastic methods applied in tourism in Slovak Republic
- Specific University Research Funds of research organization University of Finance and Administration, Prague, Czech Republic No: 7427/2019/08 Business incubator as a tool of cooperation of academic environment with real practice in the Czech Republic and abroad
- VEGA 1/0897/17 The significance of the European Energy Union project for the strategic interests of this grouping and its assessment in the context of the supporting of the competitiveness of Slovakia
- VEGA 1/0376/17 Marketing as a tool of health policy support
- VEGA 1/0543/18 The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic
- VEGA 1/0066/18: Model of marketing communication for health oriented consumer shopping behavior
- VEGA No. 1/0546/17 Impact of the geopolitical changes on enforcement of the EU strategic foreign trade interests (with implications for the Slovak economy)
- VEGA 1/0339/18 Health conscious consumer behaviour: determinants, perspectives and intervention possibilities
- VEGA No. 1/0380/17 Economic efficiency of electromobility in logistics

- VEGA 1/0587/19 Possibilities and perspectives of marketing during the transition period on the circular economy in Slovakia as a new business model
- VEGA 1/0657/19 The role of influencers in the consumer decsion-making process
- VEGA 1/0420/19 The importance of EU and Western Balkan trade cooperation in terms of expansion of entrepreneurs and VEGA 1/0546/17 - Impact of the geopolitical changes on enforcement of the EU strategic foreign trade interests (with implications for the Slovak economy).

The papers correspond with the central themes:

- Current Challenges in the Field of Business Management and Marketing
- Knowledge and Trends in the Field of International Business
- Current Trends in Toursim

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Is the current foreign trade policy of the USA a threat or an opportunity for the export of the European Union?[1]

Peter Baláž[2] - Stanislav Zábojník[3] - Zuzana Borovská[4]

Abstract

The United States' current foreign trade policy implications of introducing tariff measures against major foreign partners and impending deglobalization are beginning to have a major impact on the global economy as well as on the EU's strategic interests and competitiveness. The aim of the paper is to explore the effect of US tariffs on European exports. On this basis, using selected statistical methods, with the support of a linear regression model, analyse what possible direction and impacts the expected trends in GDP growth and the EU's external trade development will have. The output of the submitted paper will be to formulate current trends as well as possible threats to EU exports stemming from the protectionism wave from the USA after 2017.

Key words

Economic growth, foreign trade policy, Globalization, Industrial policy, Tariffs

JEL Classification: E690, F010, F130

Introduction

Over the last decade, the development of international trade has been influenced by many socio-political factors as well as by specific trends determined by changes in the economic positions of the largest powers. The spread of globalization as a natural phenomenon of global economic development and the effective application of national comparative advantages has helped to remove the various barriers to international exchange. According to R. Azevedo (2019) today, we are faced with a very different landscape. Trade tensions are on the rise and trade growth rate is declining. At the same time, the Industry 4.0 and the protective trends are compelling governments to reassess their policies in number of areas. A new operational space has also been created for the re-allocation of foreign investments and the emergence of new countries that have rapidly industrialized their economies and entered international production markets, which has been cheaper and has brought new technical-utility features. China has gotten into the lead, realizing large-scale economic reforms and leveraging domestic comparative advantages to dynamize the economy and build export growth. Until the escalation of the international financial crisis, the consolidation of its positions in international markets was not perceived as a risk, as much of this export was the result of transnational corporations (TNCs), which mainly directed it to the American and European markets. Low prices of goods and various production inputs helped them to increase their own competitiveness and profitability.

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[1] No. 1/0897/17: The significance of the European Energy Union project for the strategic interests of this grouping and its assessment in the context of the supporting of the competitiveness of Slovakia.

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Important progress such as strong world trade growth in 2018 could be quickly undermined if governments resort to restrictive trade policies, especially in a tit-for-tat process that could lead to an unmanageable escalation (WTO, 2018). The US is sending a negative signal to the markets of EU member states with its protectionist foreign trade policy. The threats of raising tariffs create unfavourable conditions for European businesses, exporting to the US market. In this contribution, we wanted to explore the potential effects of US trade barriers and analyse their relationship with the development of European exports.

1 Methodology

The objective of the presented paper is to highlight the long-term development of US-China bilateral foreign trade relations and to identify their internal commodity structure. On the basis, using, regression analysis to explore, what possible direction and impacts the current US foreign trade policy will have on the EU's trade development. In order to examine the development and the current structure of mutual relations, authors used methods of analysis and synthesis. By analysing US-EU bilateral trade dynamics, authors have chosen to use data on the HS6 Harmonized Commodity Description and Coding systems.

While examining the relationship between EU's trade development and general foreign policy of the US, authors have used regression analysis. Based on the results of measurements using the OLS method, authors created two models. Both models contain the same dependent variable, EU merchandise export to US, but differ in independent variables. Both models contain an auxiliary variable, EU GDP p.c., by which we wanted to prove the model's significance and relevance. While the first model contains two independent variables, characterizing current US foreign policy towards Europe (tariff and non-tariff barriers), model no. 2, after omitting a statistically insignificant variable, the non-tariff barrier, contains only one dependent variable, and that is the US tariff rate on manufactured products. It should be noted that the US Non-Tariffs data from 1996 to 1999 were averaged for a longer time series, as they were not published in the Economic Freedom Index. The studied dependent variable, which is the EU merchandise export to US has sought to bring it closer to its behaviour in the reference period from 1995 to 2016. By examining the model, we used the indicator R^2. The statistical significance of the model was determined by F stat and P-value. Using t-stat we explained the statistical significance of the parameters. Concerning bilateral trade changes between USA and EU28 within the industries touched by the protective measures, research is based on the statistical analysis of the EU exports to USA and characterised major changes observed after carrying-out of in-depth statistical analysis of current foreign trade results based on International Trade Centre database at HS6 level.

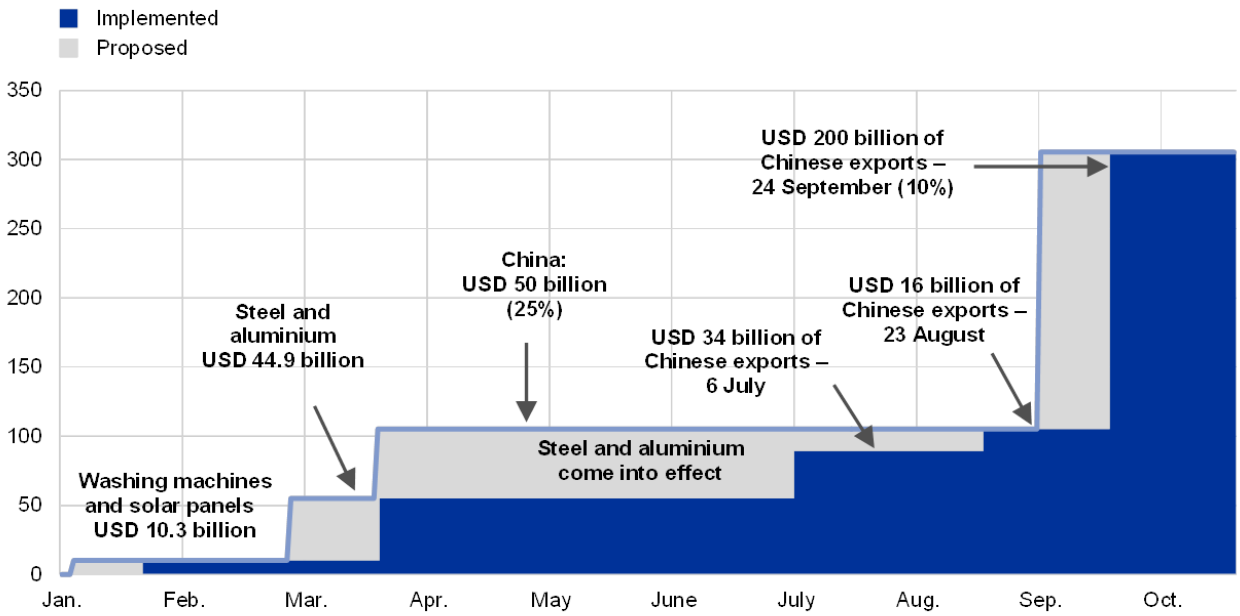
2 Results and Discussion

2.1 General effects of US protectionism wave after 2016

Until the "cleaning" of the crisis consensus showed that the US trade balance deficit had heavily indebted the country and began to jeopardize its economic stability. GTA (2016) analyses have confirmed that this liability is steadily increasing and none of the system measures introduced by the US after 2008 have significantly diminished its deepening. This can be attributed to the overall "set-up" of the US economy aimed at promoting trade in services, high technology, or military technology, at the expense of consumer goods, black and white, electrical, and, increasingly, IT or hardware. Demand for these types of goods was covered in the long run by their imports, mainly from Asia, but the volume of counter-trades that could offset this formidable discrepancy was not sufficient. However, objectively, the overall development of world economy consumption has been more consistent with that of Asian exports than the US export offer.

Nor has the changed foreign trade policy of the United States, where elements of protectionism have gradually started to emerge, bring any significant shifts in the development of its trade balance until 2018. There are several explanations. Firstly, there are no major economic reforms in its economy after the financial crisis that would have a positive impact on the overall nature and domestic production capacity (except for the expansion of shale gas and oil production and the reduction of their imports), but also on the fact that bilateral the US does not only have a deficit with China but also with several other countries responding flexibly to a change in their own export intensity to implement such protectionist measures.

Tab. 1 Evolution of the US major protective measures in 2018



Source: Gunella, V. – Quaglietti, L. (2019)

Protectionist threats made by the US Administration in 2017 have been followed by concrete actions over the past year; of tariffs on solar panels and washing machines in January 2018 came first, followed by tariffs of 25% on imports of steel and 10% on imports of aluminium for a wide range of countries in March 2018. The European Union imposed a 25% duty on a range of US products worth USD 3.2 billion, which came into force in the same month. The US Administration in turn initiated a new investigation of automobile and auto parts imports to determine their effects on national security, hinting at the possibility of a 20%-25% tariff increase (Gunella, V. – Quaglietti, L., 2019). Nevertheless, foreign trade relations between China and USA still remains a major possible trigger of trade war.[5]

[5] Tensions with China escalated in the second half of 2018. Following an investigation by the US authorities into Chinese intellectual property practices, which concluded that China has a policy of forced technology transfer, the US Administration initiated trade action against China. The measures, implemented in July 2018, included 25% ad valorem duties on 1,300 product types imported from China, with an annual import value equivalent to USD 50 billion. In September

According to N. Roubini, the current situation between the US and China could escalate to a full-scale commercial war: "Then the US would know whether or not the Chinese economy was properly or incorrectly threatened by their economy or security." China was in a better position for such a war, because "it has reserves of 3 trillion $ and can use them to help people adversely affected by this conflict. The US does not have such an economic framework capable of helping specific sectors struck by war. The US fiscal resources are tense.” The possible trade war caused by US tariffs would lead to a world trade recession, because only the very worries about it have a negative impact on overall economic development.

The growing tensions between the two largest economies are damaging the economic interests of the entire world economy and not only slowing global growth, but also making huge damage to overall socio-political stability. One of the studies in Oxford confirms that conservation measures by the US and China will bring: "a significant slowdown in real GDP, cumulatively by about 1%, causing a reduction in global economic growth from 3% to 2.5% in 2019.”(Reuters, 2018) At the same time, the duties introduced are not the solution to the trade deficit. According to N. Roubini, the growth of tensions among the world's largest economies: "It will not only have an impact on stock markets, but it may harm the entire American economy." Business War is not a zero-sum game, it is a negative summary game where everyone is defeated. China's and the international community's objections and pushing unilateral and trade protectionism, the Chinese side will continue at all costs and will certainly resolutely resist (Reuters, 2018).

A. Seibert, spokesman for A. Merkel, said in this regard that: "Trade war is not in the interests of Germany, Europe, or America." He did so on the basis of a statement by the US President on the introduction of tariffs on European cars. According to Germany, protectionism is the wrong way and will harm international trade, hurting employees and consumers in both economies. To do so, according to the Reuters (2018) the European Commission chief said that "they will not sit with their arms folded when European industry and jobs are threatened."

Regression analysis of EU merchandise exports and current US foreign trade policy

Tab. 2 Description of dependent and independent variables

Label of variable	**Description**
US_Nontariffs	Sub-index US non-tariff barriers to trade of Economic freedom index 2018
US_Tariff_rate_m~	Tariff rate, applied, simple mean, manufactured products (%), World Bank database 2019
l_EU_GDP_pc	EU GDP p.c. in current $ prices, World Bank database 2019
EU_export_to_US	EU merchandise export to US in thousands $, UNCTADstat database

Source: Author’s calculation

In order to identify the foreign trade relationship between the European Union and the United States, we have created two Models through regression analysis. The first, Model 1, is the basic starting Model in which we ‘ve chosen as a dependent variable the EU merchandise export to the US. For the independent variables in Model 1, we chose the US Tariff rate applied to manufactured products and the result of the economic freedom sub-index 2018, non-tariff barriers

2018 the US Administration announced a further wave of tariffs, targeting USD 200 billion of Chinese exports. China responded by imposing tariffs on exports from the United States worth USD 60 billion. (Gunella, V. – Quaglietti, L., 2019) of US trade. We incorporated the auxiliary variable, EU GDP p.c., which was put into the logarithm form at the beginning of the measurements, in order to achieve higher statistical value. Model contains 22 observations, from 1995 to 2016. Variable values are presented on a one-year basis.

Tab. 3 Model 1 – general effects of US foreign trade policy on EU exports to USA

Model 1: OLS, using observations 1995-2016 (T = 22)
Dependent variable: EU_export_to_US

	coefficient	std. error	t-ratio	p-value	
const	−5,87581e+08	7,16779e+08	−0,8198	0,4231	
US_Nontariffs	980520	1,51363e+07	0,06478	0,9491	
US_Tariff_rate_m~	−9,20472e+07	2,28475e+07	−4,029	0,0008	***
l_EU_GDP_pc	1,17923e+08	5,96340e+07	1,977	0,0635	*

Mean dependent var	2,92e+08	S.D. dependent var	92890518
Sum squared resid	1,47e+16	S.E. of regression	28536790
R-squared	0,919105	Adjusted R-squared	0,905623
F(3, 18)	68,17039	P-value(F)	5,03e-10
Log-likelihood	−406,6768	Akaike criterion	821,3535
Schwarz criterion	825,7177	Hannan-Quinn	822,3816
rho	0,356310	Durbin-Watson	1,270418

Excluding the constant, p-value was highest for variable 6 (US_Nontariffs)

White's test for heteroskedasticity -
Null hypothesis: heteroskedasticity not present
Test statistic: LM = 5,35284
with p-value = P(Chi-square(9) > 5,35284) = 0,80253

Source: Author's calculation

The coefficient of determination R2 in Model 1 is 0.92, indicating that 92% of the data is explained by Model 1. The p-value of separate variables indicates the probability of their estimation. In the case of Model 1, it should be noted that this estimate is limited to the US at 99% and the auxiliary variable GDP p.c. to 90%. According to the results of the t-ratio, we consider that the only statistically significant parameter in Model 1 is the US Tariff rate. Model 1 is statistically significant, as evidenced by the result of F-statistics. Model 1 does not show signs of autocorrelation and heteroskedasticity does not occur.

Due to the insignificance of the independent variable, the non-tariff barriers to trade in the US, we decided to test the Model 1 by omitting a variable of our choice that is not a significant and interesting parameter in our Model. Using this variable in Model 1, we wanted to introduce the relationship of both tariff and non-tariff barriers to the US - EU foreign trade. Therefore, we do not confirm our assumption of the significance of the non-tariff barriers to US trade variable. By removing the variable from the Model, we have, to our expectations, achieved a better result that is visible in Model 2.

Tab. 4 Model 2 – general effects of US foreign trade policy on EU exports to USA (after omitting insignificant variable)

Model 2: OLS, using observations 1995-2016 (T = 22)
Dependent variable: EU_export_to_US

	coefficient	std. error	t-ratio	p-value	
const	−5,62665e+08	5,88777e+08	−0,9557	0,3513	
US_Tariff_rate_m~	−9,17386e+07	2,17519e+07	−4,217	0,0005	***
l_EU_GDP_pc	1,16042e+08	5,07039e+07	2,289	0,0337	**

Mean dependent var	2,92e+08	S.D. dependent var	92890518
Sum squared resid	1,47e+16	S.E. of regression	27778909
R-squared	0,919086	Adjusted R-squared	0,910569
F(2, 19)	107,9091	P-value(F)	4,23e-11
Log-likelihood	−406,6793	Akaike criterion	819,3587
Schwarz criterion	822,6318	Hannan-Quinn	820,1297
rho	0,357316	Durbin-Watson	1,267984

White's test for heteroskedasticity -
Null hypothesis: heteroskedasticity not present
Test statistic: LM = 3,4761
with p-value = P(Chi-square(5) > 3,4761) = 0,627008

Source: Author's calculation

The coefficient of determination R2 is 0.92 in Model 2, which means that Model 2 explains 92% of the data. The US tariff rate parameter estimate is 99% and the auxiliary variable EU GDP p.c. estimate with a 95% probability of statistical significance. Thus, compared to Model 1, we see an improvement in the auxiliary variable estimate of 5%. According to the result of the t-ratio coefficient, we evaluate that the statistically significant parameter in Model 2 are both variables, the US Tariff rate and EU GDP p.c. Model 2 is statistically significant, as evidenced by the result of F-statistics. Model 2 also does not contain autocorrelation, nor does it have a heteroscedastic problem.

By observing the real and predicted values of EU merchandise exports the US, it is clear that the modelled values correlate with real European exports to the US during the reporting period, with a few exceptions. While examining the distance of the points from the predicted development curve, we consider 2009 to be abnormal, its distance from the observed years is deviating the most. That year the EU export has experienced the consequences of the financial crisis as well as the emerging debt crisis in the EU. In 2009, EU merchandise exports to the US declined year-on-year by 83346482.6 thousand $. Despite efforts, EU economies have not been able to adapt to changing conditions in international markets and their exports are still cumulatively below pre-crisis exports. For the same reason, the year 2010 is also deviated from the curve.

Equation of Model 2

$$\boldsymbol{EU\ merchandise\ export\ to\ the\ US} \\ = -\mathbf{5,63}\boldsymbol{e}^{\mathbf{8}} - \mathbf{9,17}\boldsymbol{e}^{\mathbf{7}} * \boldsymbol{US\ Tariff\ rate\ on\ manufactured\ products} + \mathbf{1,16}\boldsymbol{e}^{\mathbf{8}} * \boldsymbol{l\ EU\ GDP\ p.c.}$$

Model 2 interpretation:

1. If the US Tariff rate on manufactured products increases by 1%, ceteris paribus, the EU merchandise exports to US will fall by 10 056,13 thousand $.
2. If the EU GDP p.c. will increase by 1%, the EU merchandise exports to the US will increase by 34,58 thousand $.

Through the regression analysis, we have shown an inversely proportional relationship between the US Tariff rate on finished products and the export of European Union goods to the US. In case that the foreign trade policy under the leadership of US President D. Trump continues to pursue protectionist tendencies, ie. if the US Tariff rate on imported goods increases, EU merchandise exports to the US will decline. It is clear that European exporters would not succeed in the US market in the event of a higher tariff rate and would thus lose their competitiveness. Based on the results of our Model 2, we conclude that if the US increased the tariff rate for manufactured products by 1%, ceteris paribus, EU merchandise exports to the US would drop by 10 056,13 thousand $. According to the Eurostat (2018) The United States is our most important export partner with 21% of our total goods exports. As a result of a decrease in the export of the member states' goods production to the US, producers whose goods go to this region would have to find alternative outlets for their production. This fact actually opens the debate to revise the commodity and territorial focus of EU foreign trade.

Tab. 5 Scenario testing by Model 2

	Scenario 1 (Prognosis 2019)	*Scenario 2 (Extreme 1, EU GDP p.c. 2016)*	*Scenario 3 (Extreme 2, EU GDP p.c. 2016)*	*Scenario 4 (Extreme 3, EU GDP p.c. 2016)*
US Tariff rate on manufactured products (%)	2.68	3.00	5.00	10.00
EU GDP p.c. ($)	36 543.41	32 394.90	32 394.90	32 394.90
EU merchandise export to the US (thousand $)	412 577 755.09	369 647 721.96	186 247 721.96	- 272 252 278.04

Source: Author's own calculation

In order to test the results of our model, we decided to create 4 example scenarios to explain the nature of our resulting model. Scenario 1 consists of substituting forecasted variables into the equation. Thus, in this scenario, we consider the assumed US Tariff rate on manufactured products, using our estimate by the excel function for 2019. EU GDP forecast p.c. is estimated by the International Monetary Fund. In Scenario 1 (forecast in 2019), the European export of goods could reach approximately 412,577,755 thousand $.

Scenarios 2, 3 and 4 contain extreme cases in which we test the US extreme Tariff rate on manufactured products (3.00%, 5.00% and 10.00%) in the equation and the EU GDP p.c. with the base year 2016. In case the rate is constantly rising and extremely high, European exports of goods to the US would decline. If we consider 3% rate and the level of EU GDP p.c. on the level of $ 32 394.90, the value of EU merchandise exports would reach approximately 369,647,722 thousand $. By increasing the customs rate to 5%, EU merchandise exports would decline again to 186,247,722 thousand $. Scenario 4 represents a case where if the US Tariff rate on manufactured products is 10% and EU GDP p.c. of $ 32,394.90, in such an extreme case, the export of EU goods to the US would be negative and the EU would stop exporting its goods to the US.

2.2 Dynamics of the EU exports after Trump´s tariffs implementation in 2018

On March 8, 2018, American president ordered the imposition of 25 percent tariffs on imports of steel and 10 percent tariffs on aluminium imports including exports to the USA from EU. Arguments in favour for the decision included “that the present quantities and circumstances” of both steel and aluminium imports “are ‘weakening our internal economy’ and threaten to impair the national security (Layton, 2019). According to several important studies (Gunella, V. – Quaglietti, L., 2019), the effect on EU have been concentrated in commodity groups of „basic metals“ and rather minor effect in „Fabricated metal products, except machinery and equipment. Total volume of affected goods by US tariffs cover as much as 1,25 bil. $ + 0,10 bil. $ (Gunella, V. – Quaglietti, L., 2019). According to the study, March 2018 tariffs´ effect on EU exports is incomparably smaller than the one on Chinese exports and even smaller than the effect on Canada.

Overall exports of EU 28 countries on US market achieved the value of 119.6 bil. $, what is uniquely similar to the volume from the 1st quarter of 2018 as high as 119.9 bil. $. To quantify possible effects of the tariffs, we compiled quarterly data of EU exports to the USA from 2nd quarter 2014 to 1st quarter 2019 including (n=20) to clearly differentiate possible Trump´s tariffs effect on EU exports in the relevant commodity classes. The tariffs came into effect on 1 June 2018, after the failure of negotiations on national security concerns relating to those imports (Alosi-Rocha, 2018). Therefore, expected impact on trade volume can be since Q2, 2018 or Q3, 2018. Before the implementation of the tariffs (Q1, 2018), relevant EU exported steel products HS6 classes [6] accounted for 20.4% of the US imports.

Tab. 6 EU exports analysis in effected steel and aluminium product groups ($ thousand)

steel products	Period		EU export in $	USA import in $	*Share of EU on total US imports in $*
	European Union (EU 28)'s exports to United States of America	2014 Q2	2 335 880	11 425 092	*20,4%*
		2014 Q3	2 219 246	11 625 842	*19,1%*
		2014 Q4	2 554 051	11 773 343	*21,7%*
		2015 Q1	1 914 599	11 821 146	*16,2%*
		2015 Q2	1 788 328	9 158 758	*19,5%*
		2015 Q3	1 481 410	7 478 899	*19,8%*
		2015 Q4	1 367 837	6 450 807	*21,2%*
		2016 Q1	1 151 842	6 008 049	*19,2%*
		2016 Q2	1 262 814	6 043 218	*20,9%*
		2016 Q3	1 202 688	6 683 372	*18,0%*
		2016 Q4	1 244 648	6 467 118	*19,2%*
		2017 Q1	1 295 033	7 271 417	*17,8%*
		2017 Q2	1 769 553	9 122 895	*19,4%*
		2017 Q3	1 593 208	9 128 614	*17,5%*
		2017 Q4	1 703 735	8 258 076	*20,6%*
		2018 Q1	1 574 137	8 607 905	*18,3%*
		2018 Q2	1 989 066	9 170 955	*21,7%*
		2018 Q3	1 709 699	8 121 732	*21,1%*
		2018 Q4	1 830 297	7 388 376	*24,8%*
		2019 Q1	1 504 433	7 760 284	*19,4%*

aluminium products	Period		EU export in $	USA import in $	*Share of EU on total US imports in $*
	European Union (EU 28)'s exports to United States of America	2014 Q2	295 597	3 180 556	*9,3%*
		2014 Q3	298 256	3 070 179	*9,7%*
		2014 Q4	309 572	3 422 771	*9,0%*
		2015 Q1	287 540	3 559 165	*8,1%*
		2015 Q2	323 739	3 626 662	*8,9%*
		2015 Q3	276 612	3 021 976	*9,2%*
		2015 Q4	279 520	2 709 016	*10,3%*
		2016 Q1	294 764	3 166 798	*9,3%*
		2016 Q2	293 989	3 453 255	*8,5%*
		2016 Q3	285 453	3 404 430	*8,4%*
		2016 Q4	301 796	3 478 795	*8,7%*
		2017 Q1	308 804	4 250 205	*7,3%*
		2017 Q2	309 086	4 642 953	*6,7%*
		2017 Q3	322 856	4 424 795	*7,3%*
		2017 Q4	371 962	4 623 809	*8,0%*
		2018 Q1	388 608	4 833 179	*8,0%*
		2018 Q2	447 467	4 787 894	*9,3%*
		2018 Q3	455 863	4 352 617	*10,5%*
		2018 Q4	503 739	4 103 877	*12,3%*
		2019 Q1	518 174	4 107 524	*12,6%*

Source: Authors´ calculations based on ITC data (2019).

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[6] For a full list of the tariffs and relevant HS6 and HS10 codes see Layton (2019)

As can be seen in our analysis, overall volume of EU steel products´ exports are decreasing – 24.4% comparing the volume of 1st quarter of 2018 to 1st quarter of 2019. On the other hand, the share of the EU exports on total steel products imports of the USA remains stable at about 19.4%. This can be explained a “general” effect of the US tariffs from 2018 at the global level, harming also other foreign exporters. As for aluminium products, situation is very similar; comparing first quarter of 2019 to 2018, its volume boosted exactly by a third up to 518.1 mil. $ and current EU exports are approximately at a double level comparing the volumes in 2014 and 2015. Moreover, the share of the EU companies on US aluminium products market peaked at 12.6% in first quarter of 2019 what makes their competitiveness the highest since 2014. To sum up the impact of the Trump March 2019 tariffs, the exports of the EU companies producing steel products slightly decreased but remains at the level similar to volumes exported on US market in 2016 and 2017. EU exports of aluminium products are permanently increasing since the 3rd quarter 2016 and ability of the European companies to success is even improving. Therefore, the major threat to the European exports rather seems to be a possibility to impose tariffs on car manufacturing industry.

Conclusion

From the views of well-known economists and politicians and theoretical findings themselves, we can observe that they are not identified with the introduction of tariffs. Based on a study of the protective wave impact on the world trade, we think that the consequences would be reflected in other economies and hence the EU, which is the largest exporter of the products to the US. The slowdown in these two economies could lead to a decrease in demand, which would be reflected not only in prices, but also in a decline in EU value and quantity exports, which would have an impact on its trade balance and the state budgets of commodity exporting countries. On the other hand, impact of the Trump´s administration tariffs has had rather minor impact on export volumes from EU to the world and EU to the USA. Authors' research tried to identify the US tariff impact on finished products and European exports to the territory. The statistical analyses revealed a significant statistical dependence between the variables examined (tariffs, GDP and export volume). It is of the utmost importance that the competent authorities consider the impact of US tariffs and develop appropriate measures for European businesses whose production would be possibly affected by these increased tariffs.

Being focused on ad valorem tariffs effecting EU steel and aluminium exporters, this effect has negative, but rather minor impact on the competitiveness of the European steel and aluminium manufacturers selling on US market. In case of aluminium products, shipped volume from the European producers to the American customers has been at its historical high. Therefore, we consider US tariffs rather to be a massive threat for the Chinese companies what might have secondary effect on European companies. The most important threat remains a possibility to escalate the retaliatory tariffs between the two countries onto trade war with devastating losses for the EU industries.

It is important to note that 21% of all European exports go to the US, while 11% go to China. The increasing share of exports of goods to China indicates its growing influence in the EU's territorial export structure. In 2018, the EU imported 20% of all goods from China and only 13% of the US. It is questionable to what extent the European economy will adapt to changing conditions. However, it is more than certain that the EU will not want to lose any of its most important trading partners. Therefore, it is up to the highest authorities to consider possible consequences in order to adapt their current and future requirements. Thus, the current US foreign trade policy may pose a threat to European exports in the long run, subject to insufficient preparedness. In case of early identification of the risk of a negative impact of US foreign policy on European production, it is possible to reduce negative consequences e.g. by reorienting its territorial export structure and possible orientation towards the east.

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Airbnb platform as a part of the shared economy of the Slovak Republic

Dana Benešová[1] – Mária Riapošová [2]

Abstract

A shared economy contributes to sustainable consumption and a sustainable economic system of the economy. Is based on the use of ICT, generates economic values, efficiently exploits existing capacities and also benefits society. One of the emerging business forms of a shared ICT-based economy is renting accommodation via the Airbnb platform. The use of this platform has expanded in recent years also in Slovakia. The aim of the paper was identify the position of this platform in Slovak Republic and compare the pricing strategy and income from accommodation through the Airbnb platform with the capitals of the V4 countries. The results confirmed that the Slovak Republic has succeeded in a competitive environment in the area of income from accommodation, but it must improve its pricing strategy.

Key words

shared economy, information and communication technologies, air bed and breakfast, pricing strategy, revenue for accommodation

JEL Classification: L86, O33, O11

Introduction

Modern platforms based on information and communication technologies (ICT) allow new approaches to the provision of services in tourism and creating new forms of business. Air bed & breakfast (Airbnb) is platform of shared economy, one of the trends in the use of ICT in tourism.

A shared economy is often associated with the development of the Internet and mobile applications that enable consumers to access goods and services without having to own them. The recent global economic recession has helped catalyze a shared economy, but its foundations lie in values related to sustainable consumption and community connectivity (Guttentag et al., 2017). A sustainable economic system is based on sharing human and physical assets. It involves the creation, production, distribution, trade and consumption of goods and services by different organizations and people. These systems use different forms, but all use ICT to enable individuals, companies, non-profit organizations and the government to provide information that enables the distribution, sharing and reuse of overcapacity of goods and services (Stephany, 2015).

The economic platforms of a sharing economy create mutual economic value. Typically, these are apps or websites which have revenue-generating potencial. Sometimes the revenue appears to be secondary or exists only to make the service sustainable (Stephany, 2015). Some of those platforms provides shared services to users for free. However, they can earn revenue by placing links and ads for partner companies.

A shared economy refers to an economic system based on the concept of sharing goods and services among the people involved. The main benefit for participants is to reduce costs for buyers and the ability to sell more products for sellers. It contributes societal benefits such as reducing the

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carbon footprint (eg when sharing car driving), increasing recycling and increasing social interaction (Turban et al., 2018).

"Sharing" in the context of a shared economy has become an abbreviation for "making available", the process that occurs when assets become accessible. Accessibility can mean sales, for example through e-commerce and peer-to-peer commerce[3]. In addition to traditional sales and purchases, renting, donating or exchanging products and services may be of interest. (Stephany, 2015).

The Airbnb platform is a typical case of a "two-way" market with positive network externalities on both sides. It was launched in October 2007 by Airbnb, based in San Francisco, California. Since then it has seen a rapid expansion and a growing number of objects that can be rented worldwide. Data provided by the company show that accommodation in more than 4.5 million properties in more than 190 countries and more than 34,000 cities can be rented via Airbnb. Shared room, private room, whole apartment or house can be rented via Airbnb. Survey data from 2016 suggests that nearly 12% of leisure and business travelers chose Airbnb at least once to search for accommodation. The company is currently worth $ 25 billion, which is more than the Marriott Group (AirDNA, 2018). This development is due to the increasing demand for objects that can be rented through this platform, but also to specific investment strategies.

Trust and reputation are two basic principles for enhancing and protecting any online business and enabling it to grow. The basic strategy adopted by Airbnb to promote the trust is to launch an online review. Airbnb uses a double check mechanism, host and the client are cheked separately. The platform offers special features such as the ability to send messages and questions directly to the host, or link to their social networking page. (Meleo et al., 2016) Airbnb defines several measures to improve security and identification mechanisms, and has insurance coverage for damage caused during the stay (AirDNA, 2018).

In Slovakia, accommodation was first offered through Airbnb in 2010. Since then, the platform in Slovakia has seen an increase in interest, either on the demand or supply side. The legal background of the business through the Airbnb portal has not been addressed in the long term. The first legislation dealing with business through Airbnb came into force on 1 January 2018 in the form of an amendment to the Income Tax Act. This amendment introduces: ”an obligation for service providers through digital platforms to register a permanent establishment in the territory of Slovakia, if they repeatedly provide their services here in the form of transport and accommodation mediation. Consequently, the income of such an establishment will be subject to income tax” (Finančná správa Slovenskej Republiky, 2018).

The aim of the paper is to find out the position of the city of Bratislava in the accommodation market through the Airbnb platform as a new form of business in comparison with the competing capitals of the Visegrad Four countries.

[3] Peer-to-peer (P2P) trade is characterized as a decentralized platform in which two individuals cooperate with each other without third-party referral. Buyers and sellers communicate directly with each other through the P2P platform (Investopedia, 2019).

1 Methodology

The main objective was to find out the position of Bratislava in the accommodation market through the Airbnb platform in the area of pricing and income for accommodation in comparison with competing V4 capitals.

To accomplish this goal, we have set up research questions:

VO1: What is the price development and incomes for disposable room through the Airbnb platform in Bratislava in comparison with the other V4 competitive capitals?

VO2: What is the price strategy adjustment of the accommodation through the Airbnb platform in Bratislava in comparison with the other V4 competitive capitals?

VO3: What is the position of Bratislava in incomes for disposable room sold via Airbnb platform in comparison to the other V4 capitals in 2017?

The use of the Airbnb platform as one of the current trends in information and communication technologies in tourism has been realized by several methods. In the analytical part we used statistical - mathematical methods to compare the examined capitals of the V4 countries, we used economic indices to identify the development of sales, accommodation prices, income for available rooms and to compare performance indicators with the competition.

We obtained data from long-term analyzes of AirDNA, which made our own surveys available. From the available data and through indices, we used a comparison method to determine the competitiveness between the capitals of the V4 countries.

We used the following economic indicators:

RevPAR /Revenue Per Available Room/ indicator, which serves for measuring of the effectiveness, shows average income for available room in the same period of time.

$$\mathrm{RevPAR} = \frac{\text{Turnover for accommodation}}{\text{Nummber of available rooms}} \tag{1}$$

RGI /Revenue Generated Index/ - indicator used for comparison of accommodation facility with the competitors in the market, compares RevPAR of the surveyed object with the market and generates indication to its success.

$$\mathrm{RGI} = \frac{\text{Hotel RevPAR}}{\text{Market RevPAR}} \tag{2}$$

ARI /Average Rate Index/ - indicator compares the price strategy of the surveyed object with the strategy of the competition. For calculation is necessary to know ADR (average price for the room and night).

$$\mathrm{ARI} = \frac{\text{Hotel ADR}}{\text{Market ADR}} \tag{3}$$

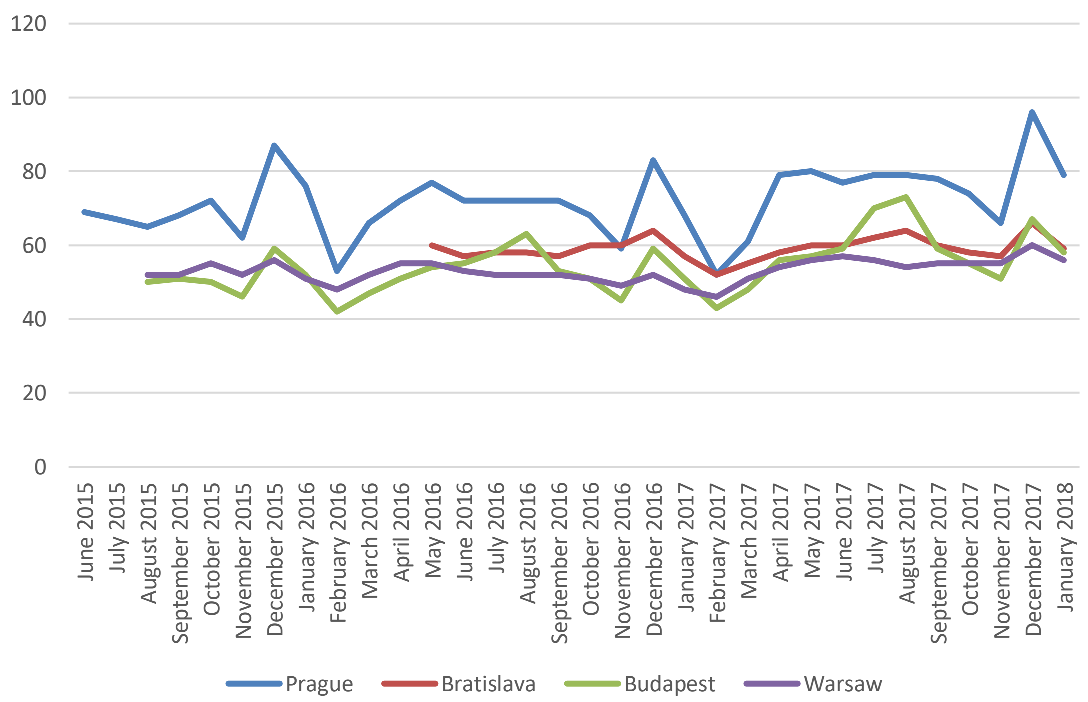
2 Results and Discussion

The accommodation through Airbnb was possible to reserve in 994 objects in Bratislava in 2017. The objects offered the lessors, who lease only one object (430) and so called “multilessors” who lease more objects (564). Average seat of these objects was 67% in 2017 (AirDNA, 2018). In determining the performance indicators and the position of Bratislava on the accommodation market through the Airbnb platform in comparison with the V4 competitive capitals we asked ourselves following questions:

VO1: What is the price development and incomes for disposable room through the Airbnb platform in Bratislava in comparison with the other V4 competitive capitals?

The development of the average accommodation price through the Airbnb platform in Bratislava, Warsaw and Budapest is on the same level (56 USD in average). Prague shows among the V4 countries an above average amount of price for the night. The average price in Prague is higher approximately at 15 USD in comparison with the other V4 countries (Graph 1).

Graph 1 The development of the average price for the night in the Airbnb objects in the capitals of the V4 countries (USD)



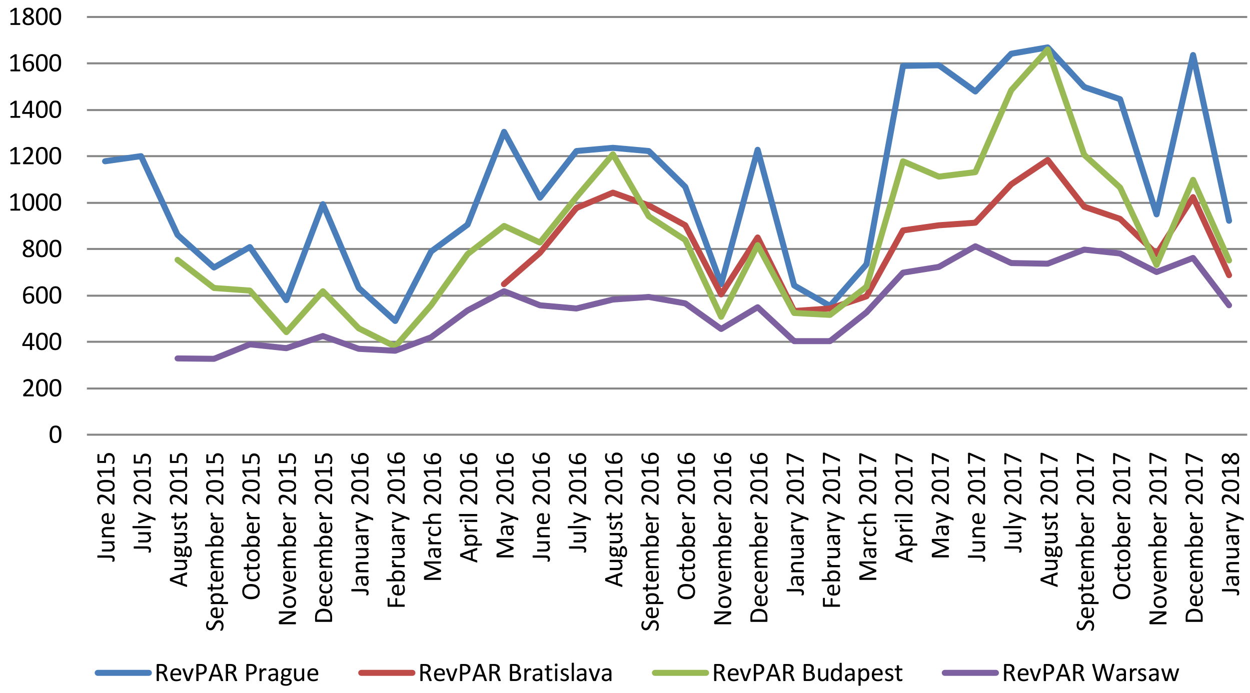
Source: own processing according to AirDNA, 2019

Also from the surveyed cities, the Prague notes the highest counter seasonal and seasonal price fluctuations. According to the obtained data, it can be concluded that directly in Prague the lessors have been focusing particular attention on the price creation and matching marked requirements according to the demand of the city visitors coming especially during the summer months and in December.

With the RevPAR indicator, we monitored average income for disposable room for the period June 2015 to January 2018 on the monthly basis, for Slovakia was the data available only from May 2016 (Graph 2). Year-to-year value of the intended indicator grows, it means, that the incomes for the accommodation through the Airbnb platform are increasing. This trend is indicated in all surveyed cities of V4 countries.

The factor of seasonality is also evident, characteristic for the tourist travel. In all cities of the V4 countries without Poland, there are seasonal fluctuations the same level of intensity. Throughout the season the highest figures is making Prague, follows Budapest, than Bratislava. Warsaw shows only slight year-to-year increase.

Graph 2 The development for disposable room sold through Airbnb platform in the capitals of the V4 countries (USD)



Source: own processing according to AirDNA, 2019

VO2: What is the price strategy adjustment of the accommodation through the Airbnb platform in Bratislava in comparison with the other V4 competitive capitals?

When comparing the price strategy in 2017 Bratislava was, according to ARI index to average monthly prices for accommodation offered through the Aribnb platform, late behind the competitors (Table 1). Bratislava is close to the average prices in Warsaw (value 93%). The best figures achieves in January, February and March, the lowest in December (55% in comparison to Prague).

It means that Bratislava doesn´t have adequate set its price strategy. Despite the fact that yearly average prices of accommodation are, excepting Prague, the same, important is to reflect flexible the demand, provenance of the tourists, purpose of their journey and duration of their stay in particular monitored months.

Tab. 1 The position of Bratislava in price competition and incomes for disposable room sold via Airbnb platform compared to the other V4 capitals in 2017 (%).

	ARI Bratislava/ Prague	ARI Bratislava/ Budapest	ARI Bratislava/ Warsaw	RGI Bratislava/ Prague	RGI Bratislava/ Budapest	RGI Bratislava/ Warsaw
January	76%	102%	108%	83%	102%	133%
February	90%	109%	102%	98%	105%	135%
March	79%	100%	94%	81%	93%	113%
April	63%	89%	93%	55%	75%	126%
May	65%	91%	93%	57%	81%	125%
June	66%	86%	89%	62%	81%	113%
July	65%	73%	91%	66%	73%	145%
August	66%	71%	96%	71%	71%	161%

September	64%	85%	91%	66%	82%	123%
October	66%	89%	89%	64%	87%	119%
November	71%	92%	85%	82%	106%	111%
December	55%	79%	88%	63%	93%	135%
The 2017 average	69%	89%	93%	71%	87%	128%

Source: own processing according to AirDNA, 2019

VO3: What is the position of Bratislava in incomes for disposable room sold via Airbnb platform in comparison to the other V4 capitals in 2017?

According to RGI index Bratislava shows better results as Warsaw. From point of view of income for disposable room achieved the average index value of 128% and for the other monitored months in 2017 got the values higher than 100% (Table 1). However, Bratislava cannot be competitive with Prague and with the results is catching up closely with Budapest.

It means that Bratislava has set, with regard to RGI index compared with Warsaw, strategy that is more suitable and its average incomes for disposable room demonstrate better reaction to market requirements as in Warsaw. It shows the higher frequency of visitors or on the higher number of accommodations by lower price level in Airbnb objects.

Conclusion

The Airbnb platform by using information technologies in the context of shared economy marked significant progress also in Slovakia. From year to year, on the one hand, grows the number of the users using accommodation rental via Airbnb platform and, on the other hand, grows the number of lessors that produce their accommodation overcapacity for sharing. Also beneficial is the creation of economic and social values as well, resulting from effective use of existing capacities, emergence of new markets and new forms of business enterprise based on ICT.

The comparison of the markets through Airbnb platform of V4 capitals shows on the best position of Prague for all observations. Bratislava has against Warsaw good position in incomes for disposable room, it means as well, that exploitation of disposable capacities that are accessible via Airbnb platform is in Bratislava compared with Warsaw extraordinary and effective.

The worst position has Bratislava in the eligibility of the price strategy. Despite the fact that the average monthly prices for accommodation offered via Airbnb platform are, exclusive of Prague, comparable with other cities, the prices in Bratislava remains during the year almost unchanged, they do not reflect actual demand and characteristic of the seasonal nature of tourism. Therefore is significant to adapt more precise the pricing to the market requirements with the aim to improve its position in this area.

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Basic Attention Token and its use in digital marketing[1]

Peter Červenka[2] – Lujza Jurkovičová[3]

Abstract

The current way of distributing digital advertising is based on the advertiser, the addressee, and the third party intermediary. A new, exciting technology trend in digital marketing is the BAT - Basic Attention Token, which bypasses the advertiser via the Brave web browser, changing both the remuneration and the privacy of users. In this paper we examine the application of this new technological principle of digital advertising in real life, where we analyze the positive and negative aspects of marketing.

Key words

Basic Attention Token (BAT), Blockchain, Brave, Ethereum (ETH), marketing

JEL Classification: O33

Introduction

Purchasing behaviour has changed significantly over the last twenty years. As a result of the development of information-communication technologies, people access information in a different way. Marketing in the form of advertisements, leaflets, or advertisements is no longer so effective, and digital marketing is coming to the forefront. Better targeting and communicating with the customer at the right time is one of the biggest benefits of digital marketing. (Laverde, 2018)

Reuters Institute's Digital News Report 2018 states in its statistics that the penetration of the Internet in Slovakia is 85 percent. This means that most people are reachable by means of electronic communication via a computer, tablet or smartphone. Digital marketing therefore has room for its rapid development. (Ifocus, 2019)

Digital advertising overtook television advertising in 2016. At present, almost all companies invest a large part of their money in the online advertising sector. (Bericonsulting, 2017)

Information is presented in various forms in the online environment. The spectrum of users, where everyone has their needs and preferences, is therefore diverse. There are groups of people who prefer expert discussion with the assistance of an expert or prefer free discussion on social networks or individual mail contact. Digital marketing therefore has the space to transform itself into personalized and individual communication with the user.

The great advantage of online environment and electronic communication is not only the ability to reach specific groups of users, but also measurability. User feedback data, such as the number of visits to a website, the number of clicks on an advertising banner, and the like, gives you the ability to track and measure the progress of your marketing campaign. When it comes to real data, the entire marketing process gets a great deal of dynamism and especially flexibility. (Laverde, 2018)

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[1] VEGA č. 1/0543/18 „The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Positionof Companies Operating in the Slovak Republic".

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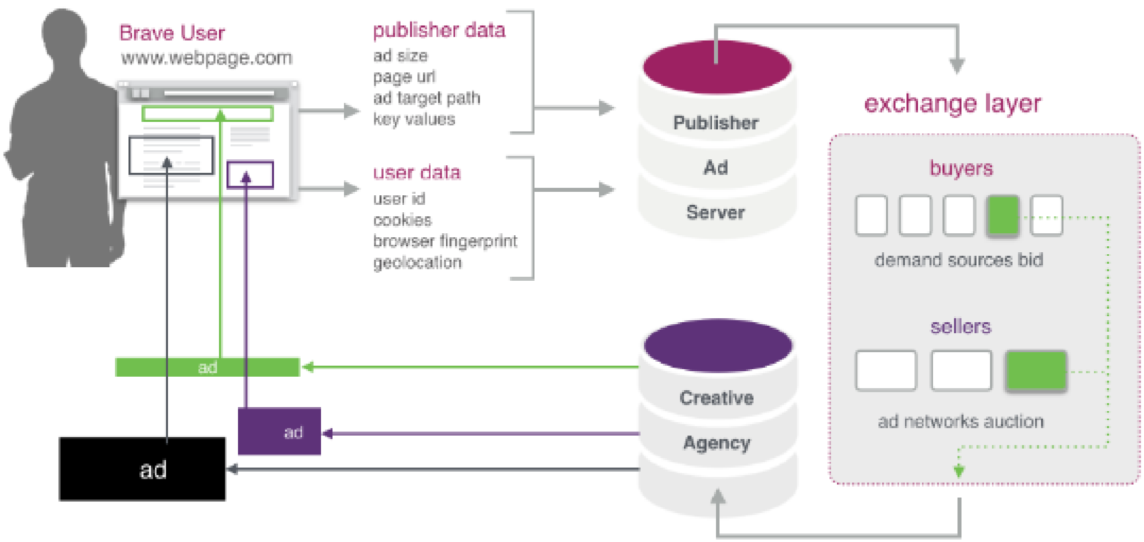
The mentioned data, which can be registered and also collected during the communication of individual users, also has a negative aspect, and that is invasion of privacy. Any of our movement in the online world can leave digital traces that characterize to some extent our privacy, our individuality. Given the number of ads in our environment, there is an increasing user response to the use of ad blocking tools. An interesting solution is provided by the Brave web browser, which not only protects our privacy when browsing the Internet, but also provides a motivation in the form of rewarding the user for voluntary viewing of the advertisement.

Literature Review

One way to identify a user's interests is to register what they are searching for on the Internet and communicating with other users. Recently, Google has been the largest search engine in the world, and Facebook, with more than 2 billion users, dominates social communication. As it reaches a third of the world's population, merchants and advertisers direct their marketing activities to this area. Therefore, retailers are also aiming at the platforms themselves, which have begun to monitor user behaviour in more detail. The collected data are then shifted to behavioural scientists. Based on the survey, it is then possible to direct specific ads according to the needs of users. If you search for new cars of a particular brand in your search, you may find that on Facebook, you will have all the offers for new cars of exactly the same brand you viewed in your search. If this data is analysed by the platform on which the user works and then moves it to another company or sells the data, there is a problem of violation of user data privacy. (Bhaneeta, 2019)

Not only do large companies collect too much user information and undermine their privacy, but they also do not always share fairly with content creators.

Fig. 1 Typical digital ad flow



Source: https://basicattentiontoken.org/BasicAttentionTokenWhitePaper-4.pdf

User response then results in the use of any ad blocking tools. Big companies are fighting this, because advertising profits are spent money. In early 2019, Google even said in a public document, Manifest V3, that it is preparing a new version of Chrome that will complicate the operation of extensions that are also used to block ads or antivirus plug-ins. These extensions will be limited to viewing and not redirecting or blocking content. (Tung, 2019)

In such an environment, it becomes very complicated to succeed with a new advertising model. Brendan Eich, the creator of JavaScript and founder of Mozzila Firefox, is bringing the Brave browser to the market with the current ad solution through the BAT ranking system. (Basic Attention Token).

Brave browser

Brave was developed from an open version of Google Chrome called Chromium. The goal was to create a browser that ensures privacy by blocking malicious software or telemetry tools that collect data about our behaviour on the Internet. To do this, the DuckDuckGo search engine is available in Brave, which does not record any personal information from the user while browsing the Internet and does not display any ads by default. Also, when browsing, it does not determine whether the user is a robot or not. It also provides Internet browsing through the TOR network, which prevents Internet providers from monitoring IP addresses or what users do.

Brave uses AI-enabled AdGraph software to automatically block ads and trackers. AdGraph employs a self-learning algorithm that goes beyond the capabilities of standard ad blocking extensions such as AdBlock Plus based on hand-held lists.

Ads are blocked by default in the browser, but if the user chooses to show ads, the machine learning system will ensure that only relevant ads are shown. Ads will not even run on products that a user has already purchased, which contributes to understanding the user's behavior known as an intent signal. The data is stored and encrypted locally on the user side. This data cannot be accessed by the server because the server does not have a decryption key. During the ad request, Intent Signals are created to minimize sender information. The analytics obtained from Intent Signal are transferred for further processing by ZKP (Zero Knowledge Proofs). (Ravindran, 2018)

BAT token

BAT (Basic Attention Token) changes the standard way in which digital ads are delivered online. For the current model, pixels, scripts, and cookies are tracked. In addition, communications are also accessed by third parties, as ads are matched and served by their servers. For BAT, third parties are eliminated because ads from the downloaded catalogue appear locally on the user's device side.

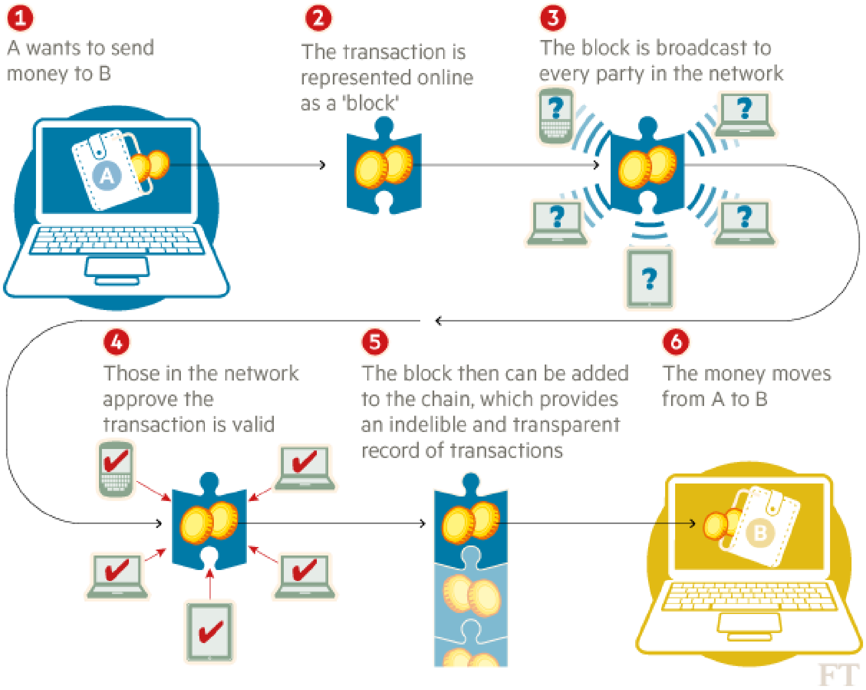
The Basic Attention Token (BAT) is a decentralized Etherea digital platform. The very meaning of the term token is in the cryptocurrency world a term for projects that work on existing blockchain computer names, in our case the blockchain etherea. These tokens carry values on the basis of smart contracts but do not originate as bitcoin or Ethereum crypto currencies, but through ICO (Innitial Coin Offering). Smart contracts, while expressing the value of the token, are unfortunately not always linked to real legislation. (Lindák, 2019)

The main goal is to advertise on blockchain. Advertisers can purchase ad space from content creators through this platform token, while users themselves can be rewarded for watching their ads. (Zdražil, 2018)

Ethereum could be characterized as a decentralized platform for working with money and applications. Ethereum, like bitcoin, works through blockchain technology, which is a decentralized database registering an ever-increasing number of records. Unlike Bitcoin, Ethereum is oriented to launch any decentralized application. Bitcoin is basically just one application in a blockchain environment and is an electronic peer to peer electronic system for online bitcoin payments. In this case, Blockchain is only used to track the ownership of the digital currency, where each bitcoin transaction is registered. (Rosic, 2017)

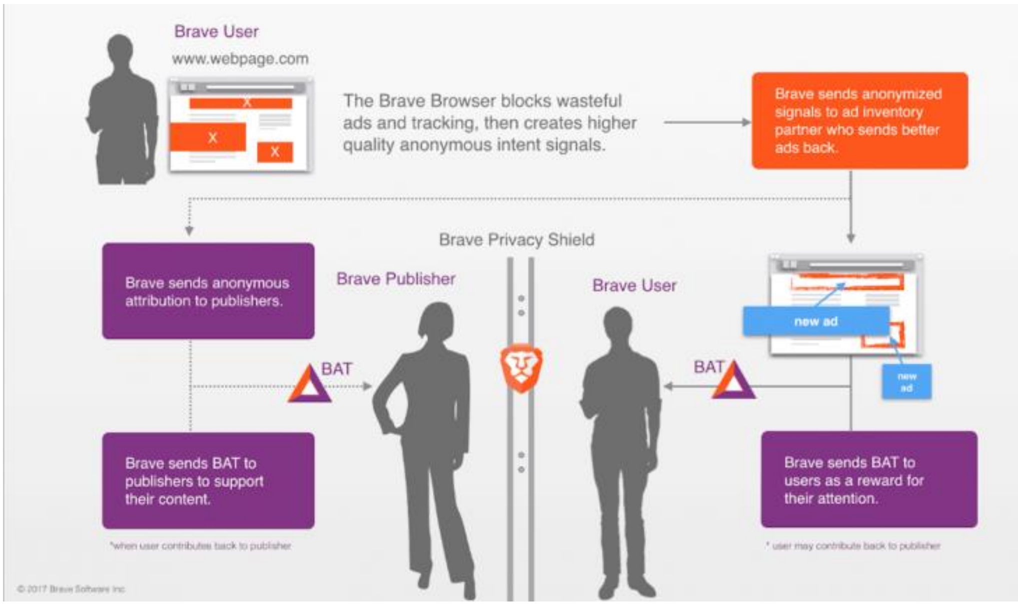
The transfer of funds in the blockchain environment works according to Figure 2. A financial transaction is understood as a block. This block is distributed throughout the network, is then approved on the network and is assigned to a chain that provides a transparent and indelible transaction record.

Fig. 2 How a blockchain works



Source: https://halpernfinancial.com/views/what-is-blockchain-and-why-should-i-care

Fig. 3 Remuneration system through BAT token



Source: https://coinsavage.com/content/2018/07/bat%E2%80%8A-%E2%80%8Aget-paid-to-watch-ads-yes-really/

The principle of remuneration of users

The Brave Payments donation system was launched in Brave browser in the last quarter of 2017 for the first time. In June 2018, the Brave Rewards feature appeared in the browser, which can reward both the BAT token and the users themselves. (Coinone, 2018)

Users who choose to receive ads in Brave will see them on separate tabs and on selected criteria. The Brave browser has a set of user data such as URLs, search terms, browsing history, and so on. The choice of preferred content is made locally on the client side, which ensures a high level of user privacy and better ad targeting. The user can be remunerated for viewing the ads, where the system evaluates the time and location, based on which they then dimension the reward. The reward is made in the BAT crypto currency of 70% of total advertising revenue. (Kryptomagazin, 2018)

1 Methodology

This paper deals with the field of digital marketing, where the aim is to approach and evaluate the issues of personal data security and user motivation to receive digital advertising. The paper was created by analytical methodology. The first step was the collection of secondary data on digital marketing, where we outlined its direction and pitfalls in the current period. In the next step, we introduced a technology that changes the nature of the standard approach of digital marketing in terms of both rewarding stakeholders and personal data security. After studying and analysing the available sources of the issue, we have come up with some research questions:

1. How does the ad distribution system get information about user behaviour for targeted mediation?
2. How trustworthy and stable the BAT token is; to be used as a means of payment in ad distribution?

2 Results and Discussion

2.1 Brave credibility

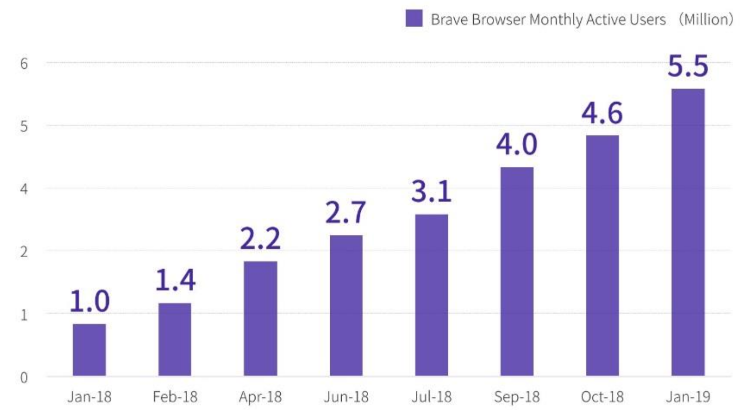
Recently, users have been intensively taking care of their privacy, as confirmed by a Ping Identity 2018 consumer survey on a sample of 3,000 consumers from the United States, the United Kingdom, France and Germany. The report states that 34% of respondents have suffered a financial loss from somebody stealing their private data, 49% of respondents would not operate a service or application, in that has been reported a privacy breach. More so, in the event of a privacy violation, 78% are not expected to return to the online brand and 36% will not return to the brand as such. It can be seen here that any security incident associated with a leak of private data has a significant negative impact on credibility. The credibility towards e-services as such varies somewhat, depending on age. Respondents under 35 years of age are more likely to be more confident about the online environment as opposed to the 55+ age group. For young respondents, confidence in online services is so high that 54% are willing to enter their bank details on a website or mobile app. The recent increase in security incidents has caused 54% of respondents to be more concerned about the safety of their online privacy than ever before. In the case of social networks, 28% of respondents significantly change their attitude towards these media. (Bayern, 2018)

According to Pew Research, 91% of respondents think they should have control over the collection and use of personal information that is outsourced. Up to 70 tracking scripts can be active when visiting a regular media site, so 64% of respondents consider government action on personal information as insufficient. (Rainie, 2016)

Among the safest browsers in recent years include: Firefox, Iridium, ICEC, Tor, Ungoogled Chromium, Brave, Waterfox and Pale Moon. Brave, like Iridium, is based on Chromium. By default, it blocks ads from unwanted scripts and provides browser fingerprinting protection.

Because of its speed and focus on blocking ads, Brave has become very popular with users. This is evidenced by the statistics from Tokeninsight in the following figure.

Graph 1 Brave browser – active users in 2018-2019



Source: https://www.investinblockchain.com/brave-browser-monthly-active-users-surges-by-450-since-2018-report-says/

In one year, the number of active browser users increased by 4.5 million, and in March 2019, 20 million downloads of its mobile version were recorded in the Google play store. (Sheykh, 2019)

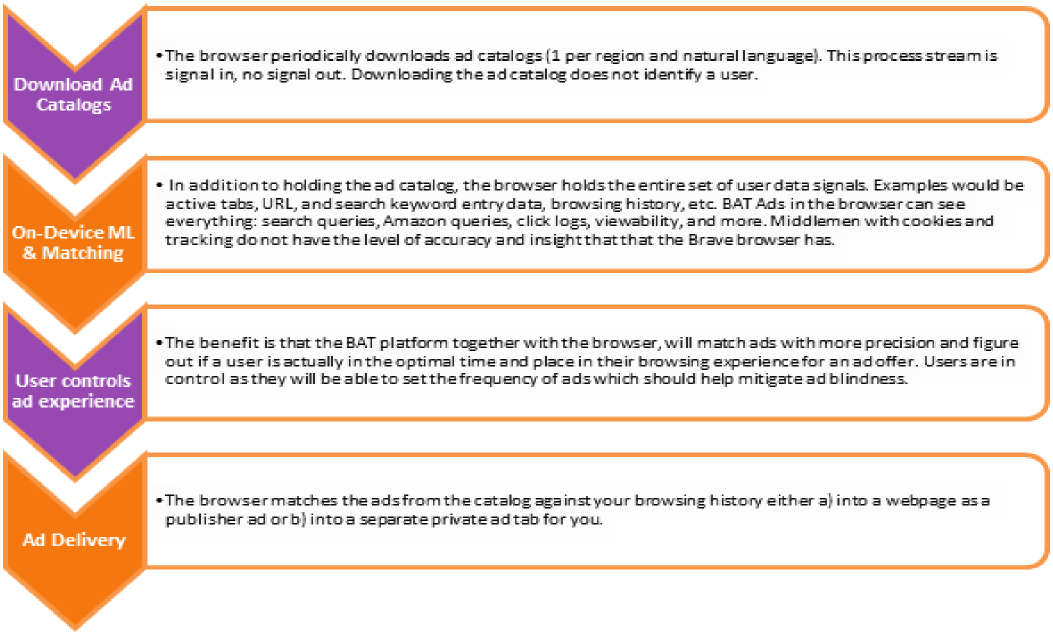
Brave has also earned negative attitudes in the eyes of the public, especially through the introduction of advertising and WebRTC security.

The public deserved criticism in the company's own program of making private ads available in a browser of their own choice, along with the Brave Rewards recipient remuneration mechanism. (Taylor, 2019)

The information that the browser collects could be divided into two groups. One group is information - signals that are provided to the browser to properly set up an ad for a user. According to Brave, each request is anonymous and has only a set of user preferences and intent signals to avoid unique user private data. (Reddit, 2019)

The browser itself processes most of the user data locally and eliminates the ad broker with its ad delivery system. Client-side comparisons and ad serving. The ad delivery process is shown in the following image:

Fig. 4 The ad delivery process in Brave



Source: https://medium.com/@agedevani/brave-bat-a-dark-horse-worth-paying-attention-to-7e234bc36fb7

The second group is information about the fitness of the browser itself. Because of the privacy priority, Brave creators have built their private P3A system, which goes beyond industry standards and GDPR requirements.

Here is an overview of the criteria that the system should meet:

1. P3A does not collect browser history, search queries, or any other sensitive private information,
2. Brave sends background reports in the background, but the reports are simple and non-identifying the product itself, these are more precise Brave questions to your browser,

P3A can be turned off at any time in the browser settings,

The P3A will always be an open code, so it will always be possible to control everything the browser shares.

The P3A system is based on two implementation phases. The first phase collects answers to 18 questions about basic browser metrics. Answers are sent in random combination with questions and the exact time is changed by a random delay of 0-5min. This mixed information is sent to the Brave's content delivery network operated by Fastly. As responses approach the CDN border, the IP address and timing information is stripped. In the second phase of implementation, the format of the sent responses is changed, where each response is a separate data point. The aim is to ensure a combination of questions so that it is not possible to identify a particular user. For example, it is possible to count how many people have set the browser as default, or how many people have imported bookmarks. However, it is not possible to count how many people have set up a nickname if they also imported bookmarks by default. (Albeniz, 2019)

2.2 WebRTC vulnerability

WebRTC (Web Real-Time Communication) is an API interface through which telephone, video communication and peer to peer file sharing can be implemented to web browser-free applications without plug-ins. In this case, it should be noted that all chromium-based browsers are vulnerable in this respect, which may reveal your true Ip address even when using a VPN connection. It is therefore necessary to block WebRTC in the browser to increase security. Unlike Firefox, where you can completely disable it. Having set up browser fingerprinting via Panopticlick, we found, as well as the author of the cited knowledge, that Brave has a gap in this respect.. (Taylor, 2019)

Table 1 Security test of browsing the Brave web browser through the Panopticlick website

Test	Results
Is your browser blocking ads?	yes
Is your browser blocking invisible trackers?	yes
Does your blocker stop trackers that are include in the so-called ACCEPTABLE ADS whitelist?	yes
Does your browser unblock 3rd parties that promise to honour DO NOT TRACK?	no
Does your browser protect from FINGERPRINTING?	no

Source: authors processing according to https://panopticlick.eff.org/

2.3 BAT token

Micropayment mechanism, resp. remuneration of content through BAT tokens has been added by Brave on Youtube, a Twitch platform, on Twitter and efforts are continuing on Reddit, GitHub and Vimeo. Estimates say that Brave Reward currently has around 60,000 verified content creators and will increase. (Holman, 2019)

BAT currently stands at $ 0.30. It is ranked 24th on the capital market in the cryptocurrency ranking, according to the last 90 days, when cryptocurrencies were traded, up to 110% (Sheikh, 2019)

Graph 2 Development of BAT value against USD

Source: https://www.cryptonewsz.com/price-analysis-of-basic-attention-token-on-22nd-may-2019/20911/

A total of 1.263 million were released and the total volume is 1.5 billion BAT tokens. The smart contract, which represents the ERC20 token, will not allow the number of chips to be increased. In January 2019, the value of BAT was $ 0.12, while in May 2019 it was traded at a triple value of $ 0.36 per BAT. The highest value of $ 0.98 per BAT was achieved in 2018. Positive predictions predict that the BAT value could be up to $ 50 per BAT. (Williams, 2019)

For the BAT token, we must not forget that although it carries a certain value, it is not a crypto-capital asset, because that value is not continuous. However, if BAT is successful and becomes the unit of attention of advertising, it will always represent a certain value convertible for real cryptocurrencies and standard money. (Gedevani, 2019)

3 Evaluation

After reviewing the ad delivery mechanism and addressing the user's personal information issue in the browser, we conclude that Information that is subsequently stripped of identifiable data is based on the user's confidence in Brave. On the other hand, there is information based on 18 questions that are a regular query against the browser. While the information is aimed at the fitness of the browser and is additionally deprived of identifying information, it still creates the discomfort of browsing. Here we would suggest that the company did not obtain this information from the entire population where the browser is distributed, but only from a sample of registered testers. This would mean that the company would not lose the information needed to improve the product, and at the same time other users would feel more secure. A good step is that the user can turn off sending this information in the browser by disabling the P3A system to transfer browser metrics.

The negative view of security is also due to the fact that the Brave browser is based on a chromium system, where it is not possible to completely shut down the WeRTC. It can only be blocked, which should significantly eliminate the leak of the actual IP address of the user.

Brave's evolutionary step in relation to the BAT token is definitely a new way to distribute and reward the user for viewing the ad. We rate this new mechanism as a very positive direction in digital advertising, where users are expected to rethink their attitude to blocking any advertising in all feeds around them.

An interesting issue here is the credibility of the BAT token itself. whose stability on the financial market is, of course, still dynamic and is within the $ 1 per BAT tolerance. According to the forecast, however, the situation is expected to improve significantly over the next two years and the BAT value should climb to USD 50 per BAT. It is, of course, a question of trust towards the development team, which can influence the situation with various new features of its browser with integrated BAT. On the other hand, the public safety issue is so sensitive today that the development team has to be very careful, because once it has lost confidence it will be very difficult to recover. In our opinion, the $ 50 per BAT vision is a bit exaggerated but not unrealistic. The idea of a user's financial motivation is enough to drive interest in digital advertising. With a certain start-up of the user base and an increased token transaction, an exponential wave of interest in the BAT system can be triggered, increasing its value converging to the above $ 50 per BAT. However, the condition of trustworthiness and privacy must be respected.

Conclusion

The digital advertising industry is in trouble with its disproportionate efforts to track and evaluate more and more personal data. Users' privacy responsiveness is at the peak of their patience, and most try to use ad filtering tools. Not to mention even the penetration of advertising itself, which also has its negative share of the fact. An ordinary user no longer watches a movie on TV or other media that is interrupted by advertising, but rather downloads it to a local device, where he has the option to skip any advertising flexibly. In this atmosphere, the solution comes from the BAT development team, which on the one hand blocks third-party ads through a browser, but on the other, opens up the possibility of receiving ads on a voluntary basis with an attractive ranking. We have to say that the idea itself is very interesting because it provides space for a different perspective of digital advertising, which in the eyes of the general public no longer causes interest, but rather an undesirable effect. If the development team manages to implement the BAT system in other browsers and maintains anonymity of ad selection based on user preferences, this marketing model awaits a successful future.

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The new customer path in the digital economy

Katarina Chomová[1]

Abstract

Companies need to realize that more touchpoints and higher volume in messages do not necessary translate into increased influence. Companies need to stand out from the crowd and meaningfully connect with customers in just a few critical touchpoints. Companies should map the customer path to purchase, understand customer touchpoints across the path and intervene in select touchpoints that matter. In the digital economy, customer path should be redefined. A new customer path must be defined to accommodate changes shaped by connectivity. In this paper, we provide a survey of state-of-the-art in a new customer path in the digital world. As part of the survey we propose a research agenda to guide future work in the area.

Key words

customer path, digital economy, touchpoints

JEL Classification: M31

Introduction

The customer path in the digital economy is important to have full understanding of within organization. The most important is building up quality touchpoints whilst maintaining a quality over quantity rule in mind.

Organizations must distinguish themselves from the crowd by delivering meaningful to the customers, with a focus on only a few crucial touchpoints. Intensifying communication, strengthening their channel presence and improving the customer interface. In fact, only a moment of being pleasantly surprised could be all that’s necessary to make a customer into a loyal advocate.

1 Methodology

Though the interest in customer journeys as a topic of research and practice has spread across a range of fields, comprehensive analyses of the literature on customer journeys is missing. This represents a fundamental shortcoming.

This paper aims to provide an overview of existing uses of the term customer path and existing customer path approaches. This aim also entails the ambition to identify five customer path models that can lead to a better understanding of customer path in the digital economy.

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2 Results and Discussion

The Customer Path refers to series of channels that customers use or are exposed to in order to convert into a purchase. These channels include everything from emails, apps, search engines, brand´s websites, loyalty programs, review channels and social networks. (Ramirezon, 2015)

The concept of customer path has been for well over 100 years but it's really within the last 5-10 years with the birth of the smartphone that the level of complexity has exploded. (Think with Google, 2018)

We identify four different customer path models for three different eras: early, pre-connectivity and era of connectivity. (See Tab.1)

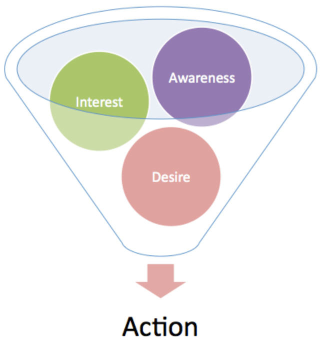
Tab. 1 Four customer path models

EARLY		**PRE-CONNECTIVITY**	**ERA OF CONNECTIVITY**
E.St. Elmo Lewis		*Derek Rucker*	*Philip Kotler*
A.I.D.A.	A.I.D.A.R.	A.A.A.A.	A.A.A.A.A.
Attention	Attention	Aware	Aware
Interest	Interest	Attitude	Appeal
Desire	Desire	Act	Ask
Action	Action	Act Again	Act
			Advocate

2.1 Early era of customer path

One of the earliest and widely used frameworks to describe the customer path is AIDA model.

Fig. 1 AIDA marketing funnel model



Source: www.practicalecommerce.com

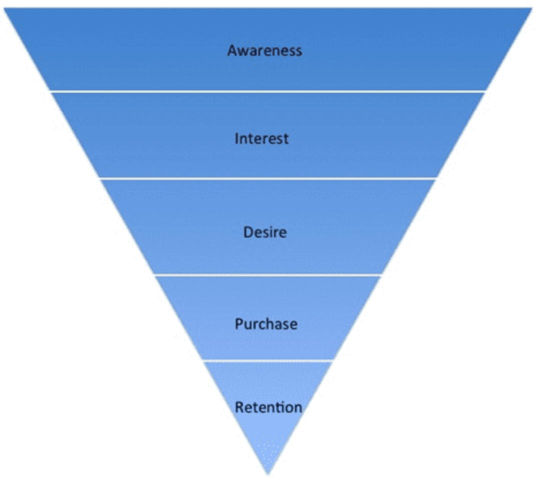
AIDA model (See Fig.1) is marketing basic movement in organizing advertisement that is resulted from customers' perception. E. St. Elmo Lewis introduces this concept in 1898. AIDA refers to Attention, Interest, Desire and Action. AIDA is abbreviation that is used in marketing and advertisement. It describes general list of incidents, which is possible to happen when a customer involves in a certain advertisement. Mackey (2005) explains that AIDA consists of Awareness (attentive to customer), Interest (improving customers' interest by focusing on profit and benefit and it is not focused on feature like in traditional advertisement), Desire (convincing the customers that the interest of a product or service can fulfill their needs), Action (main customer acts and or purchase products and services) (Hadiyati, 2016)

Similar to the four P's of marketing (product, price, place and promotion), AIDA has undergone several expansions and modifications. (Kotler, 2017)

The AIDA model was criticized & modified many times over the years. Many of the modified AIDA models are presently in use. One among them is the AIDAR model.

AIDAR model (See Fig.2) consists of Awareness (the brands are focused on promoting their product or service and making the customer aware of the brand), Interest (the brands are focused on helping the customers to generate interest on the benefits of a product or service), Desire (the brands are focused on moving their customer mindset from "I like it" to "I want it."), Act (the brands are focused on encouraging the customer to act or perform a desired task), Retention (the brands will focus on establishing a long-term relationship for mutual benefit).

Fig. 2 Title of the figure AIDAR marketing funnel model



Source: www.smartinsights.com

The problem with the AIDAR model was that it demanded the customers to adjust to the model rather than being flexible enough to adapt & adjust to the needs of the customers. The model also didn't give importance to connectivity & it's influence on the customer's purchase decision. (Sanju, 2018)

2.2 Pre connectivity era of customer path

Derek Rucker of the Kellogg School of Management offers a modification of AIDAR that he calls the four A's: aware, attitude, act, and act again (See Tab.2) In this more recent framework, the interest and desire stages are simplified into attitude and a new stage, act again, is added. The modified framework aims to track post-purchase customer behavior and measure customer retention. It considers an action of repurchase as a strong proxy for customer loyalty.

The four A's framework is a simple model to describe the straightforward funnel like process that customers go through when evaluating brands in their consideration sets. Customers learn about a brand (aware), like or dislike the brand (attitude), decide whether to purchase it (act), and decide whether the brand is worth a repeat purchase (act again).

The four A's also reflects a primarily personal path. The major influence on customers' decision making as they move across the path comes from companies' touchpoints (e.g., TV advertising at the *aware* phase, salesperson at the *act* phase, service center at the *act again* phase). This is within a company's control. (Folstad, 2018)

Tab. 2 Four A´s model

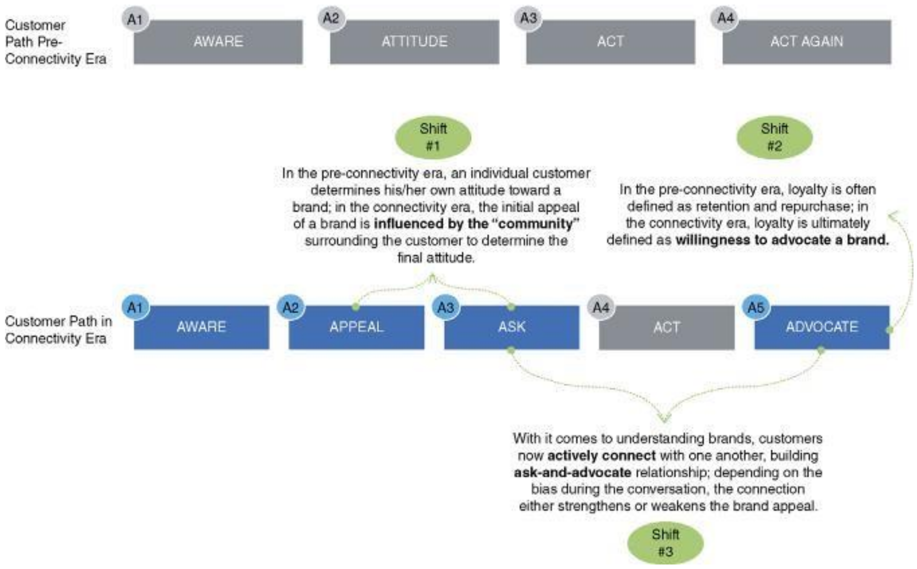
Four A´s	
Aware	"I know" They know of your existence
Attitude	"I like" They like or don't like a brand/company
Act	"I buy" They decide to buy the product
Act again	"I recommend, or I buy again" They decide whether they buy it again or not

Source: http://pastparadise.com/the-new-customer-path-in-the-digital-economy/

2.3 Era of connectivity of customer path

Today, in the era of connectivity, the straightforward and personal funnel-like process of the four A's needs an update. A new customer path must be defined to accommodate changes shaped by connectivity. The customer path should be rewritten as the five A's: aware, appeal, ask, act, and advocate. (See Fig. 3)

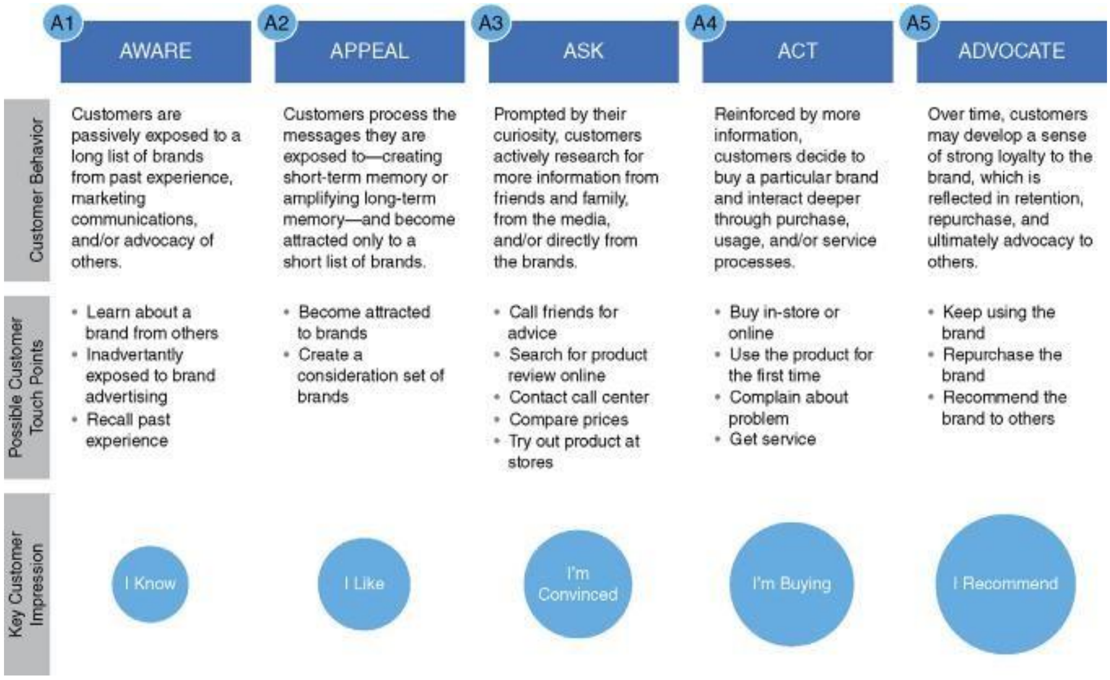
Fig. 3 The Shifting Customer Path in a Connected World



Source: Ph. Kotler, 2017, p. 62

5 A´s model (See Fig.4) consists of Awareness (potential customers are exposed to a brand through word of mouth, advertising, social media, past experience & every other medium that lets the customer know about the existence of a brand; the brands in this stage focus on creating a short-term memory that will help the customers to recall or recognize the brand if they do come across one), Appeal (the potential customers move from the stage of being aware of the product to the stage of wanting to know more about the product; the brands in this stage focus on amplifying the short-term memories created during the first stage), Ask (after learning about the product the curious customer at this stage will seek out to gather more information & opinions about the product; the customer might approach his friends, family, colleagues or anybody who might have an idea about the product; they might also check online reviews, social channels, forums & any other platforms for more info on the product or service), Act (the customer is convinced with the gathered information & will decide to act; the brands in this stage will make sure that the process will not end with a purchase & will try to establish a relationship with the customers by creating a positive & memorable experience for the customer) Advocate (the customer would have built loyalty to the brand because of the positive & memorable experience; this will result in Retention, Repurchase, and finally Advocacy for the brand.) (Kotler, 2017)

Fig. 4 Mapping the customer path throughout the Five A's



Source: Ph. Kotler, 2017, p. 64

Conclusion

A proper understanding of the customer path will help to better understand customers. It will help to reduce the cost and increase the sales. It will also help to take the necessary steps to build a stronger relationship with customers and to understand customer behavior much more efficiently.

Companies need to realize that more touchpoints and higher volume in messages do not necessary translate into increased influence. Companies need to realize that more touchpoints and higher volume in messages do not necessary translate into increased influence.

The newest customer path model five A’s is a flexible tool that is applicable to all industries. When used to describe customer behavior, it draws a picture that is closer to the actual customer path. It allows for cross- industry comparisons, which reveal insights into industry characteristics. It also provides insights into a company’s relationship with customers in comparison with its competitors. When a company, for example, finds that the most common path its customers often take is very different from the typical customer path in its industry, the company might discover either an authentic differentiation or a hidden customer experience problem.

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Customs and Traditions as Part of the Tourism Product[1]

Miroslava Čukanová[2] – Paulína Krnáčová[3] – Ladislav Bažó[4]

Abstract

Customs and traditions are integral part of the intangible cultural heritage. Recently, there is increasing demand to visit and experience cultural identity of different regions around the world. We can observe changes in the scope of perception and interest in the culture of other nations, which can be particularly caused by the impact of globalization that influence the development of society. The aim of the paper is to find out whether the tourism products which present local customs and traditions can be considered as memorable tourism experience. We apply sentiment analysis and focus on the most visited folklore festival in Slovakia – Jánošíkove dni. The results confirm that the positive reputation of the festival is connected first of all with experience, then with atmosphere and tradition. We consider the festival Jánošíkove dni being a tourism product presenting Slovak customs and traditions and fulfills criteria of memorable tourism experience.

Key words

tourism product, customs and traditions, sentiment analysis, memorable tourism experience

JEL Classification: L83, Z32

Introduction

Enormous growth of knowledge, increasing mobility and the increased accessibility of travel result in widespread curiosity about other places and a huge demand to visit and personally experience other societies. One of the pillars of the tourism industry has been mankind's inherent desire to see and learn about the cultural identity of different parts of the world. In domestic tourism, cultural heritage stimulates national pride in one's history. In international tourism, cultural heritage stimulates a respect and understanding of other cultures and consequently promotes peace and understanding (WTO, 2001). Customs and traditions are an integral part of the intangible cultural heritage. The increasing use of customs and traditions to create tourism product puts people at the heart of cultural tourism. According to the UNWTO definition at the 22nd Session of the General Assembly held in Chengdu, China (UNWTO, 2017), cultural tourism is a type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination. These attractions/products relate to a set of distinctive material, intellectual, spiritual and emotional features of society that includes arts and architecture, historical and cultural heritage, culinary heritage, literature, music, creative industries and the living cultures with their lifestyles, value systems, beliefs and traditions.

[1] The paper is output of the scientific research project within the framework of Erasmus+ No. 2017-1-CZ01-KA203-035428 MIECAT: Methodology of Interpretation of European Cultural Heritage through Attractions in Tourism

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As we mentioned above, traditions and customs represent integral part of the intangible (spiritual) cultural heritage. They can be characterized by several specific features that are based on a specific region of the country where they originate and have been maintained for a long time. They currently represent important motivational elements of active and passive participants in tourism (Pavolová & Hlavňová, 2013). According to Tudorache (2015) the global wealth of traditions is one of the main motivation factors for travel, with tourists seeking to get to know new cultures and to experience the global difference of performing arts, handcrafts, rituals and cuisines.

Furthermore, young tourists with their motivations represent remarkable segment in tourism. They are interested in local customs and traditions when travelling. According to WYSE Travel Confederation (World Tourism Organization, 2016), ''*young tourists has become one of the fastest growing segments of international tourism, representing more than 23% of the over one billion tourists traveling internationally each year.*" The survey conducted by WYSE Travel Confederation in 2014 pointed out that the most important motivation factors of this tourist segment are to interact with local people (55% of youth rated it as important) and to experience everyday life in another country (45% of young respondents claimed). This drive to experience the 'local' while traveling brings young participant in tourism closer to local communities which means that they have more direct economic, social and cultural impacts on the communities they visit (WYSE, 2019).

The goal of cultural destinations should be to create a connection with the tourist. To achieve the goal it is important that the tourist comes back to the destination and moreover they encourage their friends, relatives, and acquaintances to visit the destination. Therefore, cultural destinations should focus on ways how to increase and improve the effective interaction between tourists and how to enhance cultural exchange and provide an authentic experience to tourists. Visitor engagement could focus on the new culture and provide more knowledge about the new culture through more interactive methods such as host-guest luncheons and live entertainments (Chen & Rahman, 2018).

Modern tourism offers a wide variety of experiences for tourists who crave diverse scenery, cultures, and local life styles at different tourism destinations (Ritchie, Tung, & Ritchie, 2011). Nowadays the emphasis is on delivering unique, extraordinary and memorable tourism experiences to potential visitors in order to maintain a sustainable competitive advantage over competitors (Hudson & Ritchie, 2009). This has resulted in increasing recognition of the significance of memorable tourism experiences among both tourist experience researchers and tourism professionals (Kim, 2010; Kim, Ritchie, & McCormick, 2012; Pizam, 2010; Chandralal & Valenzuela, 2015).

1 Methodology

The aim of the paper is to find out whether the tourism products which present local customs and traditions can be considered as memorable tourism experience.

In our paper we focus on sentiment analysis of the top 10 Google.com search results related to the folklore festival "Jánošíkove dni".

Jánošíkove dni is an international folklore festival, which is held annually between July and August in Terchová for more than fifty years. However, it has had international character since 1991. During this period it hosted several thousands of performers (folk groups, soloists) from over 30 countries (Belgium, Bolivia, Bulgaria, Czech Republic, France, Croatia, Latvia, Lithuania, Macedonia, Hungary, Mexico, New Zealand, Germany, Poland, Romania, Serbia, Sweden, Ukraine, etc.). Every year tens of thousands of folk art and folklore fans from Slovakia and abroad join unrepeatable, almost magical atmosphere which is distinctive for this festival since its birth. The part of the magic is “Terchovská muzika”, recorded in December 2013 in the Representative List of the Intangible Cultural Heritage of Humanity. The overall character of the event is enhanced by a variety of special events, special exhibitions (folk artists, professional artists, photographers, and collectors), and demonstrations of folk crafts, audiovisual programs and ceremonial presentation of books. (Cabadaj, 2019).

Sentiment analysis represents the methodology to measure positive and negative reputation. It is a way to evaluate written or spoken language to determine if the expression is favorable, unfavorable, or neutral, and to what degree. Sentiment analysis helps data analysts within large enterprises gauge public opinion, conduct nuanced market research, monitor brand and product reputation, and understand customer experiences.

Measurement of reputation begins with the definition of representatives of the surveyed segment, in this case we chose a specific event Jánošíkove dni. The virtual identity of this event was then investigated by Google. We reviewed the first 10 results of Google.com search using incognito browser mode that ensures the objectivity of searched results and prevents to display personalized information, which is mainly influenced by the searcher's location, its history cookies. We analysed five keyword groups that were entered in the search engine as follow:

Group 1: Jánošíkove dni

Group 2: Jánošíkove dni + experience

Group 3: Jánošíkove dni + atmosphere

Group 4: Jánošíkove dni + tradition

Group 5: Jánošíkove dni + folklore festival

Tab. 1 The sentiment value of the first 10 search results

Sentiment / Position in search	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
positive sentiment	20	19	18	17	16	15	14	13	12	11
website belonging to the event	10	9	8	7	6	5	4	3	2	1
neutral sentiment	2	2	2	2	2	2	2	2	2	2
negative sentiment	20	19	18	17	16	15	14	13	12	11

Source: Roháľ & Sasko, 2011

The table 1 shows the chronological sequence of point´s allocation to the analyzed subjects. Positive response, i.e. sentiment will increase the score. The higher the position of this sentiment in the search result is, the more points are awarded. Likewise, but with the opposite effect, it works to identify negative sentiment. Points are deducted.

2 Results and Discussion

One of the most preferred tourism forms based on customs and traditions are cultural tourism and visits to festivals especially folk festivals. Based on statistical data showed in Table 2 we claim that there is interest in such a tourism product. Results in table 2 show trend in numbers of concerts, festivals and folklore festivals in Slovakia in the period of years 2007 – 2017.

Tab. 2 Number of concerts / festivals in Slovakia in the period of years 2007 – 2017

Year	Total number of concerts / festivals	Folk festivals as % of total number
2007	4 401	13,45
2008	4 451	11,21
2009	4 630	10,39
2010	3 513	10,85
2011	3 591	10,97
2012	3 497	11,21
2013	2 677	9,49
2014	3 506	9,04
2015	3 425	10,98
2016	3 465	12,61
2017	4 682	10,00

Source: Ministry of Culture of the Slovak Republic, Results of the State Statistical Survey in the Field of Culture in the Slovak Republic 2007 – 2017

Based on comparison of the number of visitors of folklore events in Slovakia, we can say that Jánošíkove dni is the most visited event – folklore festival (see tab. 3).

Tab. 3 Most visited folklore festivals in Slovakia in 2009 and 2015

No.	Event / festival	Place	Number of visitors [thousands]	
			2009	**2015**
1	Folklórny festival Jánošíkove dni	Terchová	75	55
2	Folklórne slávnosti pod Poľanou	Detva	14,6	50
3	Folklórny festival Východná	Východná	30	30

Source: Makarova, 2016

Data in table 4 point out trend of the number of visitors of all music festivals in Slovakia and the percentage of visitors of folk festivals as well as Janošíkove dni.

Tab. 4 Number of visitors of music festivals/concerts in Slovakia in the period of 2007 – 2017

Year	Total number of visitors	Folk festivals [% of total number]	Jánošíkove dni [% of folks festivals]
2007	1,183,357	166,207 14.05%	65,000 39.11%
2008	1,496,251	197,946 13.23%	65,000 32.84%

Year	Total number of visitors	Folk festivals [% of total number]	Jánošíkove dni [% of folks festivals]
2009	1,189,848	150,027 12.61%	75,000 49.99%
2010	892,942	97,294 10.90%	65,000 66.81%
2011	1,047,891	137,305 13.10%	60,000 43.70%
2012	1,034,682	116,014 11.21%	70,000 60.34%
2013	606,078	73,594 12.14%	n.d.
2014	1,640,089	83,382 5.08%	n.d.
2015	1,540,384	113,821 7.39%	55,000 48.32%
2016	1,732,951	183,894 10.61%	n.d.
2017	1,986,907	202,573 10.20%	60,000 29.62%

Source: Ministry of Culture of the Slovak Republic, 2019; Makarova, 2016, Trend, 2010; Hrabovská, 2012

Products and services are no longer enough to generate economic prosperity. Therefore organizations and the hospitality industry use the experience as a management tool for differentiation (Pine & Gilmore, 2011). Experiences are subjective, highly personal and intangible phenomena (O'Dell & Billing, 2005), hence, difficult to define and to grasp their essence. The tourist experience remains in the memory, preceded by motivations and expectations, and results in satisfaction or dissatisfaction (Quinlan-Cutler & Carmichael, 2010). It also reflects the traveler's assessment after the interaction with the visited destination (Quinlan-Cutler & Carmichael, 2010).

Therefore, we move on focusing on the sentiment analysis of the folklore festival Janošíkove dni.

2.1 Results of sentiment analysis of the folklore festival Janošíkove dni

We provide the sentiment analysis in google search engine. The results are shown in the table below.

Tab. 5 Sentiment rating of the folklore festival Janošíkove dni

Sentiment / Position in search	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Total**
Jánošíkove dni	10	19	2	2	2	2	14	2	2	2	57
Jánošíkove dni + experience	20	9	18	2	16	2	14	13	2	11	107
Jánošíkove dni + atmosphere	20	19	7	6	16	2	14	2	12	2	100
Jánošíkove dni + tradition	20	19	18	6	2	2	14	2	2	11	96
Jánošíkove dni + folklore festival	10	9	8	7	2	2	14	13	2	2	69

Source: author´s results

Based on the results of the sentiment analysis, we can conclude that the best sentiment and hence the best reputation has the folklore festival in connection with experience. In this case, the event was mentioned in a positive manner in the largest number of external sites. The second rank holds the connection of the title of the event with the expression of atmosphere. In terms of reputation, the third position ranks the event in connection with the expression of tradition. The worst result was only by searching for the title of the event.

We consider as positive results that we did not find any negative feedback on this event on the first pages of search.

However, based on the searched results for the title of the event, there are a lot of possibilities to improve the sentiment and the reputation of the event. It requires regular and long-term work in the field of online marketing to squeeze neutral search results from the first page of the search engine.

Conclusion

Our research results show increasing interest in tourism products which have a traditional and/or regional character. Recently we have been witnessing increasing demand in traditional and regional products and interest in the traditions of ancestors. This is also reflected in tourism – one of the main motivation factors why people travel is to get to know local culture and lifestyle in the visited tourism destination. Nowadays, the satisfaction of tourism participants does not depend on the product, quality of the products or its price. Participants expect memorable experience while travelling.

The simplest form for a tourism participant to experience local traditions and customs of the region are folklore festivals which are the most visited music festivals/concerts according to statistical data. In Slovakia, the most visited folklore festival is the festival Jánošíkove dni. Based on the facts mentioned above, we focused on sentiment analysis of the folklore festival Jánošíkove dni. The results confirm that the positive reputation of the festival is connected first of all with experience, then with atmosphere and tradition. We consider the festival Jánošíkove dni being a tourism product presenting Slovak customs and traditions and fulfills criteria of memorable tourism experience.

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Partial research results of economic efficiency of electromobility in logistics[1]

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Abstract

The main aim of the article is based on scientific methods to analyze possibilities of developing electromobility in the world and in Slovakia. This possibilities go out from results from survey, which was realized like parcial part of project VEGA 1/0380/17 – Economic efficiency of electromobility in logistics. Primary targeting of survey is to analysis of the transportation and infrastructure as well as comparison different types of vehicle energy sources. The final part contains the analysis of the results of the questionnaire and the forecast of future development of electromobility.

Key words

electromobility, consumer research of electromobility, market potential, development of electromobility

JEL Classification: O31, O18, R41

Introduction

Global megatrends such as the increasing rate of urbanization in the world, accelerating technological progress or increasing environmental pollution are relatively well known (MHSR, 2018). These changes affect on us all and do not circumvent the automotive industry. The Slovak Republic, as a highly economically open country with a pro-export economy, is characterized by its specialization on the automotive industry. The Slovak Republic produces the highest number of vehicles per thousand inhabitants of all countries in the world with a production threshold of over one million vehicles in 2016 and an estimated production of up to 1.3 million in 2020 (SARIO, 2017). Already, European cities are making efforts to limit the entry of older diesel vehicles into city centers. According to most experts, the automotive future is represented by either hybrid vehicles or fully electric versions of cars. Electric vehicles represent the future, not only in passenger transport, where combustion engines will not be able to meet low emission standards and will gradually be pushed out of the market by other alternatives, but also in other transport areas. The paper looks at potential consumers' views on electromobility, which is the basis for further research on electromobility in Slovak market.

1 Methodology

The aim of the paper is to analyze the potential future development of electromobility and the issue of electrified vehicles not only in Slovakia, but also in the world. A questionnaire was created to achieve this goal. Most of the questions are closed, from which the respondent could choose only

[1] The paper is output of research project: VEGA 1/0380/17 – Ekonomická efektívnosť elektromobility v logistike“ (Economic efficiency of electromobility in logistics)
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from predefined answers (Richterová, 2013). The questionnaire was published only in electronic form and social networks were used for the inquiry. Among the networks used were Facebook and LinkedIn, which is a business-oriented internet social network. Due to the highest credibility and reliability of the answers, the maximum possible number of respondents was addressed and the data collection itself lasted 2 months. The total number of relevant and usable answers was 200, which are discussed in more detail in the following section.

2 Results and Discussion

The total number of respondents was 200, while the total number of men was 111 and women were 89, representing a ratio of 55.5% to 44.5% in favor of men. Most respondents, up to 29%, are among the youngest group, i. aged 18 to 31 years. This phenomenon is due to the fact that social networks, where our questionnaire was promoted, are primarily used by young people. The second most represented age category with 24.5%, resp. 49 respondents are aged 31 to 40 years. Respondents aged 41 to 50 represented a 17% share, aged 51 to 60 represented 16%, and an age category from 61 years and over represented 13.5%. It can be assumed that people from this age category, ie seniors, are often unable to handle modern information and communication technologies, which explains their low representation in the questionnaire. The next question was to determine the highest level of education of respondents. There were 3 categories - university, secondary and basic education. Most respondents, up to 65.5%, achieved university education, 34% of people completed secondary education, and only 1 respondent achieved maximum primary education. Higher interest in alternative forms of propulsion, environmental protection and electromobility as such can be associated with the achieved higher education. This statement is based on the fact that two thirds of university educated people filled out the questionnaire despite addressing all educational categories. The next question was to find out the economic status of the respondents. Of the total number of 200 respondents, up to 110, or 55%, are employed on a permanent basis. The second largest group of respondents are students with 28%, followed by entrepreneurs and sole traders with a total of 12.5%. The least represented groups are those on maternity / parental leave, the unemployed and pensioners with a total of only 4.5% of 200. We can assume that these groups do not spend time on social networks. However, their interest in electromobility is clear from the results of the questionnaire.

2.1 General knowledge of respondents about car use

The second category of questions focuses directly on the automotive market and respondents' personal experiences of using cars. The first question is asked in general and asks people if they own a car. Of the total number of 200 respondents, 147 of them own the vehicle. Specifically, this is a 73.5% share. More than a quarter of respondents, exactly 26.5%, do not own a passenger car. If the person chose the option of owning a passenger car, he proceeded to the next question, which focused on how to use the passenger car. If the respondent chose a negative option, they automatically proceeded to the next section of the questionnaire. Of the 147 respondents who own a car, up to 66.7% of respondents use their car daily. Less than a quarter of drivers use their vehicles almost daily and only 9.5% of respondents use their vehicles occasionally or minimally. It is therefore clear that a person who owns a motor vehicle also uses it regularly, most often when commuting. In the following question, we investigated the propulsion of their passenger car, which they own and use regularly. The results are relatively clear and balanced. The chart is dominated by 51% diesel, ie diesel, which is second to 44.2% gasoline internal combustion engine. Their combined total represents a staggering 95.5%. The electric car is owned only by one of the 147 respondents and only three on the hybrid. Gas treatment of LPG or CNG vehicles also reaches only a negligible 1.4% share in our survey. The significant proportion of conventional internal combustion engines is evident and the share of alternative movements is still negligible. However, we can assume that their share will continue to grow (Krnáčová, 2013). Another question was the daily mileage. It is a key indicator in the field of electrified vehicles, since their primary use is for daily commuting to work on short routes around and around the city. According to the survey, more than half of the respondents (55.1%) traveled more than 21 kilometers a day. Up to 34.7% of all 147 respondents travel more than 41 km a day. Even if you drive this higher mileage on a daily basis, you can still comfortably use a modern electric car on a single charge all week, making it an attractive full-featured replacement for the combustion model. As an example, we can see the current BMW I3s, which achieves a standard electric range of 260 kilometers (BMW, 2019). In the case of a round-trip of 45 kilometers per day, the whole working week reaches 225 kilometers, which the BMW i3s with a range of 260 can handle even with a small margin. In the case of commuting 20 kilometers a day, which is the answer from 19% of respondents, a given electric car with a single charge even two weeks. In the following question we were interested in the purpose of using a car. The number of respondents remained at 147. However, the question offered the possibility to mark multiple answers. That is why we have up to 276 total answers. Commuting to work dominates, which appeared in up to 123 responses out of all 147 respondents, ie 83.7, who commute daily to work and for whom an electric car would be an appropriate choice. Leisure activities are attended by 90 respondents (61.2%). The least respondents chose to attend school, only 29 out of 147. The obvious fact is that young people often do not have their own vehicles and travel to school by public transport, on foot or taken by someone else. On the only open question in our survey, we asked people about their estimated monthly fuel costs. Together we received answers from 147 car owners, and the previous question shows that up to 95.5% are diesel and petrol cars. We calculated relevant data using statistical methods. The maximum amount provided by the respondent was € 500, which was an employed, university-educated man driving a diesel vehicle. On the contrary, the minimum amount of monthly fuel costs was only € 5 while being a male with the same degree as a higher education, but driving and doing business. The average monthly cost was 128 €. However, in order to maintain the objectivity of the results, we excluded both the highest and the lowest value and arrived at an average of 126 € with 145 responses. However, the difference from the original value is negligible, which means that respondents provided real and reliable information and not extremes. The median, ie the median value, reached € 100, which is 76 liters of fuel at the current average price of petrol of € 1.314 (BENZIN, 2019). Modus, also referred to as the most common value, also reached € 100. Of all 147 responses, the modus was repeated up to 20 times, representing up to 14% of all responses.

2.2 Knowledge of respondents about using of electric car

The third section of the questionnaire focuses on electromobility in general. The results of the first question "Have you ever met the term electromobility?" Surprised us pleasantly. Up to 99%, which represents an absolute value of 198 respondents out of 200, have already encountered the concept of electromobility. Only two people did not meet electrified vehicles. However, the second question on electric vehicles does not seem so positive. Of the 200 respondents, up to 68.5% said they had no opportunity to drive on an electric car and they haven't driven an electrified vehicle yet. Only 63 respondents, or 31.5%, had this option. It is still a relatively low percentage, which indicates the current weakness of electromobility in Slovakia. The room for improvement is therefore considerable. In the following question, we examined the respondents' subjective opinion on electromobility as a whole. Respondents were offered 4 types of answers, 2 with positive and 2 with negative aspect. To begin with, we can clearly say that the general attitude towards electromobility is very positive. Up to 89% of respondents, representing 177 people, have a positive opinion of electromobility. Only 12% of respondents expressed a negative attitude towards electromobility. Respondents are most concerned about the high purchase price of vehicles, the slow recharging of batteries and the relatively low environmental impact associated with the recyclability of batteries. As environmental protection is a highly topical issue, we have also addressed it in our questionnaire (Holub, Winkler, Magurová, Veterníková, Vačoková, Kropaj, Bartalská, Jurkovičová, Slezáková, 2018). We asked respondents in this question whether they think that electric cars are environmentally friendly. Similarly, the answers to the previous question were mostly positive. As many as 81% of those surveyed think that electric vehicles are environmentally friendly and only 19% believe the opposite. Consumers do not believe in the full recyclability of batteries and are also skeptical of the origin of the electricity used to power an electrified vehicle. Supporters of this alternative mode of transport appreciate zero direct emissions and noiseless driving that does not disturb the surroundings.

2.3 Consumer attitude towards the purchase of an electric vehicle

The fourth set of questions in our survey focuses on the purchase of an electrified vehicle itself. We asked 200 respondents whether they would consider purchasing an electrified vehicle on the basis of the information they have had to date regarding electric vehicles. The results are not clear. Of all respondents, 62.5% said they would actually buy such a vehicle, while 18.5% would definitely buy it. A third of respondents, or more precisely 37.5%, do not currently consider buying an electric car. Exactly 10% of people said that they would certainly not buy an electrified vehicle. In the following question we asked what would motivate the respondents to buy an electrified vehicle. This is a semi-open question with five predefined answer options, and respondents could also give their own reason. The respondents had the opportunity to choose more than one answer and the total number of responses reached the level of 424. Up to 73% of all respondents consider lower operating costs of driving as an incentive to buy an electric car. For comparison, driving an electric car costs around 2 euros for home charging, while the owner's petrol car costs 10 euros per 100 kilometers. The second most important reason is environmental friendliness. Almost half of all respondents would also be motivated by subsidies for the purchase of an electrified vehicle. The good news is that, under the new Action Plan, subsidies for the purchase of an electrified vehicle in Slovakia will return again, which will support the growth of electromobility. On the other hand, respondents do not consider image and social status in society to be an important factor in purchasing an alternative vehicle. Of course, we were also interested in the opposite, which would discourage respondents from buying an electric car. We have therefore inquired about these reasons in the following question. The respondents also had the opportunity to choose from five predefined answers or to give their own reason. If we look at the results of our questionnaire, as many as 77% of people consider the network of charging stations to be limited and insufficient. This is the main reason discouraging them from buying an electric car. Equally unacceptable is the high purchase price of the vehicle and the short range of vehicles. Almost 70% of respondents identify with these negatives. Generally, poor electromobility is a problem for only 5% of respondents. Another question was financially oriented. Respondents in our questionnaire were asked about the price range they would consider when buying an electric car. It was a closed question with the choice of five answers. Surprisingly, none of the price categories was significantly preferred. It won the second lowest option, from EUR 10 001 to EUR 17 000, with a total share of 37%. The second category chosen was between EUR 17 001 and EUR 25 000. These price levels correspond to commonly purchased lower middle class vehicles. It is clear that consumers are interested in buying an electric car as a full replacement for their combustion model. If they were interested in using an electrified vehicle as a secondary car, they are likely to choose the lowest price level. However, only 7% of respondents would be willing to pay more than € 35,000 for a new electrified vehicle. This is the current price of currently available mid-range electric vehicles. However, the price of more premium electric cars such as Jaguar I-PACE or Audi e-tron is up to 80,000 euros (JAGUAR, 2019). The following question examined the preferences of brands among electrified vehicles. We asked the respondents the one they would choose when buying an electric car. Since the respondents had a choice of up to thirteen brands, and they could also write their own, the chart showed only the 5 most preferred ones. Tesla is the most popular brand with a 30% share and 60 responses. Tesla is generally regarded as a symbol of electromobility, and at the same time it is often the only electric car people know. It should be noted that the cheapest car from Tesla, Model 3, costs around 40,000 euros in Europe (Bakša, 2019). This does not correlate very much with the previous question on the price that consumers would be willing to pay when buying a new electric car. The second brand that people like is Volkswagen, which currently offers electrified models e-up and e-Golf. Kia is the fifth most requested brand with a 5% share. Seven people, on the contrary, said that it does not depend on the brand itself, but on a particular electric car. In the following question, we asked our 200 respondents about the time horizon of buying an electrified vehicle. However, the answers are not positive for the potential development of electromobility. Only 4% of those surveyed, representing seven people in absolute terms, plan to buy an electric vehicle within one year and 5% in the near future. On the other hand, up to 80% keep this matter for later (unspecified) and 12% of respondents do not plan to purchase an electrified vehicle at all. It is obvious that people are interested in electric vehicles, but they are still discouraged by many of the factors mentioned above. The new Action Plan for the Promotion of Electromobility under the umbrella of the Ministry of Economy of the Slovak Republic will certainly contribute to this fact. Another question was to find out how the future of electromobility is perceived in the eyes of our respondents. The results again support the development of electromobility. Up to 167 people, 84%, perceive the future of electrified vehicles positively. Only 17% of respondents are of the opposite opinion and therefore see the future of electric vehicles negative. Based on the answer to the previous question, whether respondents assess the future development of electromobility positively or negatively, they proceeded to the following question. If they consider the development of electromobility to be positive, they continued on the question of the development of electromobility. On the other hand, if they see its future negative, they continued to question the decline in electromobility. However, only 33 respondents have pessimistic prospects, representing a 17% share. There are several factors that, according to our respondents, hinder the development of electromobility. The shortest range of electrified vehicles compared to conventional, conventional vehicles is considered to be the largest and most important. Up to 70% of the 33 respondents chose this option. The same number of people consider the high purchase price of the vehicles in question to be an obstacle to the development of electromobility, which is usually double that of conventional vehicles. People are also concerned about the environmental pollution caused by electric vehicle batteries, as the possibilities for recycling lithium batteries are not yet fully understood. On the other hand, respondents do not see the struggle from oil moguls and refineries for a problem that would hamper the development of electromobility. Nor are they worried about the weak demand for electrified vehicles or the costly servicing of the vehicles. The 167 respondents who saw the future of electromobility positively asked why they thought the interest in electromobility would increase. Almost 40% of the respondents said that the rise in fuel prices and, in general, the high level of conventional fuel prices would lead to increased interest in electromobility. Developments could also be helped by the falling price of electricity that drives electric cars. Scientific and technological developments that will help us to improve our batteries will also contribute to the popularity of electrified vehicles. Faster battery recharging and higher battery energy density combined with longer range are therefore desirable for further development of electromobility. Surprisingly, only 12.6% of respondents consider subsidies for the purchase of electric vehicles as a factor that will support the overall growth of electromobility. It is only 8.4% worried that diesel and gradually also petrol vehicles may enter the city centers.

Conclusion

The results of our survey, which was carried out on a sample of 200 respondents, showed a real picture of electromobility in Slovakia. Although the topic and problems of electrified vehicles are known and theoretically well covered, the real implementation of vehicles in practice is still weak. While up to 99% of respondents met the concept of electromobility based on the results of an electronic questionnaire, only 32% of them have practical experience with these vehicles. In general, however, we can say that there is a prevailing opinion among ordinary people on the subject and up to 89% of respondents express their support for electromobility. However, only 63% of respondents would be willing to buy an electric car. The motivation for purchasing an electrified vehicle is mainly due to lower driving costs and overall vehicle operation. Of course, an environmental factor associated with zero direct emissions is also an important factor. Only 47% of respondents consider subsidies for the purchase of electric vehicles to be motivating. On the other hand, the main reason to discourage consumers from buying such a vehicle is the limited and inadequate network of charging stations. However, this fact is not true and according to EAFO (European Alternative Fuel Observatory) Slovakia has one of the best networks of fast charging stations from neighboring countries (ELEKTROMOBILITA, 2018). Another factor that discourages people from buying electric cars is their high purchase price, which is normally around 40,000 euros and double for premium brands. According to the survey, the range of battery vehicles is also insufficient. It is currently around 300 to 400 kilometers, which is enough for daily commuting and driving around the city. If we look at the issue of the potential development of electromobility from the perspective of the near future, we find that up to 84% of respondents evaluate the possibilities of development positively. This is due to the rising price of conventional fuels such as diesel and petrol. Likewise, the scientific and technical advances associated with improved batteries will offer longer range and faster charging.

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Integration Processes in the Asia-Pacific Region[1]

Kristína Drieniková[2] – Zuzana Kittová[3]

Abstract

The Asia-Pacific region has become the most dynamically developing region in the world and its significance for the regional economic integration processes has been growing rapidly as well. The paper focuses on the development of mutual cooperation among countries in the region within the framework of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP). Based on explanation of integration processes in the Asia-Pacific region – specifically CPTPP and RCEP agreements – our aim is to evaluate the development of trade among the participating economies as well as explore the potential for intra-regional trade growth. Our evaluation is based on the analysis of foreign trade indicators from international statistical databases. We have found that the potential of trade liberalization for the future growth of intra-regional trade is higher for the RCEP when compared to the CPTPP

Key words

Regional Economic Integration, trade, CPTPP, RCEP, regionalism

JEL Classification: F13, F15

Introduction

The Asia-Pacific region inhabited by 60% of the world's population (UNFPA, 2019) has become the most dynamically developing region in the world and is growing rapidly in significance as for the regional economic integration processes as well. While the Asia-Pacific region was initially characterized by the absence of regional trade agreements (RTAs), even in the second half of the 20th century (the only RTA in East Asia region was the Association of Southeast Asian Nations – ASEAN founded in 1967), in the 21st century the situation has improved significantly and Asia-Pacific belongs to regions with strong regionalism. The expansion of regional and bilateral agreements in the region was mainly due to the rapid emergence of regional value chains and the focus on measures designed to facilitate trade between countries. It has led to a deep regionalism (Pomfred, 2009).

Primarily Asia´s evolving trade policy architecture according to Kawai and Wignaraja (2014) is likely to be increasingly connected to free trade agreements (FTAs). In the East Asian region ASEAN has been the major player as for the FTA race. In 1993 it enacted AFTA - ASEAN Free Trade Area (the only major FTA established in East Asia in the late 1990s) and then in 21st century it concluded five ASEAN+1 FTAs with China, Japan, Korea, India and with Australia and New Zealand (AANZFTA). It is related to the emergence of institution-driven regionalism promoted in the late 1990s by the establishment of FTAs in contrast to market-driven regional economic integration since 1980s

[1] This research was supported by the Ministry of Education, Family and Sports of the Slovak Republic VEGA grant 1/0897/17 - Impact of the geopolitical changes on enforcement of the EU strategic foreign trade interests (with implications for the Slovak economy).

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(importance of market forces resulting from trade and investment policy liberalization and deregulation) in the region (Urata, 2018).

Thus, in the beginning of the 21st century, the Asia-Pacific trade architecture was dramatically transformed – from multilateral toward bilateral approach (FTAs) as an easier and quicker way to open new export markets. Asia-Pacific became the epicentre of this move with the number of FTAs growing to 40 by 2014 (Wilson, 2016) and today is one of the world's most dynamic regions in terms of concluding integration agreements (Cihelková, 2010). Similarly, the European Union has developed the concept of bilateral FTA agreements with ASEAN countries (Kašťáková & Ružeková, 2019). The rapid spread of bilateral FTAs globally has led to a phenomenon termed as "spaghetti bowl" (Bhagwatti, 1995) of trade deals. In Asia, this term has become widely known as the "noodle bowl" effect or problem of regional trade deals (Kawai, Wignaraja, 2014; Wilson, 2016). A new generation of FTAs – or modern FTAs (or WTO-plus agreements) dealing with not only traditional trade issues such as trade barriers, however with 21st century trade agendas as e-commerce, competition policy, trade facilitation, etc. (Lu, 2019) – beyond the scope of trade liberalization agreed in the WTO – has come to the forefront.

Furthermore, in the second decade of the 21st century mega-regional trade agreements began to characterize the global trade landscape by global trade powers as China, USA, EU, and Japan. Their specific feature is that they are large – not only in terms of the GDP and trade volumes, as well as geographical coverage (Bobowski, 2018*).* Mega-regional trade agreements or mega-regionals or mega-FTAs are defined as *"deep integration partnerships between countries or regions with a major share of world trade and foreign direct investment"* (Hirst, 2014). These agreements should be one way to reduce the noodle bowl effect by consolidating bilateral FTAs into a regional bloc. The rise of mega-FTAs suggests that the world trade system is fragmenting and transforming – and thus "*…creating a regional "Jigsaw Puzzle" considering different shapes and sizes of bilateral FTAs"* (Menon, 2014; Wan, 2018). Among the most significant mega-regionals are the Regional Comprehensive Economic Partnership (RCEP); the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP); the Comprehensive Economic and Trade Agreement (CETA) between the European Union and Canada, the FTA between the EU and Japan, accounting for roughly a third of the world's GDP, as well as the proposed Transatlantic Trade and Investment Partnership between the EU and USA. According to Dian and Menegazzi (2018) creation of a "*multilateral agreement aimed at harmonizing the different pre-existing standards*" should be a solution to disentangle the noodle bowl and to increase the volume of mutual trade in goods and services.

The paper focuses on the development of mutual cooperation among countries in the Asia-Pacific region within the framework of the CPTPP and the RCEP which are often held up as competing initiatives in the region, however, there is an interest in pursuing both. Beyond their economic benefits, their common members (Japan, Australia, Singapore and Vietnam) and aspirants hope to achieve a balance of influence in the region (Lohman, 2019).

1 Methodology

There is a growing interest among academics and politicians as for the potential economic impacts of the mega-FTAs on economies involved or uninvolved (Wignaraja, 2019). Based on explanation of integration processes in the Asia-Pacific region – specifically CPTPP and RCEP agreements – our aim is to evaluate the development of trade among the participating economies as well as explore the potential for intra-regional trade growth.

The article draws, first, on qualitative methods including secondary data and information analysis. We have used especially scientific works by Bobowski (2018), Kawai and Wignaraja (2014), Wilson (2016), Urata (2018), Menon (2014) etc. We emphasize the development of regional integration processes in the Asia-Pacific region while highlighting the main changes and milestones of this development. We focus predominantly on the two most significant mega-FTAs in the region – the CPTPP and the RCEP.

Moreover, this paper seeks to contribute to the literature by evaluating the development of trade cooperation among the participating economies as well as by exploring the potential for intra-regional trade growth. Our evaluation is based on the quantitative analysis of foreign trade indicators from International Trade Centre (TradeMap). To predict the future volumes of intraregional trade we used the time series method that captures trends and extrapolates them forward. A linear forecast was performed using the method of least squares.

2 Results and Discussion

The Asia-Pacific region is particularly specific to its developed system of non-formalized economic cooperation, based on the civilization-cultural features of the society at the level of family relations, communication and consumer habits. There are also some obstacles in the region that could impede the integration of the region, especially the obstacles associated with the diversity of the region in which developing as well as highly developed countries are integrated (Baumgartner, Gavaľová, 2013). According to Milner (2017) regionalism in Asia is characterized by plurality and competition, thus building regional institutions in this region is not related only to the need for practical cooperation in trade, security and other matters, but is also shaped by specific and national interests and rivalries, as well as by historical and cultural ties.

In 2012 Asia saw two different approaches to trade liberalization – on the one hand ASEAN-led RCEP agreement, on the other hand the Trans-Pacific Partnership (TPP) led by the USA at that time. After US withdrawal from the agreement, TPP has been revised with the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Both the agreements besides the tariffs' elimination aim to the elimination of behind the borders issues of trade facilitation measures as well. However, the CPTPP is more comprehensive in coverage of trade in goods and services, opening of investment sectors, e-commerce, the dispute settlement process, intellectual property protections as well as in regulation of the state-owned enterprises´ role (Cyrill, 2018). Although they may generate competition between them, both are potential pathways to a broader FTA in the Asia-Pacific region.

2.1 Comprehensive and Progressive Agreement for Trans-Pacific Partnership

As for the development of the TPP agreement, several countries of the Asia-Pacific Economic Cooperation (APEC) began to discuss formation of a FTA with high-level of trade liberalization in the region. In 2002, Chile, Singapore and New Zealand launched the negotiations, later joined by Brunei in 2005 (creating P4 – a comprehensive FTA in 2006). During 2009, the P4 became the TPP, joined by the USA, Australia, Peru and Vietnam (and later also by Malaysia, Canada, Mexico and Japan). The main motivation for USA to join was not to be kept out from East Asia. Therefore, USA proposed even a FTA of Asia-Pacific (FTAAP), which would play an important role for the US business to maintain access to the fast-growing region´s markets (Urata, 2018).

The original Trans-Pacific Partnership was being pushed as a “WTO-plus approach”. The USA was the primary motivator of the trade pact under President Obama. Its goal was to eliminate 11,000 tariffs and to serve as a template for future FTAs in the region. It was a key element of the US trade policy in its “pivot” toward Asia, especially to counter China (Freiner, 2019). The TPP agreement was concluded in 2016, however, not enacted, as the newly elected US President Trump withdrew USA from it as soon as he took over the office in January 2017.

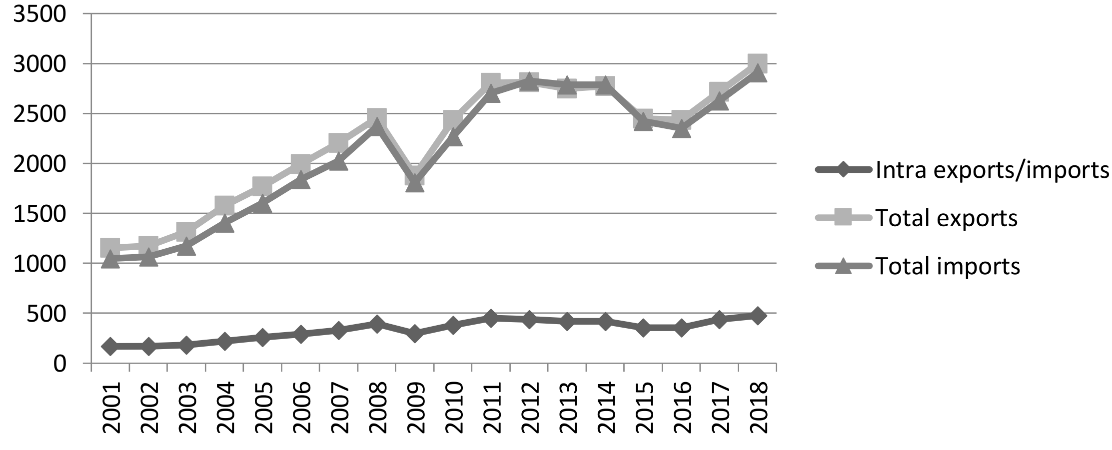
The CPTPP agreement, signed in March 2018 is the successor to the TPP, concluded after the US withdrawal from the original TPP. Faced with growing threat of protectionism (especially by US trade policy) the remaining 11 countries discussed and reaffirmed the economic and strategic importance of the TPP in particular and decided to pursue the agreement without the USA, formally named as Comprehensive and Progressive Agreement for Trans-Pacific Partnership. Complex and progressive – because it goes beyond reducing cost for businesses and includes commitments to protect and promote high labour and environmental standards in Asia-Pacific (NZFAT, 2018). It still refers to the original provisions of the TPP agreement, the remaining signatories implemented the original agreement among themselves. However, they suspended TPP´s 22 provisions. These include provisions on intellectual property rights and investment protection, which were included in TPP due to strong US interests´ pressure (Urata, 2018).

The CPTPP agreement accounts for 13.5% of the global GDP and for 15.3% of the world trade. As for population, it comprises 11 member states accounting for almost 500 million citizens (6.8% of the world population) (MITI, 2019). Thus, the CPTPP is not as large as the previous TPP with nearly 40% of the global GDP. Nevertheless, it is a meaningful accomplishment for its member states and very important for strengthening their economies. It will deliver 18 new FTAs between the countries involved (Rastogi, 2018).

Concluding and ratifying the CPTPP is a significant step towards closer trade and investment ties in the Asia-Pacific region and sets new and higher standards for regional trade. It provides more trade space for previously less active countries on the international market, therefore the CPTPP can be seen as a great potential for countries involved as well as for the world economy.

The development in trade values of the CPTPP countries, namely in their total exports, total imports and in the mutual trade within the CPTPP countries (marked as intra exports/imports) in current prices since 2001 to 2018 can be tracked in figure 1.

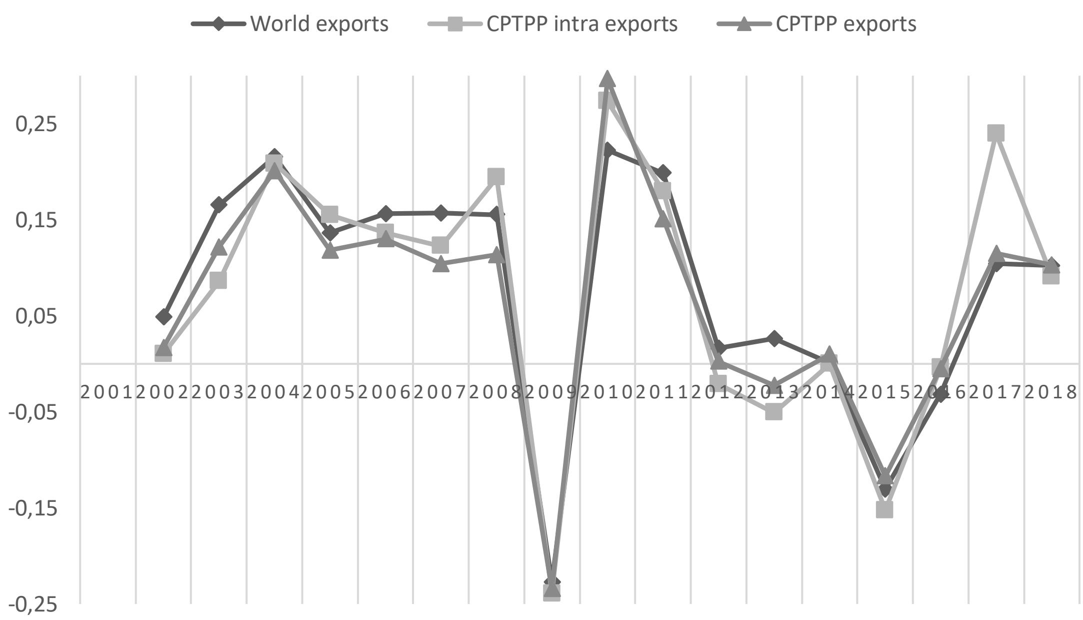
Fig. 1 CPTPP trade values (in bill. USD)



Source: Own calculation based on data from International Trade Centre, 2019.

Figure 1 shows an increase in value for all indicators during the period under review. While total exports grew 2.6 times in 2018 compared to 2001, total imports grew 2.7 times and intra exports/imports 2.8 times. At the same time, however, world exports as well as imports grew more than 3.1 times. In figure 2, annual growth rate of CPTPP intra exports is presented compared to annual growth rate of total CPTPP exports as well as to the world exports. The growth rate of intra exports exceeded the growth rate of both the world and total CPTPP exports especially in 2017.

Fig. 2 Growth rate (%)



Source: Own processing based on data from International Trade Centre, 2019.

Importance of trade within the CPTPP partners for their total trade did not change substantially. This conclusion can be supported by calculating ratios of intra exports/imports to total exports/imports. Respective ratios, as presented in table 1, remained stable during the past 18 years.

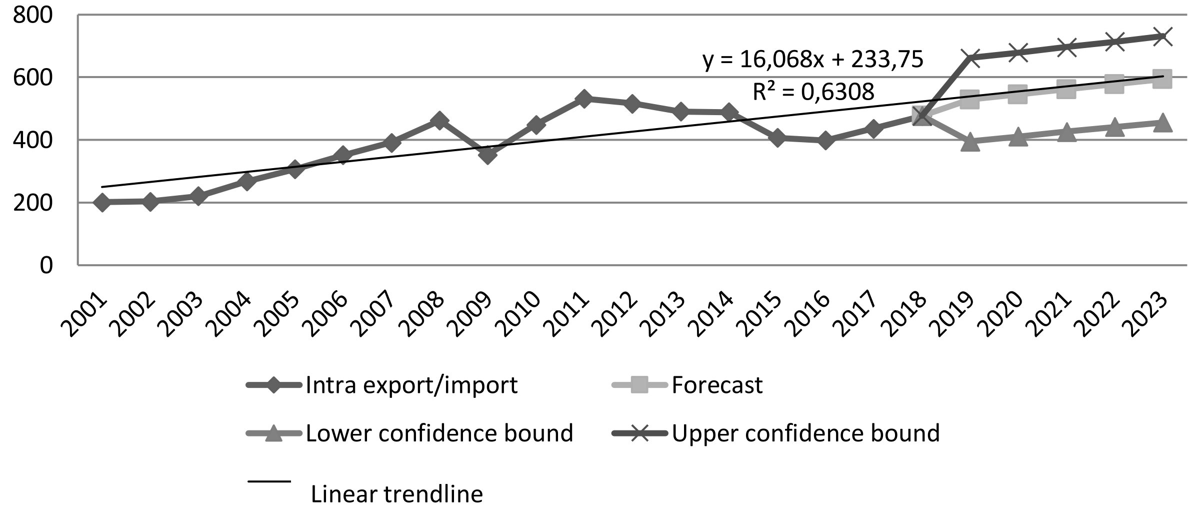
Tab. 1 Ratios of CPTPP intra-regional exports/imports to total CPTPP exports/imports (in %)

	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Exports	14.6	14.5	14.1	14.2	14.6	14.7	15.0	16.0	15.0
Imports	16.1	16.0	15.8	15.9	16.1	15.9	16.3	17.6	16.6
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Exports	15.7	16.0	15.7	15.2	15.1	14.5	14.4	16.1	15.9
Imports	16.8	16.6	15.6	15.0	15.0	14.6	15.0	16.6	16.4

Source: Own calculation based on data from International Trade Centre, 2019.

We have developed a prediction for the future values of CPTPP intra-regional exports/imports using the time series method. We used historical data on intra-regional trade since 2001 to 2018. The R-squared value equals to 0.6308, with a confidence interval for the forecasted values of 95%. The trend line presented in figure 3 predicts an increase in intra-regional trade for the CPTPP. With ongoing implementation of the CPTPP commitments, we expect even more significant increase in intra-regional trade. This expectation is based on Ebbers (1997), according to whom the higher is the intra-regional trade before integration, the larger is the trade creation effect after integration.

Fig. 3 Forecast of CPTPP intra-regional exports/imports (in bill. USD)



Source: Own calculation based on data from International Trade Centre, 2019.

Table 2 contains shares of individual CPTPP countries on the overall intra-regional trade, separately for exports and imports. The ranking of countries was created according to their shares, the country having the highest share being ranked the first. We expect that countries with the highest shares on intra-regional exports/imports at the time when trade barriers were applied would benefit the most from the trade liberalization stemming from the CPTPP implementation. They include Japan, Singapore, Malaysia and Australia.

Tab. 2 Shares of individual CPTPP countries on intra-regional exports/imports in 2017

	Share on intra-exports	Ranking	Share on intra-imports	Ranking
Australia	11.0%	4	8.4%	5
Brunei	0.7%	11	0.1%	11
Canada	3.8%	7	16.5%	2
Chile	3.0%	8-9	2.5%	8
Japan	23.8%	1	25.6%	1
Malaysia	17.3%	3	7.4%	7
Mexico	5.7%	6	16.0%	3
New Zealand	3.0%	8-9	1.5%	9-10
Peru	1.3%	10	1.5%	9-10
Singapore	21.6%	2	12.5%	4
Vietnam	8.8%	5	8.0%	6

Source: Own calculation based on data from International Trade Centre, 2019.

2.2 Regional Comprehensive Economic Partnership

Negotiations to launch the RCEP were formally launched in November 2012 at the ASEAN Summit after their announcement a year earlier. The launch of negotiations coincided with negotiations about the TPP agreement, backed by the USA. In the first half of 2019, the agreement is still under negotiations. Although the US´s withdrawal from the TPP agreement has put the RCEP back in the limelight, remaining obstacles delay negotiations´ successful conclusion (Cheong et al., 2019).

The key aim of this trade agreement is to reconcile two long-standing proposals – ASEAN+3 (or East Asian FTA – EAFTA) and ASEAN+6 (or Comprehensive Economic Partnership for East Asia – CEPEA) – into a large, region-wide agreement (Wignaraja, 2019). ASEAN Plus Three (ASEAN+3) cooperation institutionalized in 1999 includes 10 ASEAN members plus China, Japan and South Korea. ASEAN+6 comprises ASEAN+3, Australia, New Zealand, and India.

The RCEP will be a modern FTA comprising 16 countries – it is based on the ASEAN+3 template. The East Asia Vision group established at the ASEAN+3 summit in 1998, submitted a proposal including the formation of an EAFTA in 2002. Soon after Japan proposed an idea of CEPEA in 2006 to include another 3 countries – India, Australia and New Zealand (ASEAN+3+3 or ASEAN+6). Thus, China (with EAFTA) and Japan (with CEPEA) were striving to take a lead in the formation of a region-wide FTA. This pushed ASEAN to respond by proposing the RCEP agreement – to unify the movements toward founding EAFTA and CEPEA. Its purpose is to consolidate all five of the ASEAN+1 FTAs with China, Japan, Australia and New Zealand, India and South Korea negotiated at different points in time (FTAs were completed in 2012) which contain different norms and principles (Dian, Menegazzi, 2018) into one integrated regional economic framework. It should be a high-quality and mutually beneficial economic partnership agreement with the aim to deepen and broaden the existing FTAs (Basu Das, 2013).

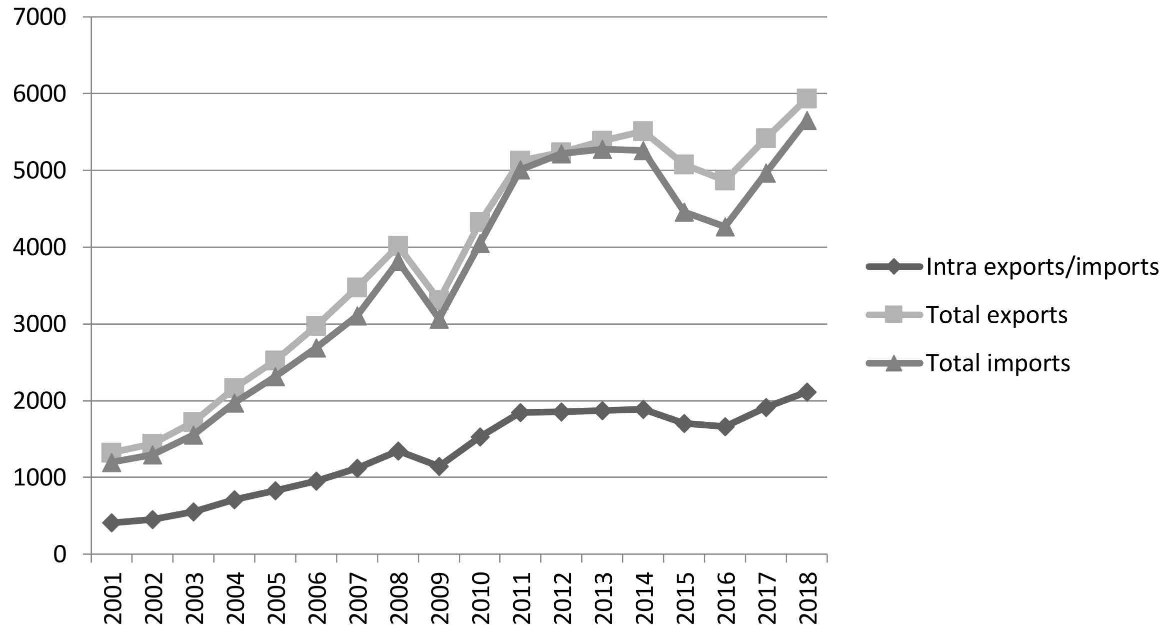
RCEP will be among the most ambitious trade and integration groupings in the world, accounting for 32% of global GDP and for about 28% of global trade (according to MFAT, 2019; although Dian and Menegazzi report up to 40% of global trade). As for population, it covers a total population of more than 3.5 billion citizens across 16 economies. It will create the world´s largest FTA (Lu, 2019, Wignaraja, 2019).

According to Wignaraja (2019) there are four a priori reasons why the agreement can contribute to economic integration in Asia: the RCEP can be an insurance against rising trend to protectionism in the global economy – if its rules align with the WTO agreements (GATT, GATS); it can help to spread sophisticated global supply chains; it can promote easier flows of foreign direct investment (reducing barriers) and technology transfers; it will reduce the overlap of the FTAs in Asia and thus reduce the risk of an Asian “spaghetti” or “noodle bowl” effect.

Lu (2019) states, that the agreement has geopolitical implications as well – for future peace, prosperity, and the development of the whole Asia-Pacific region. Also, according to Bobowski (2019), ASEAN as the epicentre of the RCEP agreement should enable the coexistence of regional powers such as China, Japan, India and South Korea within one trade block as well as for China it should be a counterbalance to other mega-FTAs.

First, we evaluated the developments of the total exports, total imports as well as of the mutual trade within the RCEP countries (i.e. intra-regional exports/imports) during the period of 2001 to 2018.

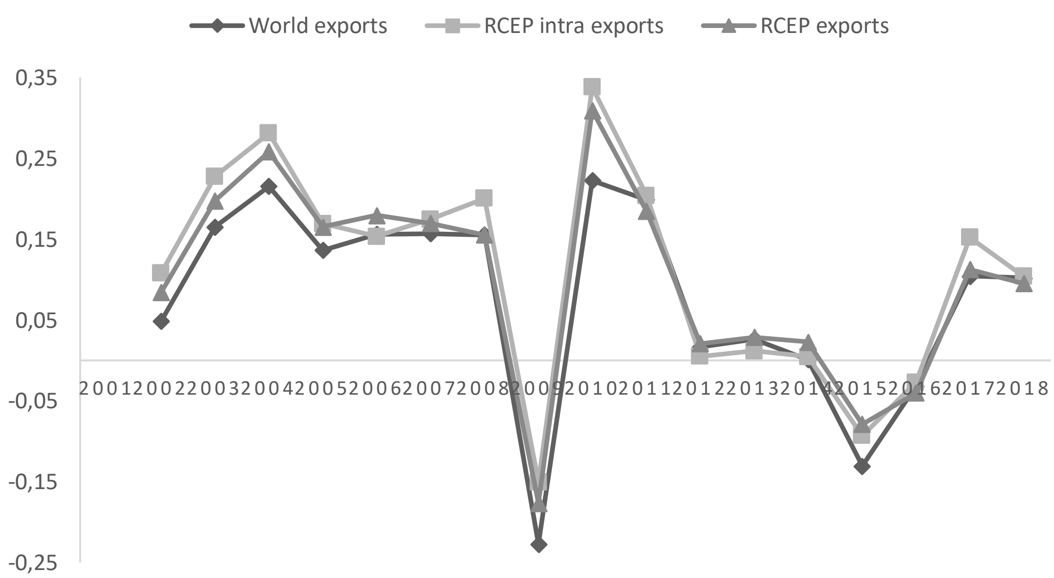
Fig. 4 RCEP trade values (in bill. USD)



Source: Own calculation based on data from International Trade Centre, 2019.

As observed in figure 4, values of all trade indicators increased since 2001. However, the most significant one was the growth of the intra-regional trade. It increased 5.2 times in 2018 when compared with 2001. Total exports and total imports increased 4.5 and 4.7 times while world exports as well as imports grew more than 3.1 times. Figure 5 shows the annual growth rate of RCEP intra exports compared to both the annual growth rate of RCEP total exports and world exports. During the period under review, the growth rate of intra exports exceeded the growth rates of both the total RCEP exports and world exports several times.

Fig. 5 Growth rate (%)



Source: Own calculation based on data from International Trade Centre, 2019.

Calculation of the shares of intra- regional exports/imports on total exports/imports for the RCEP countries confirmed a gradual increase in export shares from 31 % in 2001 to 36 % in 2018 as well as in import shares from 34 % in 2001 to 37 % in 2018 (see table 3). Taking into account the assumptions of Ebbers (1997) (namely that the trade creation effect of integration is high if, first, high values of intra-regional trade before integration exist and, second, if the economic size of the integration measured by the share on world output is high), this indicates that a large potential exists for future intensification of mutual trade relations after eliminating existing trade barriers.

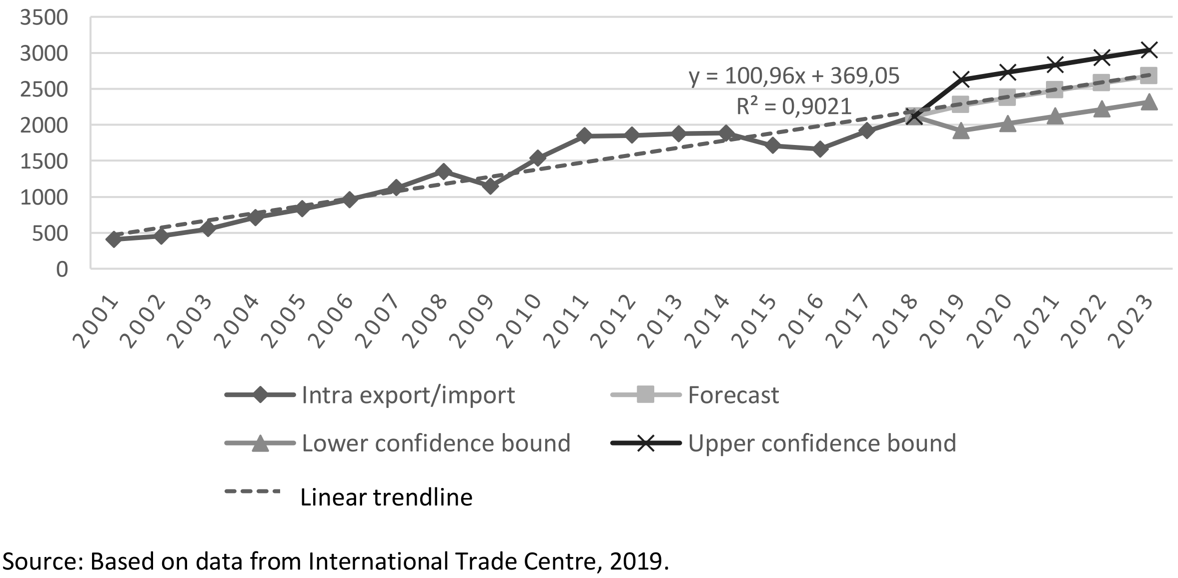
Tab. 3 Ratios of RCEP intra-regional exports/imports to total RCEP exports/imports (in %)

	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Exports	30.7	31.4	32.2	32.8	32.9	32.2	32.3	33.6	34.6
Imports	33.9	34.9	35.6	35.9	35.9	35.6	36.2	35.3	37.4
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Exports	35.4	36.0	35.4	34.8	34.2	33.7	34.1	35.3	35.6
Imports	37.8	36.8	35.5	35.5	35.8	38.3	38.9	38.6	37.4

Source: Own calculation based on data from International Trade Centre, 2019.

Moreover, according to Urata (2018) RCEP (i.e. ASEAN+6) has the highest share of intra-regional trade in region´s overall trade (35-45%) if compared with ASEAN+3 and ASEAN. It reflects the fact that China´s trade with East Asian countries including ASEAN from the mid-1980s through 2015 increased significantly. This share is even higher in terms of intra-regional trade for intermediate goods (around 50%) than for final goods (almost 40%), which he explains by the development of regional production networks under which intermediate goods (including parts and components) are actively traded in the region. On the other hand, there was a large increase in the intra-regional trade share for final goods during that period – the region has become a large market for final goods due to its rapid economic growth.

Fig. 6 Forecast of RCEP intra-regional exports/imports (in bill. USD)



Source: Based on data from International Trade Centre, 2019.

For the RCEP countries, too, we have developed an intra-regional trade development forecast that is presented in figure 4. The R-squared value equals 0.9021, with a confidence interval for the forecasted values of 95%. The trend line predicts increasing intra exports/imports volumes for the RCEP even without ratification and enforcement of the free trade agreement.

Tab. 4 Shares of individual RCEP countries on intra-regional exports/imports in 2017

	Share on intra-exports	Ranking	Share on intra-imports	Ranking
ASEAN	22.8%	2	25.5%	2
Australia	7.4%	5	4.5%	6
China	33.1%	1	37.1%	1
India	3.2%	6	8.9%	5
Japan	16.7%	3	13.5%	3
New Zealand	1.2%	7	0.8%	7
South Korea	15.7%	4	9.6%	4

Source: Based on data from International Trade Centre, 2019

We expect that forming a free trade area among the RCEP countries would support mainly exports of countries with the highest shares on intra-regional exports. As presented by table 4, those countries include China, ASEAN countries taken as a whole, Japan and South Korea.

Conclusion

Based on explanation of integration processes in the Asia-Pacific region – specifically CPTPP and RCEP agreements – the aim of this paper was to evaluate the development of trade among the participating economies as well as explore the potential for intra-regional trade growth.

Although the CPTPP trade block is not as large as the previous TPP (13.5% and 40% of global GDP, respectively), for the countries involved it is a meaningful accomplishment, especially when they face growing threat of protectionism. It is also a significant step towards closer trade and investment ties setting new and higher standards for regional trade as well. The ASEAN-led RCEP should become the largest modern FTA accounting for almost 50% of the world population (involving 16 countries), 32% of global GDP and for almost one third of global trade by consolidating five ASEAN+1 FTAs.

Both these mega-FTAs could help to insure to the growing protectionism threats, to simplify trade rules and reduce barriers to investment, as well as to reduce the risk of the noodle-bowl effect in Asia´s FTAs. Hereby, they have geopolitical implications as well – not only as for peace, prosperity and the region´s economic development, they should enable the coexistence of regional powers as well.

The evaluation of the trade development among the participating economies was based on the analysis of total exports, total imports and of the intra-regional trade within the participating countries. For both regional groupings, we found that mutual trade has increased since 2001 to 2018. However, the developments of share of intra-regional trade on total grouping trade during the period under review differed. While the share has remained stable for the CPTPP countries, for the RCEP countries it has been increasing gradually. We conclude that the potential of trade liberalization for the future growth of intra-regional trade is higher for the RCEP when compared to the CPTPP.

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Health and health literacy[1]

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Abstract

This paper considers the issue of health literacy, health, education for health and education to better healthl iteracy. In adequate health literacy of EU citizens leads to the fact that with these issues Europarlament with measures to improve health literacy, the health of the EU population. He current state of health of the population across the EU needs to be improved. Active focus on educating the population and preventing population aging.The EU health policy direction pursues clear objectives. The goalis a literate patient who takes care of his or her own health. Health literacy of the population is to be achieved.

Key words

Health literacy, health, health education, healthy lifestyle

JEL Classification: I21, I29

Introduction

The European Commission and its Member States pay increased attention to EU's inhabitants´ health and safety. This is due to the aging of the population; prolonging life expectacy, but also the increase of health care costs.

Strategic vision for 2016-2020 – the mission of DG Health and Food Safety is to:

- Improve and protect human health, and support the modernization of Europe´s heath systems,
- Ensure that all food, feed and medicinal products marketed in the EU are safe and that EU standards are promoted globally,
- Protect animal health and welfare and plant health,
- Contribute to a well-functioning and fair internal market in food, feed, agricultural and medical products.

The Lisbon Treaty, the 'Public Health' section mentions the EU's health policy goals. EU health policy has three strategic objectives:

- Support good health condition: Prevent diseases and promote healthy life-style by addressing the issues of nutrition, physical activity, alcohol, tobacco, and drugs, environmental risks and injuries. With population ageing, special needs of elder people are subject of discussions.
- Protection against health threats: to prepare population for possible epidemics and bioterrorism and surveillance in this area and to increase the ability to react to health threats such as climatic changes

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Support of fast-developing health systems: to help health-care systems in EU´member states be able to cope with challenges connected to population aging, higher expectations of people, and mobility and healthcare workers (Evropský parlament, 2019).

In 2019, Deloitte company has released "Global health care outlook", in which it is stated:

Health care expenditures have been growing and it is expected to reach $ 10,059 trillion in 2022. It considers as important to mention all factors that impact health care. The decisive factor is increasing live expectancy rate - over the age of 65 years; notable gains are in the area of communicable disease, while some diseases are progressing, e.g. cancer, diabetes, heart disease.

The choice of a healthier lifestyle is also closely related to the area of ensuring healthy food and nutrition during the life of the citizens. According to epidemiological studies, at the international and national level, these are the harmful nutritional factors that effect significantly the occurance of non-infectious diseases: excessive energy intake, increased intake of saturated fatty acids, decreased intake of unsaturated fatty acids, reduced fiber intake, reduced antioxidant intake, inadequate intake of minerals, especially calcium , kalium, magnesium, iodine and some micronutrients such as selenium, excessive sodium intake (in the form of table salt), significantly affect the occurance of non-infectious diseases (RÚVZ TN, 2007).

There is a fundamental breakthrough in health care of sick people, which changes to care supporting disease prevention, and timely medical treatment.

1 Methodology

The aim of the paper is to analyze the current situation in the EU health politics considering current situation, to focus on the awareness of the consumer and to propose ways of raising the literacy in the Slovak environment. The EU creates a comprehensive system of information about health to provide access to trustworthy health related information, and it creates an environment for analyzing factors that influence public health. Patient safety, quality of care, cross-border care, workers mobility and so on.

The European Parliament intends, in all member countries, to focus on health care and prevention in relation to the aging process, to improve quality of health services by proactive use of information and communication technologies.

In relation to this, current pacients´ literacy is evaluated, while it´s necessary to improve active communication between patient, doctor, and health care professionals. In the context of literacy, healthy life-style and perfect self-care are important.

Having responsibility also means raising and teaching child, being also a patient, to movement and active life-style. The idea is to spread knowledge about health literacy, to emphasize and educate consumers to a healthy lifestyle and responsibility for their own health.

The reason is the weak health literacy of people living in European Union, hight costs associated with the treatment, mainly of civilization diseases and the need to prevent these diseases by education. The article proposes a way to educate in area of health and healthy lifestyle.

The priorities of the Slovak Health Policy are:

- Chronic diseases in form of National cardiovascular program, National oncology program,National program of obesity and overweight prevention,
- Infectious diseases, in form of Immunization program, Crisis planning and Bioterrorism

- Environment and health, in form of Responsible environment plan, Water and health protocol,
- Tobacco, alcohol and mental health, that are topics of National tobacco control program, National operational plan for problems with alcohol

When preparing these article we have used methods of analysis, comparison synthesis, concretization, deduction. The paper is based on the data of the European Commission and Slovakia (RÚVZ TN, 2007).

2 Results and Discussion

Health policy is set together as a base strategy for the whole Union, while individual member states specify their roles in individual countries, in accordance with the set strategy. The current health policy for 2020 is follows strategy the Health 2020 and declares goals that are:

- Significantly improve health and prosperity of the population
- Reduce health imbalances,
- Strengthen public health
- Ensure that people-centered health systems are universal, sustainable, fair and high-quality.

This means that the individual parts are mainly aimed at improving the health of the population. Different research in the member states shows the need to pay attention in certain areas.

According to the National Health Information Center, the assessment of the current health status is interesting. As of 31 December 2017, 5 443 120 inhabitants lived in the SR. The mean life expectancy for men is 73.75 years, for women 80.34 years (-0.07 years decrease). The 65+ population group is very strong, the aging index has increased. The most serious health problems that cause death are considered:

- circulatory diseases - 48.3% deaths
- cancer - deaths 25.3%
- respiratory system - death rate 7.3%
- digestive system and external influences other deaths.

It is remarkable, that in 2017, 374,167 people were examined and diagnosed by psychiatric clinics. There is an increase in these diseases. The report also mentions suicides for 2017 - 506 people, of whom 81% are men and 19% are women (NCZISK, 2016).

“Every fourth person in the European region suffers some form of mental health disorder throughout their lives. Particular attention should be paid to promoting early diagnosis of depression and preventing suicide by initiating community intervention programs. Research leads to a better understanding of the negative links between mental health problems and social marginalization, unemployment, homelessness, alcoholism and the use of other addictive substances; new forms of dependence on the virtual Internet world are also becoming increasingly relevant. ”(p. 7, Strategic Framework for Health Care 2014-2030 (MZ SR, 2011).

It is essential to systematically assess the effects of a changing environment on health, especially related to technology, work, social conditions, lack of regular physical activities, eating habits, energy production and urbanization - and should result in positive health benefits. Healthy communities react proactively to new or unfavorable situations, are prepared for economic, social and environmental change and are able to cope with crises and difficulties much better (MZ SR, 2011)

According to Eurostat, these shortcomings indicate that in 2014, 51.6 percent of citizens over 18 were overweight in the EU, 35.7 percent were close to obesity and 15.9 percent obese. Only 2.3 percent of Europeans over 18 have underweight.

The older people are, the higher is the proportion of obesity. Obesity is also linked to the level of achieved education: the higher the level, the less obese people are. In the EU, over 20% (19.9%), 16.0% moderate, and less than 12% (11.5%) of obese were among obese people with low education.

In Slovakia, one in six persons - 16.3% - is considered obese. 15.9% of men and 16.6% of women were obese. 2.7% of Slovaks were obese in the 18-24 age group; at 25-34 it is 7.7%; at the age of 35-44 it is 11.8%; in the 45-64 age group, obesity was 22.1%; the most obscure age category was 65-74 years with 33% obese; over the age of 65, 23.2% of citizens suffered from obesity.

The biggest difference between the proportion of obesity among young people (aged 18 to 24) and the elderly (aged 65-74) was recorded in Slovakia (33.0% for persons aged between 65 and 74 years). compared to 2.7% for those aged between 18 and 24, or + 30.3 pp). The same applies for Slovakia, higher the education, leaner the person. 22.2% of people were obese with low education, 17.7% with secondary education, 8.3% of Slovaks were obese in the highest education category. (Európska komisia a. , 2016)

According to recent surveys, up to 60% of Europeans are not moving at all. The European Parliament notes that it is necessary to change lifestyle since childhood. It is necessary to increase the physical activity of schoolchildren, students, who will replace passive sitting behind computers. Eating habits are not healthy, and obesity is increasing with lack of exercise, and later civilization diseases. Population literacy in the health sector is very low, so there is a need for increased attention to education, health literacy, quality health information, quality health information (Európske noviny, 2015).

Health is:

a) absence of disease,
b) defining health as a form of life - the organism interacts with the environment in which it exists,
c) defining health by defining processes and status - when the organism works in its optimal,
d) form, which is 20% genetically conditioned, 20% is environmental impact, 20% health care activity and 40% is an individual's way of life,
e) health as a qualitative form of life to disease - a condition before or after a disease,
f) health as the optimal state of the internal genetic base and the external environment,
g) according to WHO, it is a state of complete physical, mental and social well-being.

The fact is that health is difficult to determine, to define unambiguously, but also to measure by metrics. Health disorder is manifested by disease, disease. And here it is necessary to find out what caused the disorder, it is necessary to determine it, diagnose it, find out and examine the course, how it develops, which is the possible cause of the typical course, what is the treatment, health services, how to care for health, the disease no outbreak. A person can deal with a change in his / her state of health alone - according to his / her own experience, family experience when it comes to lay or self-medication.

Another way is to help a doctor and treat a disease, a disease by a doctor. Here we can examine the human-patient, his reactions, the way of treatment and his manifestations. In this case we also meet the patient's rights but also the patient's responsibilities. The typical patient does not have this information. Intuitively demands information about his / her health status, where the doctor determines the conditions of treatment, the method of treatment, the patient's duties in the treatment - rest, dosage of the drug, control, monitoring of the current health condition, further recommendations.

This is an area that needs more attention.

we outline the fundamental rights of patients under the Charter of Rights that apply throughout the EU (Zdravie, 2016):

1. **Right to prevention.**
2. **The right of access to health services.**
3. **Right to information.**
4. **Right to express consent.**
5. **Right of free choice.**
6. **Right to privacy and confidentiality.**
7. **Right to respect patient time.**
8. **Right to compliance with quality standards.**
9. **Patient's right to safety.**
10. **Right to innovation.**
11. **The Right to Prevent Unnecessary Suffering and Pain.**
12. **Right to treatment with regard to personal needs.**
13. **Right to compensation**

Two years after the Tartu Challenge for a Healthy Lifestyle, Commissioner Tibor Navracsics, VytenisAndriukaitis and PhilHogan's initiative has made significant progress in promoting a healthy lifestyle. The results are:

- More budgetary resources have been reserved to promote a healthy lifestyle at EU level.
- Targeted information campaigns and activities to promote healthy eating and physical activity are organized.
- The European Commission has supported EU Member States and civil society by collecting, compiling and exchanging useful evidence and implementing relevant best practices.
- The European Parliament and the Council are working actively with the European Commission to promote a healthy lifestyle.
- Internal cooperation has been further strengthened between the European Commission services.

It follows that it is appropriate to pay attention to proper eating, to create healthy eating habits already among children, to actively play sports (Európska komisia b , 2019).

1. Make the best use of available EU funds to implement relevant initiatives, in particular to eliminate inequalities.
2. Use sport as a powerful tool to promote healthy lifestyles, exploiting the potential of sports clubs, unorganized sports and existing key instruments such as the European Sport Week.
3. Adopt ambitious measures to promote healthy eating habits among EU citizens in order to reduce obesity and non-communicable diseases. They have raised awareness, especially among young people, of the importance of healthy eating and have made the best use of the EU program to promote fruit, vegetable and milk consumption in schools.
4. Enhance cooperation between relevant sectors, including health, sport, education and agri-food, but also research, transport, marketing and urban planning.
5. Promote physical activity and healthy eating at the workplace in order to have a positive impact on overall employee behavior.

Based on these EU activities, we outline what is the direction of the projects set.**Here are sample projects that are active and operate in a European environment:**

- **European heart network - fight against heart disease and stroke.**One of the main goals of this project is to prevent preventable cardiovascular diseases. The project has a strong focus on promoting cost-effective promotion and prevention measures, especially in line with the EU strategy on diet and nutrition.
- **STOP - Science and technology helps to combat childhood obesity**
The aim of this Horizon 2020 funded project to combat childhood obesity is to expand and consolidate a multidisciplinary body of scientific evidence on which effective and sustainable policies can be built to prevent and manage childhood obesity.
- **European Association for the Study of Obesity - Project Spotlight**
SPOTLIGHT is a pan-European research project and represents a sustainable prevention of obesity through integrated strategies. It is financed by the European Commission from its Seventh Framework Program.
- **YOUNG50 #StayHealthy - Preventing Cardiovascular Risks**
With YOUNG50, CARDIO 50's Italian Best Practices project will be open to 50-year-olds from Lithuania, Romania and Luxembourg.

It follows that the right - a healthy lifestyle is part of today's life. It is not just a trend, but it sports a lot of young and older people, many people pay attention to healthy eating. Many are dedicated to vegetarian diet, vegan diet and exercise. The measure of the Ministry of Education of the Slovak Republic on the ban on vending machines with sweets in schools is a way to prevent increased consumption of sweets, but there is a lack of parenting, education in the family. It is difficult to ban something for a child if it is not done by his or her parents - sweets, chips, sweet drinks, from which the above information is given.

For a healthy lifestyle, it is necessary to pay attention to diet and healthy lifestyle, physical activity, to avoid harmful smoking or alcohol, to indulge the body with enough sleep. Many people know this, a partial survey has provided a partial answer.

Ing. Szakalova in a survey focused on the lifestyle of university students, examined a sample of 1114 students, a source of information for the selection of food, the way of eating, respectively. living at all. The answers to the question of diet are presented in the table and in the graph.

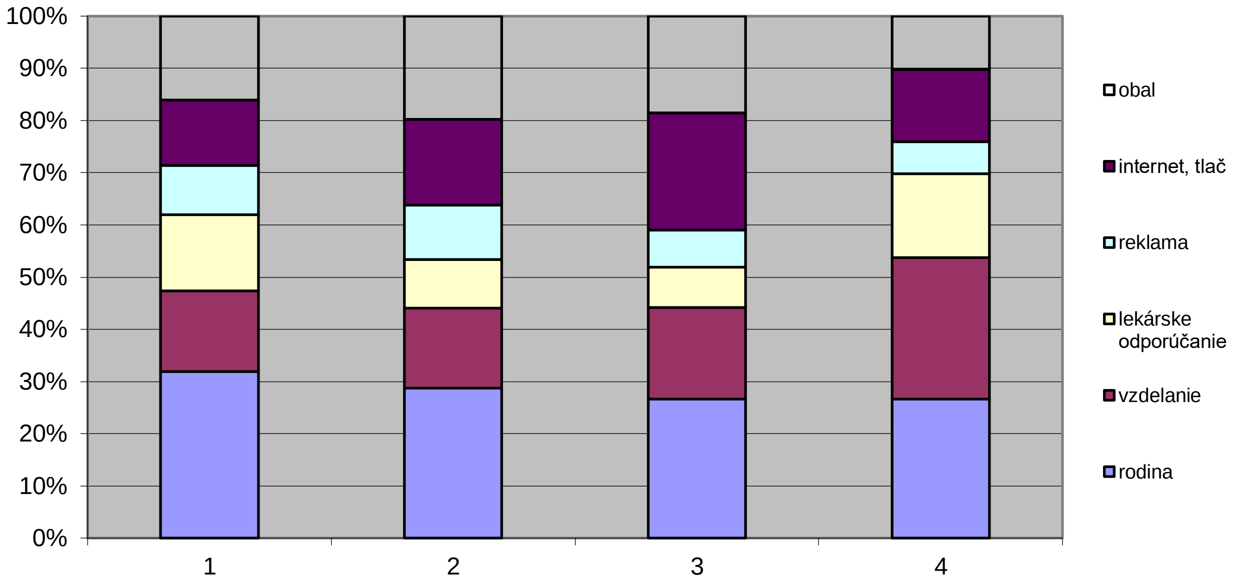
Tab. 1 Distribution of respondents by answer to question Living- the influence of resources

university / resources department	number of respondents:			**1114**
	technical	economic	humanistic	natural science, medicine, healthcare
family	105	80	75	60
education	51	43	49	61
medical advice	48	26	22	36
advertising	31	29	20	14
internet, print	41	46	63	31
packing	53	55	52	23
CELKOM	**329**	**279**	**281**	**225**

Source : own processing

As shown in the table, family, education and then the media have a decisive impact on the diet. This means, however, that if a healthy diet is not respected, children will be transporting this diet to adulthood.

Graph 1 Distribution of respondents by answer to question Living- the influence of resources



Source : own processing

The legend
1 - respondents studying technical field
2 - respondents studying economics
3 - respondents studying Humanities
4 - respondents studying natural sciences, health care

Human health and health

The National Health Portal states: According to the World Health Organization, the health of the population is affected by the level of health at 10 to 15 percent, genetic equipment at 10 to 15 percent, the environment in which we live, about 20 to 25 percent, and the way of life at 50 to 60 percent. It is the way of life that largely determines the quality of future population health. The most important factors affecting a healthy lifestyle include improving eating habits, increasing physical activity, and adjusting body weight (Národný portál zdravia, 2013).

Human health is influenced by the following factors: genetics, race, gender, age, development, psyche, lifestyle, environment, standard of living and others.

Positive Health Factors are:

- proper nutrition and healthy eating,
- physical activity adapted to age and health,
- blood pressure monitoring,
- optimal cholesterol and triglyceride values,
- absence of smoking, alcohol and other addictive substances,
- stress management.

The direction of health policy in the EU Member States focuses on care based on health policy outcomes. It is based on the use of information and communication technologies (ICT) so that the current status of subsequent treatment is changed to disease to prevent. Thus, to prevent diseases in various ways. For example, a social care network, education - in both physical and virtual environments, people - the patient's surroundings, access to healthcare.

Digital technologies will make it possible for patients to be involved in interactive communication with the doctor, the social service, with a two-way relationship with enough information.

Conclution

The current 65+ seniors are computer literate and can connect to the internet and use different search engines. WHO defines "Healthy Aging" as a process of developing and maintaining **functional abilities** in older age**. Functional capability** includes:

- meet basic needs;
- learn, grow and make decisions;
- be mobile;
- build and maintain relationships and
- contribute to society.

Senior Education Project Training

Elderly orientation means paying attention to the young and preparing them for an active life into the senior age. To achieve health, the joy of life needs to be addressed at every stage of life. Thus healthy eating, physical activity, pure psyche and passing through various civilization diseases. WHO comes with the Healthy Aging project 2015 - 2030. The EC shares the need for lifelong learning, the need to achieve a healthy population through prevention and a healthy lifestyle. The reason for this is that health care costs are rising, especially in the elderly, and require considerable funding from each country's GDP.

The basis is to achieve and maintain health potential, i. physical, mental and social well-being throughout life by systematically influencing all determinants that influence the aging process and health. Health of physical, mental and social well-being throughout life.

Factors such as the presence of diseases, injuries and changes related to aging have an impact on health. Furthermore, it is the current environment, such as home, community and wider society, people and their relationships, attitudes and values, health and social policy, services. Being able to live in an environment that supports and maintains functional abilities and is part of healthy aging.

Seniors are interested in developing their mental and physical abilities. A suitable environment is the Third Age University, which complements developing knowledge in various fields. Usually, seniors choose the area that interests them and motivates them. Meeting new people is a means of active social contacts.

Health and health literacy is also suitable for the Third Age University. It's about patients' rights, patient responsibilities, about healthy lifestyles, physical activities. Many seniors are active sports - jogging, walking, walking with mallets, bicycles, group exercises in gyms, but also dancing and singing.

For example, worshops, lectures at universities, but also in non-traditional environments - such as theater - are suitable for increasing knowledge in the field of health and other literacy. Also complemented by a cultural program. Excursions can also be attractive with education and literacy growth in each area. It is appropriate to prepare the content of education attractive, to cover the basic issues and to leave space for interactive communication and creativity. A classic lecture may not be appropriate - depending on the group.

Both government and public administration have to prepare for this trend, which is in line with the EC and WHO concepts.

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Tourism and Acculturation: A Study of Slovakia

Iveta Fodranová[1]

Abstract

The changes in values of the Defert's tourism function index of towns creates preconditions for acculturation. The aim of this study was to determine and describe the changes in Defert's tourism function index of thirteen selected towns in Slovakia. The analysis was carried out based on the values of the Defert's tourist function index, which is one of the basic indices used in tourism geography. The analysis demonstrates significant differences between examined towns. The results showed that the majority of Slovak cities reached low values of the Defert's tourist function index what indicates a low change of social and cultural environment of Slovak towns due to the construction of tourism infrastructure.

Key words

acculturation, tourism activity, Defert's tourist function index

JEL Classification: L83, A13

Introduction

Tourism in the 21st century has been fundamentally changed as a result of globalization, digitization, new technologies, and the liberalization of the movement of people, goods, services, and a new type of sharing economics. These factors affect not only the visual and structural transformation of tourist destinations but also the lifestyle of local people. However, the long-term pressure of transnational impacts in contact with local culture leads to cultural and social changes resulting from the persistent and long-term pressure of external factors. This process and the result of this process is called acculturation. Acculturation in conjunction with tourism is a relatively new phenomenon, unlike in conjunction with ethnology, sociology, or anthropology. Acculturation has been a common term since the late 19th century, where it was used by the American anthropologist Powell (Powell, 1880) to refer to the "psychological changes induced by intercultural imitation." Despite a long time, acculturation is not clearly defined in theory. Segall (1979) and Berry (1997) define acculturation as the changes that occur when different cultural groups come into intensive contact. Cleveland defines acculturation as "how individuals acquire knowledge, skills, and behaviors that are characteristic of nascent and deterritorialized global consumer culture (Cleveland et al., 2013)." According to Tsai (Tsai et al.2002) and Rasmi (Rasmi et al. 2014), acculturation is the process of adjusting to a new culture and the degree of involvement with the new environment. Berry views acculturation as two separate processes, the maintenance of the original culture and the development of relationships with the new culture. In this process, when two cultures come into contact regardless of duration, each becomes, to a certain extent, similar to the other through borrowing (Nuñez, 1989). These two processes, (or dimensions), include four acculturation strategies (integration, assimilation, separation, and marginalization) that describe differences in individual attitudes and behaviors (Berry, 2003). According to Soukup (Soukup, 2003), acculturation includes phenomena that arise at the time when groups of individuals from different cultures enter to a permanent, direct contact that leads to changes in the original cultural patterns of the one or

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both groups. At present, acculturation is understood as a process of adjusting to a new cultural environment and can involve changes in an individual's attitudes, behaviors, and cognitions (Tsai, Chentsova-Dutton & Wong, 2002)

Acculturation takes place at the level of individuals and groups. According to Berry (Berry, 1980) on an individual level, acculturation refers to the acquisition of values, perception, attitudes, and personality. Degree of the acculturation also depends on interests and motivations. At a group level, acculturation occurs through socialization, social interaction, and mobility (Olmedo, 1979). Tourism is especially characteristic by group acculturation, where the elements of other culture are brought by the visitors. Reisinger and Dimache (Reisinger, Dimache, 2010) distinguish voluntary and forced acculturation. From the tourism point of view, the acculturation is clearly voluntary acculturation, since the forced one (or violent) is always associated with economic or political reasons. The elements of volunteering are a significant accelerator of the acculturation, which in the context of tourism causes acceptance of globalized standards of homogenized products. One of the assumptions for acculturation due to tourism is the existence of tourist infrastructure, which allows tourists to stay in a certain area. We can consider an accommodation to be the most important element of the tourist infrastructure.

Accommodation is an element of the tourism infrastructure. It is used only by tourists and whose size and state have a direct influence on the development of tourism in the local area (Matczak, 1989). Matczak (1989) defines the tourism function as the entire socio-economic activity in a certain area oriented towards providing services to tourists, thanks to which particular types of their needs can be satisfied. If the tourism function is understood as the role played by a given area that contributes significantly to the acculturation caused by the changing of different social and cultural environments of tourism function of given area.

1 Methodology

The aim of the current study was to determine and describe the changes in the tourism function of thirteen selected towns in Slovakia. To determine functional changes in urban areas we have used Baretje's and Defert's indicator, the tourist function index (further only Defert's index) defined as the number of tourist beds per 100 local residents.

$$TF = \frac{N \times 100}{P} \tag{1}$$

where N is the number of beds and P is the number of local residents. Defert's index can take values from 0 to infinity. The higher the value of the Defert's index, the more can be the region considered as a region with high tourist activity.

Tourist activity given by the intervals of the Defert's index can be found in Tab. 1.

Tab. 1 Tourist activity given by the values of the Defert's index

Values of the Defert's index	Tourist activity
0-4	almost no tourist activity
4-10	low tourist activity
10-40	areas with a significant but not predominant function of tourism
40-100	mainly tourist area
100-500	significant tourism center
>500	hyperturistic center

Source: Boyer (1972) and Pearce (1995)

The following analysis is based on the secondary data of the statistical database of the Slovak Republic. Collected data were analyzed by using the mathematical formulas and equations. The obtained results are represented in the form of graphs.

2 Results and Discussion

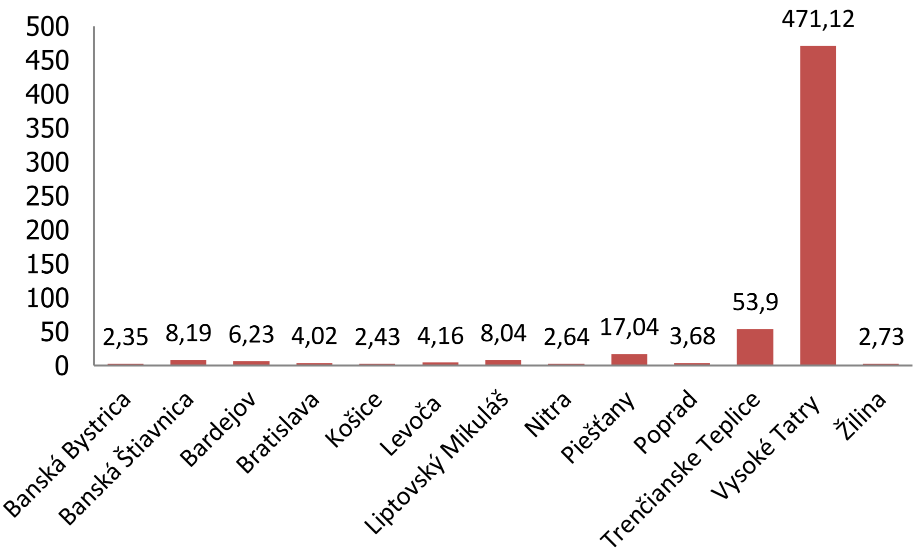
The dynamics of the changes in the tourist accommodation in Slovakia is reflected in the values of the Defert's index Tab. 1 and on Fig. 1.

Tab. 2 Selected indicators applied to selected towns

	Residents to 31.12.2018	The capacity of tourist beds for the accommodation of visitors 31.12.2018	Value of Defert's index
Banská Bystrica	78 327	1 842	2,35
Banská Štiavnica	10 035	822	8,19
Bardejov	32 449	2 024	6,23
Bratislava	432 864	17 418	4,02
Košice	238 757	5 817	2,43
Levoča	14 757	614	4,16
Liptovský Mikuláš	31 194	2 508	8,04
Nitra	76 655	2 026	2,64
Piešťany	27 534	4 693	17,04
Poprad	51 304	1 888	3,68
Trenčianske Teplice	4 166	2 248	53,9
Vysoké Tatry	4 042	19 043	471,12
Žilina	80 810	2 213	2,73

Source: own processing

Fig. 1 Values of Defert's index for the Selected Slovak Towns



Source: own processing

According to the presented results, the Defert's index takes values from the interval of 2.73 and 471.12. The calculated values of the selected towns put them in the bottom part of the ranking of tourist activity. From the localization aspect, there is no difference in which part of Slovakia the towns are situated. However, from the view of the tourist arrivals, the situation is worrying in the case of the towns Levoča and Banská Štiavnica, which are included in the UNESCO World Cultural and Natural Heritage List, and therefore a higher value of the tourism activity would be expected. Better tourist activity was found in the case of the spa towns Piešťany (17.04) and Trenčianske Teplice (53.9). The highest calculated value was reached by the town of Vysoké Tatry (471.12), which in the long term, represents the significant tourist center in Slovakia. Based on the results obtained, we ranked the thirteen Slovak towns according to how dynamic the changes in their tourism function (see Tab.3).

Tab. 3 The categorization of selected towns according to tourist activity.

TF					
0 – 4	**4 – 10**	**10 – 40**	**40 – 100**	**100 – 500**	**< 500**
B. Bystrica	B. Štiavnica	Piešťany	T. Teplice	V. Tatry	
Košice	Bardejov				
Žilina	Bratislava				
	Levoča				
	L. Mikuláš				
	Nitra				
	Poprad				

Source: own processing

Since the indicator of the Tourism activity expresses a quantitative aspect of tourism, from the measured values, we can conclude that from selected Slovak towns, residents of the High Tatras are exposed to strong pressure from visitors coming from other social and cultural environment. The mentioned high values of the TF indicate a need to monitor changes in residents' satisfaction levels. Monitoring of the changes in the residents' satisfaction levels can help identify and solve problems in advance and can directly affect planning decisions.

Conclusion

The analysis of the tourist function carried in the article demonstrated mostly low tourist activity of the values of the Defert's index in the examined towns. Based on Defert's index, it is obvious that the local population is not threatened by changing of the social and cultural environment due to intensive construction of tourism infrastructure. However, it does not mean that construction of new tourist infrastructure will not happen in the future by the guests' needs and in respect to architectural appearance that will not impair the whole ambience of the towns.

Further research should be focused on the methodology development that could quantify the cultural-social and psychological impacts of tourism with higher precision. Finally, it should also be borne in mind that many tourists use accommodation via sharing platforms.

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Measuring the Concentration of the Tourism Sector in the Region of Upper Považie[1]

Jozef Gáll[2]

Abstract

To get an overview of the position the industry within its structure in the region in order to get useful information for further use in practice has been processed in several studies. The analysis to be carried out in this article is to help in the process to identify potential tourism clusters in the region of Upper Považie. The main aim of this article is to analyse the agglomeration of tourism in the sectoral structure of the region and to get an overview of the industry developments through macroeconomic indicators and indices. To determine the employment structure in the region regarding the tourism sector used to provide an indicator of the percentage share of industry employment. To assess the position of tourism in the region will be applied the most widely used geographical methods of industry evaluation, such as the Ellison-Glaeser index and the Gini's index of concentration with graphical expression through Lorenz curve. The application of the selected instruments was the tourism sector in the region of Upper Považie identified as agglomerated. These results may lead to the initiation of further steps in the process of mapping the tourism cluster.

Key words

sectoral structure, tourism sector, Ellison-Glaeser index, Gini's index, Lorenz curve, cluster identification

JEL Classification: C21, L16, R12

Introduction

The concentration of economic activities, their density – whether spatial or sectoral – has been at the heart of theoretical economists to explore the causes of this phenomenon. The concept of territoriality in the last two decades, in addition to the traditional concept of regional economics, has been put into several lines of theoretical economics, as the spatial structure of economic activities is a very important factor in economic development and growth (Fujita & Thisse, 2012).

P. Krugman (1995), G. Ellison and E. L. Glaeser (1997), who deal with the study of the spatial economy, have an increasing emphasis on measuring and quantifying spatial differentiation and understanding and modeling of the mechanism of attracting and eliminating forces near each company.

The geographical and spatial density of economic activities can be attributed to several reasons. These may be special local conditions, natural, social and economic factors commonly referred to as concentration or agglomerations (Fujita & Thisse, 2012). International literature, which examines the spatial distribution of economic activities, does not distinguish between the terms of concentration and agglomeration. However, attempts have been made to distinguish these two concepts. The first difference of concepts formulated by S. Brakman et al. (2009) is the size of the economic activity and, in the latter case, according to the study of authors

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M. Lafourcade and G. Mion (2007), the concepts of concentration and agglomeration are used depending on whether there is a merger within the territorial units, or the merging crosses borders.

In addition to the differentiated indicators used to measure the concentration of economic activities in statistics, the Herfindahl-Hirschman index, Gini's index, Hoover-Balassa coefficient or currently the most used Ellison-Glaeser index can be used (Stejskal, 2011).

Successful examples of application of the above-mentioned indices are mainly found in international literature. The first to use the indicator was by G. Ellison and E. L. Glaeser (1997) to explore the American industry. Analyses have subsequently emerged to characterize the concentration of industries in specific countries, such as F. Maurel and B. Sédillot in France (1999), M. P. Devereux et al. in Great Britain (1999), P. Mayerhofer and G. Palme in Austria (2001), M. Lafourcade and G. Mion in Italy (2007) and J. Stejskal in the Czech Republic (2011).

1 Methodology

The aim of this article is to analyse the agglomeration of tourism in the sectoral structure of the Upper Považie region and to obtain an overview of the current development of the tourism industry through macroeconomic indicators and indices. The article also introduces the concept of Ellison-Glaeser index, which in the Slovak literature is poorly mentioned and in relation to the identification of industrial clusters scantily processed. In no other study in the conditions of Slovakia, which is known to me, the concentration of the tourism sector has not been studied in this way.

Region of Upper Považie was selected following previous research concerning the multistage process of identifying and analysing a potential tourism cluster in the tourist regions of the Slovak Republic. Region of Upper Považie is one of the 21 tourist regions defined by the territorial planning document issued by Ministry of Economy of the Slovak Republic in year 2005 – *Regionalization of tourism in the Slovak Republic.* The values of the indices and other sectoral specialisation indicators referred to in the present article are calculated on the basis of employee statistics by economic activity with regard to the NACE I section, which are sorted on the basis of the publication Statistical Office of the Slovak Republic (2007) — *Statistical classification of economic activities — SK NACE Rev. 2*, within the range of reference years 2013 to 2017.

For a difficult process of mapping the spatial density of economic activities, several methods applied in practice can be used. In addition to the widely used localization coefficient and the Herfindahl index, the Ellison-Glaeser index is the most widely used and important tool for statistical analysis of industry concentration. G. Ellison and E. L. Glaeser (1997) have processed agglomeration as a combined effect of the industry´s natural advantage and spillover in the region. In the spirit of this idea, the authors developed the index of the geographical concentration of industry (in terms of employment) – the Ellison-Glaeser index (γ), which is calculated (for the purposes of this article for the tourism sector by a modified formula) as follows:

$$\gamma_{CR} = \frac{{G_{CR}}\Big/{(1-\sum_i^n (X_i)^2)} - H_{CR}}{1-H_{CR}}, \tag{1}$$

where

γ_{CR} ...Ellison-Glaeser index
G_{CR} ...Gini´s index

H_{CR} ...Herfindahl index
X_i ...the district's share of total regional employment expressed by:

$$X_i = {district}/{local} \tag{2}$$

The Ellison-Glaeser index is based on two basic indices quantifying the degree of concentration of the sector labor spillover in the region. The Gini´s index represents an estimate of the natural (absolute) concentration of the industrial sector, which authors G. Ellison and E. L. Glaeser (1997) expressed the formula:

$$G_{CR} = \sum_{i=1}^{n} \left({district_{CR}}/{district} - {district}/{local} \right)^2, \tag{3}$$

where
G_{CR} ...Gini´s index
n ...total number of districts in the region
i ...district
$district_{CR}$ ...district employment in the tourism sector
district ...district employment
local ...regional employment

The calculation of the Herfindahl index, which is used to determine the sector´s labor spillover within the region, is based on the share of district employment in the regional employment of the tourism sector (Ellison & Glaeser 1997):

$$H_{CR} = \sum_{i=1}^{n} \left({district_{CR}}/{local_{CR}} \right)^2, \tag{4}$$

where
H_{CR} ...Herfindahl index
n ...total number of districts in the region
i ...district
$district_{CR}$ ...district employment in the tourism sector
$local_{CR}$ ...regional employment in the tourism sector

The Ellison-Glaeser index (γ) describes the agglomeration power of activities within a single industry, which may have a negative and positive value. The value of the Ellison-Glaeser index (γ= 0) represents a random distribution. The positive index values demonstrate the existence of an industrial concentration. The literature provides values for the interpretation of the Ellison-Glaeser index as follows:

- $\gamma_i < 0{,}02$ – low industry agglomeration in the region,
- $0{,}02 < \gamma_i > 0{,}05$ – medium industry agglomeration in the region,
- $\gamma_i > 0{,}05$ – high industry agglomeration in the region.

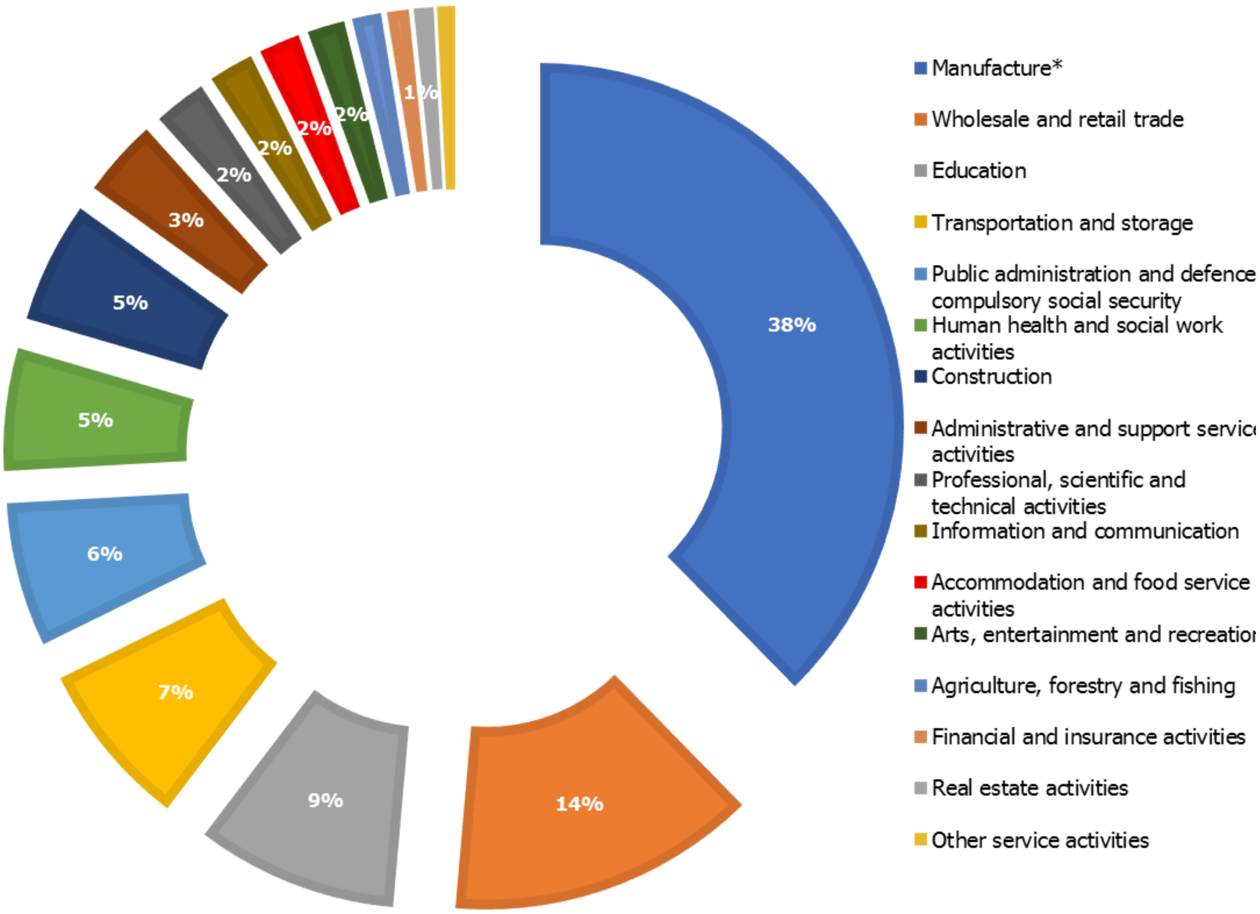
Negative values are typical for even geographical coverage or distant locations along with significant spatial separation (Ellison & Glaeser 1997).

2 Results and Discussion

As is apparent from the studies referred to in the introductory part of this article, there is currently a wide range of possibilities for using the above indicators for empirical analyses. This section of the article presents the results of an analysis of the sectoral structure of the Upper Považie region with special focus to the tourism sector.

The authors R. H. Frank and B. Bernanke (2018) argue that the sectoral structure may influence the growth or stagnation of the economy. It is therefore very important to support those sectors that generate the highest share of added value and the environment providing long term economic growth and prosperity. The sectoral structure expresses the degree to which employment and added value are collected in the economy sectors. A simple indicator of sectoral specialisation in the economy is the percentage share of employees in the region of Upper Považie in the various sectors of the economy, which illustrates graph 1.

Graph 1 Structure of the economic activity sectors in the region of Upper Považie by employment (in 2018, in %)



* Manufacture includes sections – Mining and quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply and Water supply.
Source: processed by the author according to data by Statistical Office of the Slovak Republic, 2019

More than one third of regional employment was concentrated in the industry (38 %). Other economic activities that have achieved the highest share of employment are – wholesale and retail trade (14 %), education (9 %), transportation and storage (7 %) and public administration and defence (6 %). The share of accommodation and food service activities in total employment is 2 % and is among the sectors with the least number of persons employed in terms of sectoral structure.

Not very positive results of the tourism sector automatically represent its weak concentration in the region. In the following part of the research, the application of frequently used concentration measures calculates the degree of agglomeration of tourism in the monitored period and graphically shows its concentration in the region.

The first step in calculating the Ellison-Glaeser index is to calculate its absolute (H_{CR}) and relative (G_{CR}) elements in the various districts of the Upper Považie region between years 2013 and 2017 (listed in table 1).

Tab. 1 The default quantities of districts for the calculation Ellison-Glaeser index of the sector per 2013 – 2017

Index / District	G_{CR}		X_i		$(X_i)^2$		H_{CR}	
	2013	**2017**	**2013**	**2017**	**2013**	**2017**	**2013**	**2017**
Považská Bystrica	0,0051	0,0025	0,1249	0,1177	0,0156	0,0139	0,1772	0,1865
Púchov	0,0118	0,0106	0,1387	0,1310	0,0192	0,0172	0,0681	0,0398
Bytča	0,0014	0,0016	0,0401	0,0426	0,0016	0,0018	0,0000	0,0000
Čadca	0,0121	0,0158	0,1149	0,1281	0,0132	0,0164	0,0014	0,0003
Kysucké Nové Mesto	0,0024	0,0053	0,0815	0,0900	0,0066	0,0081	0,0274	0,0074
Žilina	0,2464	0,2312	0,4999	0,4906	0,2499	0,2407	0,0119	0,0683
Upper Považie	**0,2792**	**0,2670**	x	x	**0,3062**	**0,2980**	**0,2860**	**0,3022**

Source: processed by the author according to data by Statistical Office of the Slovak Republic, 2019

The calculation of the Ellison-Glaeser index for the year 2013 by replacing the variables from table 1 in the relation (1) is as follows:

$$\gamma_{CR} = \frac{{}^{0{,}2792}\!/_{(1-0{,}3062)} - 0{,}2860}{1-0{,}2860}$$

The calculation found that the tourism sector in the region of Upper Považie was very agglomerated in year 2013 with the value γ_{CR} = 0,163. To determine the growing or declining trend of the concentration of tourism in the region, by applying the indices to the relation (1), the Ellison-Glaeser index for the year 2017 shall be calculated in the same way:

$$\gamma_{CR} = \frac{{}^{0{,}2670}\!/_{(1-0{,}2980)} - 0{,}3022}{1-0{,}3022}$$

Although the Ellison-Glaeser index in year 2017 has fallen to a value γ_{CR} = 0,112 compared to year 2013, the tourism sector is still very agglomerated in the region. The decrease in values during the period may be caused by the departure of employees for example abroad or going to another sector. The main cause of these changes is the search for better wage evaluation.

To fully confirm the concentration of the sector in the region, it is possible to analyse the individual variables of the Ellison-Glaeser index. G. Ellison and E. L. Glaeser (1997) classify industry sectors according to the Herfindahl index values achieved as follows:

- H_i < 0,01 – the sector is highly fragmented,

- $0{,}01 < H_i > 0{,}1$ – the sector is fragmented,
- $0{,}1 < H_i > 0{,}18$ – the sector is poorly concentrated,
- $0{,}18 < H_i$ – the sector is highly concentrated.

For the tourism sector, the calculated index is the value of $H_{CR} = 0{,}3022$. Tourism is highly concentrated in the tourist region. The Gini´s index value ranges from $0 \leq G_i \leq 2$. If a value equal to zero means that the sector distributes evenly in the region. The higher index value represents the higher spatial concentration of the sector (Ellison & Glaeser 1997). For the region of Upper Považie, the value of $G_{CR} = 0{,}2670$ based on which the tourism sector is concentrated.

Using the calculation of industry concentration levels based on the Ellison-Glaeser index brings benefits in relation to the cluster identification. For example, the index values can be compared between industries that have different operating size structures as the Herfindahl index considers this factor. In addition, it is possible to carry out various statistical tests using the index, focusing on the existence of geographical concentration, comparative advantages and labor spillover in the region (Farhauer & Kröll, 2009).

In the context of the exploration of regional specialisation in the tourism sector, another, practically used, the concentration measure is applied. K. Turečková and S. Martinát (2016) argue that the Lorenz curve is a suitable tool for the graphical representation of the spatial concentration or specialisation of the industry. For its construction, the cumulative values of the two variables that are in the relationship are necessary, and these relationships are arranged in ascending order. The first point of the curve has coordinates (0; 0) and the last coordinates (1; 1). In addition to the Lorenz curve, the so-called equilibrium curve is always displayed, which connecting two points – (0; 0) and (1; 1), the square splits into two equally large triangles. Figure 2 illustrates the spatial concentration of the tourism sector in the region of Upper Považie over the years 2013 – 2017, while the Lorenz curve for 2017 is also interpreted using the numerical values shown in table 2.

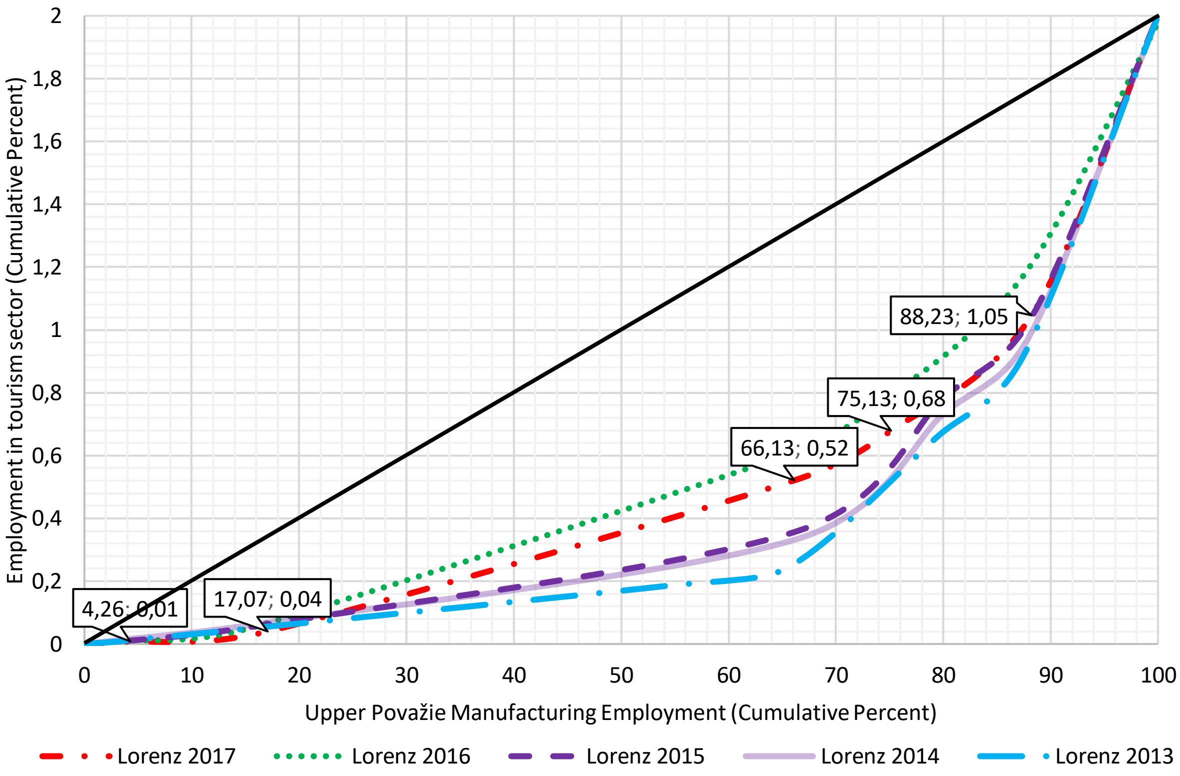
Tab. 2 The cumulative values of the districts on total employment and employment in tourism sector in the region of Upper Považie

District	x_i	y_i	x_i cum.	y_i cum.
Bytča	4,26	0,45	4,26	0,45
Čadca	12,81	1,71	17,07	2,17
Žilina	49,06	26,13	66,13	28,29
Kysucké Nové Mesto	9,00	8,57	75,13	36,87
Púchov	13,10	19,95	88,23	56,81
Považská Bystrica	11,77	43,19	100	100

Source: processed by the author according to data by Statistical Office of the Slovak Republic, 2019

The horizontal x-axis of the graph 2 shows the cumulative share of total employment in the region of Upper Považie and the vertical y-axis represents the cumulated share of regional employment in tourism. In principle the rule applies – the greater area between the equilibrium and the Lorenz curve, the higher geographical concentration of the industry.

Graph 2 Lorenz curve of tourism sector in the region of Upper Považie per 2013 – 2017



Source: processed by the author according to data by Statistical Office of the Slovak Republic, 2019

With a focus on the Lorenz curve in year 2017 in Bytča district – 4,26 % of all employees of the tourist region are working, but only 0,01 % of all employees work in the tourism sector. 66,13 % of all employees works in the districts of Bytča, Čadca and Žilina of which 0,52 % are in the tourism sector. Given the fact that at 88,23 % of employment (the districts of Bytča, Čadca, Žilina, Kysucké Nové Mesto and Púchov), the tourism sector operates 1,05 % of the region's workforce, the concentration of this sector is not too high. If the economic activity of the tourism sector was evenly divided into all districts, the Lorenz curve would correspond to the direct current distribution – the equilibrium curve. It is also known from the graph that tourism was most concentrated in year 2013 and at least in year 2016.

At the end of the research, it should be noted that tourism is a cross-sectional sector, which includes all enterprises with direct or indirect benefits from tourism. Given the fact that this research included an analysis of NACE I section – accommodation and food service activities and some sectors of economic activities belonging to tourism, such as transport, travel agency, tour operator reservation service and related activities etc. create a larger market share component and have a higher profile of consumers, the final share as well as the specialisation and concentration of tourism in the region of Upper Považie can have significantly higher values.

Conclusion

As stated in the introduction, the concentration measures used in regional economic research form the basis for the subsequent identification of spatial specialisation and concentration. In the context of cluster mapping, the aim of this article was to analyse the actual scope and spatial concentration of the tourism sector in the region of Upper Považie. For the purposes of this research, commonly used methods have been used in practice, including the most commonly used tool for statistical analysis of the industry concentration – Ellison-Glaeser index, which, compared to traditional indicators used to measure concentration, has the amount (in the article of the mentioned) benefits.

According to the identified results of the percentage indicator, the tourism sector with a share of 2 % of the region's total employment ranks among the sectors with the least number of persons employed. The second part of the research focused on the concentration and specialisation of the sector in the region. Although the results achieved in the period under consideration recorded a decrease in the Ellison-Glaeser index, the sector is currently highly agglomerated. The Herfindahl index, which focuses on the structural dimension of the sector's concentration, has reached the value of classifying tourism as a highly concentrated sector. The calculation of the Gini´s index of spatial concentration has again been confirmed by the fact that tourism is an area of industry to which the region of Upper Považie should specialize. On the one hand, the graphical representation of the spatial concentration of the sector using the Lorenz curve confirmed the decreasing tendency of the concentration of tourism compared to year 2013 and year 2017 (as well as the calculated values of the Ellison-Glaeser index). On the other hand, the Lorenz curve for year 2017 shows an increase over the previous period and its convex shape illustrates the geographical concentration of tourism in the region.

The results referred to in the article complement the empirical findings of the author, which map out the potential tourism clusters in the tourist regions of the Slovak Republic. Research has found that the tourism sector in the region of Upper Považie is agglomerated, thus not only confirming its potential in relation to the emergence of the tourism cluster but has opened the possibility of carrying out further analyses, which more accurately determine its cluster potential.

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Perception of Fast Fashion and Sustainable Fashion[1]

Petra Garasová[2] – Ľubica Knošková[3]

Abstract

Fast fashion is a new term inspired by fast food which can be defined as a quick update of products with a short refresh cycle and fast delivery. Sustainable fashion is a response to this trend based on environmental sustainability and social responsibility. The aim of the paper is to identify consumer perception of fast fashion and sustainable fashion in Slovakia. We conducted a consumer survey using structured questionnaire. 115 respondents participated in the survey. We found out that only 61.7% of respondents are aware of the concept of fast fashion and sustainable fashion and 63.5% are occasional fast fashion shoppers. Semantic differential was used to better understand consumer perception of fast fashion and sustainable fashion characteristics. Differences in perceptions can also be seen among genders. Women perceive fast fashion as more affordable, modern and more commercial than men. They also perceive fast fashion as more harmful to environment and easier to wear out than men.

Key words

Fast fashion, sustainable fashion, consumer perception

JEL Classification: D90, M30

Introduction

Fast and cheap fashion has changed the way consumers are dressed. It's easier for them to get the new fashion pieces at better prices. Consumers buy clothing much often and in higher amounts than ever before and wear new pieces only few times.

Clothing became the subject of fashion trends and after few weeks comes out of fashion. New goods come to the shops, and consumers are forced to buy more and more clothes. Traditional brands introduce new collections in their outlets every 12 weeks, fast fashion brands have been able to speed up the process. ASOS introduces new collections twice quicker, once in 6 weeks, Zara in 5 weeks. Missguided needs the shortest time, just one week, every week to introduce new collection (McKinsey&Company, 2017).

In 2002, the value of the fast fashion clothing sales amounted to $ 1 trillion. In 2015, the value of sales reached $ 1.8 trillion. In the coming years, sales rise is expected to continue. In 2025, sales should reach $ 2.1 trillion (Cobbing & Vicaire, 2016), with an average annual growth of 1.67%.

E-commerce is experiencing a growth too. In 2018, average returns per consumer from e-commerce reached $ 270. By 2022, returns should rise to $ 301, that is rise by $ 31 (Orendorff, 2018). Average annual growth from 2018 to 2022 is likely to be at 2.68%.

[1] The paper was created as part of a grant project VEGA 1/0543/18 *„The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic"*

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In North America, clothing consumption in 2014 was 16kg per person, equivalent to 64 shirts or 16 pairs of jeans. The second largest consumption was in China, where consumption was 6.5 kg per person. The smallest amount of clothing was consumed in the Middle East / Africa, just 2 kg per person. Average global consumption was 5 kg per person. By 2030, clothing consumption should increase to 11 to 16 kg per person (Cobbing & Vicaire, 2016).

Fast fashion is a new term. This term is inspired by the term fast food. Fast fashion can be defined as a quick update of products with a short refresh cycle and fast delivery of goods (Byun & Sternquist, 2008).

The beginning of fast fashion has started in 2000, with leading brands such as Zara and H & M. Consumption of fast fashion clothing is pushing the limits of Earth's ability to absorb greenhouse gases, hazardous chemicals, waste, but also exhaustively sources of water and soil (Cobbing & Vicaire, 2016). The negative impact is on production of CO_2 emissions, which will increase by as much as 77% in 2025 compared to 2015 if the clothing sales value will grow by 1.67% on average annually. Water consumption in this sector will increase by 20% by 2025 compared to 2015. Land use will also increase by 2025, it will grow by 7% (Remy et al., 2016).

A short life cycle differ fast fashion brands from traditional sellers. The fast fashion brands are designed to capture a very short fashion trend and seasonal style. Therefore, products are designed to be on shelves in stores for only a few months or even weeks (Christophe et al., 2004).

Fig. 1 shows a fashion pyramid. In the pyramid base are basic commodities, in the top of the pyramid are exclusive fashion collections. So we can see the difference between conventional and exclusive brands. At the top of the pyramid, the products are more expensive, with higher quality, but the prices are higher. The lower part of the pyramid has a shorter product cycle and shorter production.

Fig. 1 Fashion pyramid

Source: Linden, A. R. 2016. An Analysis of the Fast Fashion Industry. Senior Projects Fall 2016. 30. [Online]. Available on the Internet: http://digitalcommons.bard.edu/senproj_f2016/30

In the future, corporate social responsibility will be more focused on concrete measures, not just on broadly-defined ethical principles of business. Companies can benefit from proposing environmentally-friendly alternatives, sustainable packaging, correct and clear labelling (Knošková, 2014).

Sustainable fashion originated in response to fast fashion. The idea of this fashion is based on environmental sustainability and social responsibility (Stottlemire, 2017).

Sustainable fashion can be defined as a fashion that is produced, introduced on market and used in the most sustainable way, taking environmental and socio-economic aspects into account. In practice, this means continuous work to improve all stages of the product life cycle, from design, raw material production, manufacturing, transport, storage, marketing and sales to use, reuse, repair, remake and recycling of the product and its components (Green Strategy, 2014).

Slow fashion is based on a philosophical ideal that focuses on sustainability values, including good working conditions and reducing environmental burden. Sustainable fashion is perceived as a high-level phenomenon linked to aspects of exclusivity and luxury, but such a fashion does not have to be affordable for everyday consumers (Henninger et al., 2016).

1 Methodology

The aim of the paper is to identify consumer perception of fast fashion and sustainable fashion. The required primary data is obtained from our consumer survey using standardised questionnaire sent to the respondents in Slovakia via the Internet. The obtained data was evaluated by simple analyses, and a semantic differential was used to better understand consumer perception of fast fashion and sustainable fashion.

The use of a semantic differential to investigate consumer behaviour is outlined by many authors (Richterová et al., 2013 and 2015, Duarte, 2008). Semantic differential allows us to explore consumer attitudes in many areas, for that reason we have decided to use it to identify consumer attitudes towards fast fashion and sustainable fashion. Shanat and Saili took advantage of the semantic differential method to investigate consumer satisfaction in furniture design (Shanat & Saili, 2018). Han Lu Che et al. used the semantic differential method in the course of designing laptop bags (Han Lu Che et al., 2012). The semantic differential was also used to explore student views on teaching through e-learning (Klement et al., 2015). Cross-tables, p-value and Pearson chi-square test were used to test the dependence between gender and evaluation of individual characteristics of fast fashion and sustainable fashion.

The following formula is used to work out the semantic differential. This formula allows us to determine the average values associated with the individual adjectives used on the scale.

$$x = \frac{x_1+x_2+x_3\dots+x_n}{n} \tag{1}$$

x= average
x_1= value of the first item
x_2= value of the second item
x_n= value of the last item
n = number of respondents

The standard deviation shows the extent to which the measured values are around the mean value. The formula used to calculate it is:

$$\partial = \frac{\sqrt{(x_1-x)^2+(x_2-x)^2+\dots+(x_n-x)^2}}{n} \tag{2}$$

∂ = standard deviation
x = average value of the term
x_1 = value of the first item
x_2 = value of the second item
x_n = value of the last item
n = number of items

2 Results and Discussion

Total of 115 respondents participated in the survey (Tab. 1). Of the total number of respondents, 85 (73.9%) were women and 30 (26.1%) were men. The largest number of respondents was in the age group 21 - 30 years, 76 (66.1%) of respondents, followed by age groups 15 - 20 and 31 - 40 with the same number of respondents, 14 (12.2%). In the survey, respondents with a higher education prevailed, 55 (47.8%) respondents with university degree. The most frequent employment situation of respondents was employee in 47 (40.9%) cases and student in 44 (38.3%) cases.

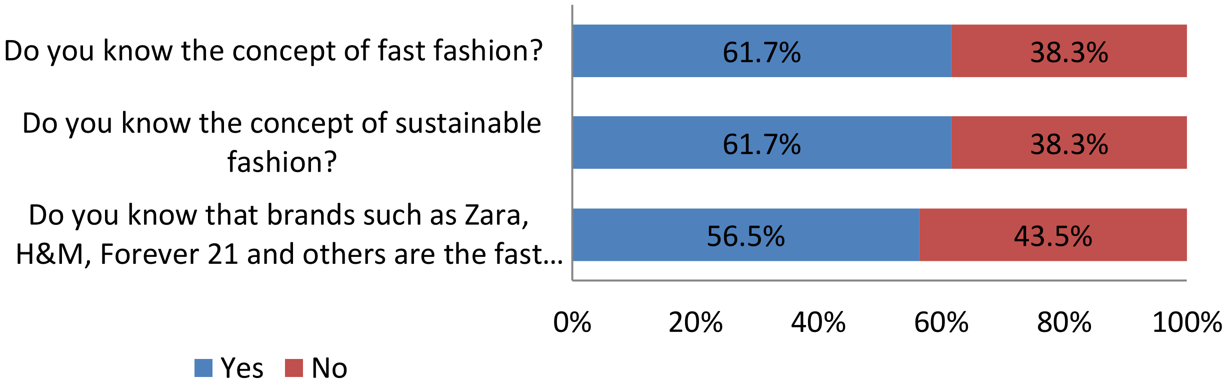
Tab. 1 Respondents' demographic data

Gender		**Age**		**Educational attainment**		**Employment**	
Woman	85 (73.9 %)	15 – 20	14 (12.2 %)	**Still studying**	35 (30.4 %)	**Student**	44 (38.3 %)
Man	30 (26.1 %)	21 – 30	76 (66.1 %)	**Primary**	2 (1.7 %)	**On maternity or parental leave**	11 (9.6 %)
		31 – 40	14 (12.2 %)	**Secondary**	23 (20 %)	**Employee**	47 (40.9 %)
		41 – 50	9 (7.8 %)	**University**	55 (47.8 %)	**Businessman / entrepreneur**	11 (9.6 %)
		51 – 60	2 (1.7 %)			**Retired**	1 (0.9 %)
		61 and more	0			**Unemployed**	1 (0.9 %)
Total respondents	105						

Source: Own survey

Through the survey, we wanted to find out the respondents' awareness of fast fashion and sustainable fashion (Graph 1). We found that 71 (61.7%) of respondents were aware of the concept of fast fashion, and 44 (38.3%) of respondents did not know this concept. Awareness of sustainable fashion was at the same level, 71 (61.7%) of the respondents knew the concept of sustainable fashion and 44 (38.3%) were not aware of it. 65 (56.5%) of respondents knew that Zara, H & M, Forever 21 and other selected brands belong to the fast fashion brands, 50 (43.5%) did not know it.

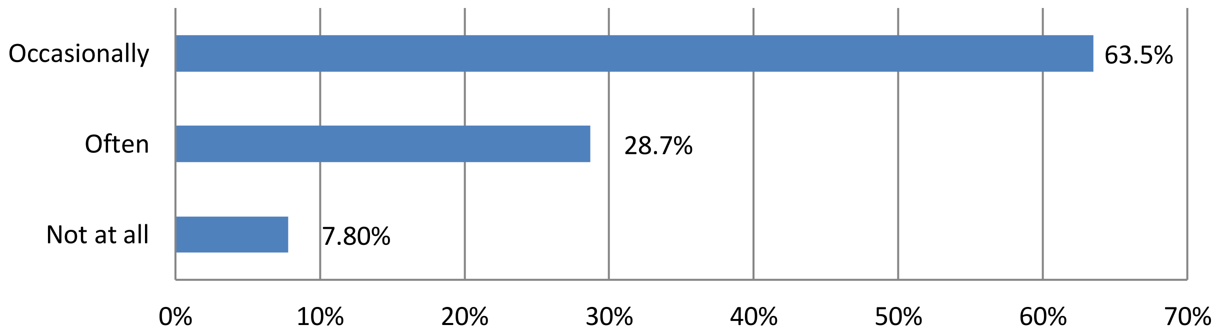
Graph 1 Awareness of fast fashion and sustainable fashion by respondents



Source: Own survey

33 (28.7%) of respondents shop frequently in fast fashion outlets, 73 (63.5%) of respondents are occasional shoppers, and 9 (7.8%) of respondents do not buy in fast fashion outlets at all (Graph 2). The reasons to shop in fast fashion stores are the low prices, fast-changing collections, advertising, easy accessibility, factors that affect consumers to buy.

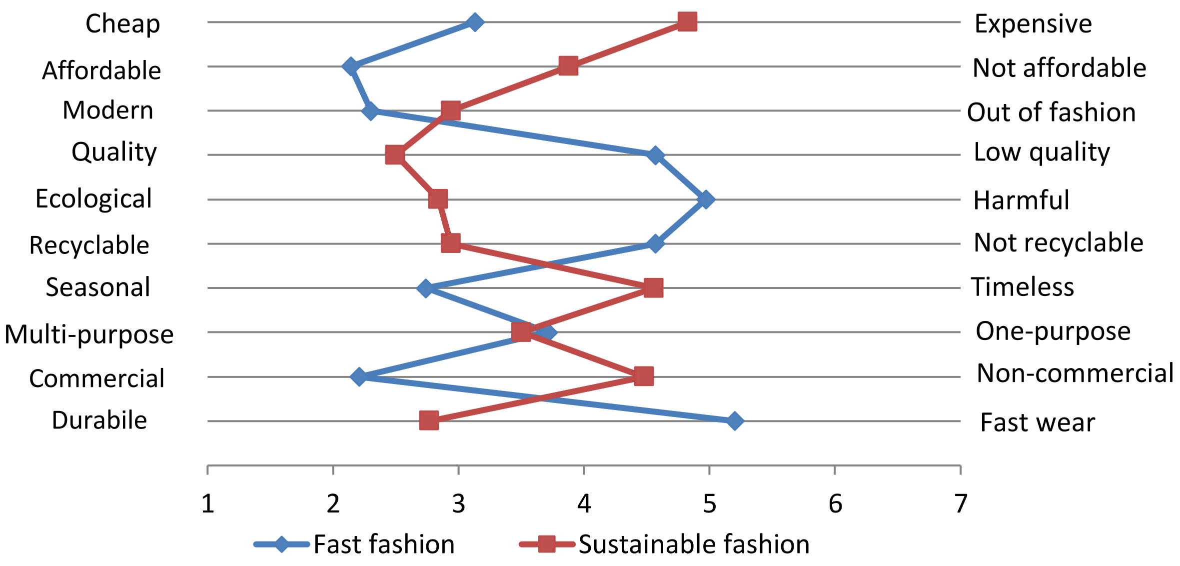
Graph 1 Frequency of purchases in fast fashion stores



Source: Own survey

The consumer perception of fast fashion and sustainable fashion differs. Respondents perceive fast fashion as rather cheap, affordable, modern, seasonal and commercial, while sustainable fashion is perceived as more expensive, not so modern, timeless and non-commercial in consumer eyes. The most significant differences in respondents' perceptions between fast fashion and sustainable fashion are in terms of quality, durability and harmfulness to the environment. Sustainable fashion is perceived as higher quality, durability, ecological and recyclable in opposition to fast fashion perception. Almost complete consensus has been achieved in perception of multi-purpose and one-purpose use of fast fashion and sustainable fashion, consumers have labelled this concept around a central or neutral value (Graph 3).

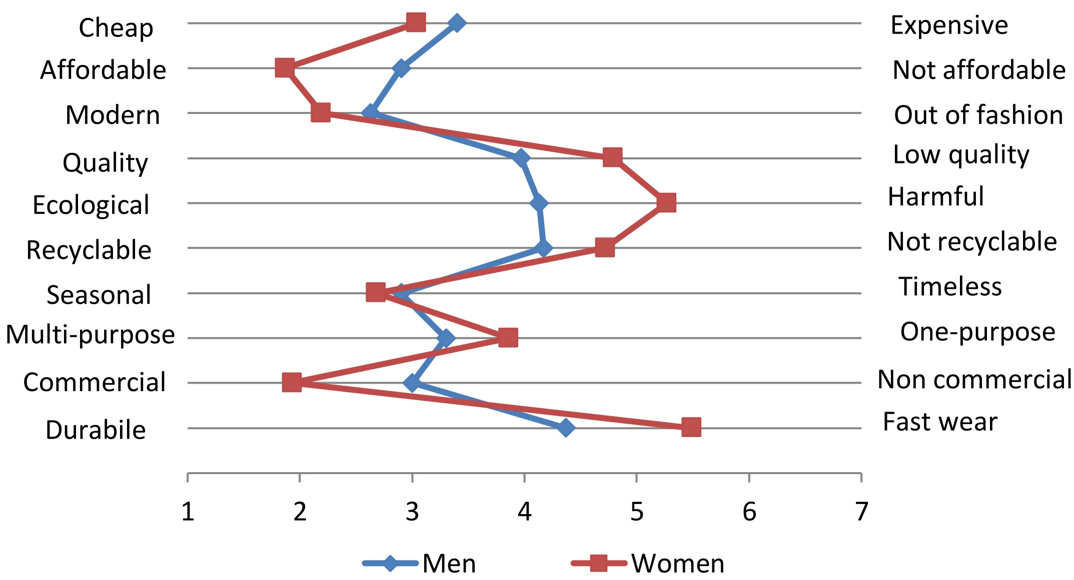
Graph 2 Consumer perception of fast fashion and sustainable fashion



Source: Own survey

Differences in perceptions can also be seen among genders. Men had the tendency to attribute the average values to fast fashion. Women perceive fast fashion as more affordable, more modern, and more commercial than men. Women also perceive fast fashion as more harmful and less-recyclable and easier to wear out than men. Almost complete consensus has been reached between men and women in evaluation of seasonality and timelessness. Both genders perceive fast fashion as quite seasonal (Graph 4).

Graph 3 The perception of fast fashion by women and men

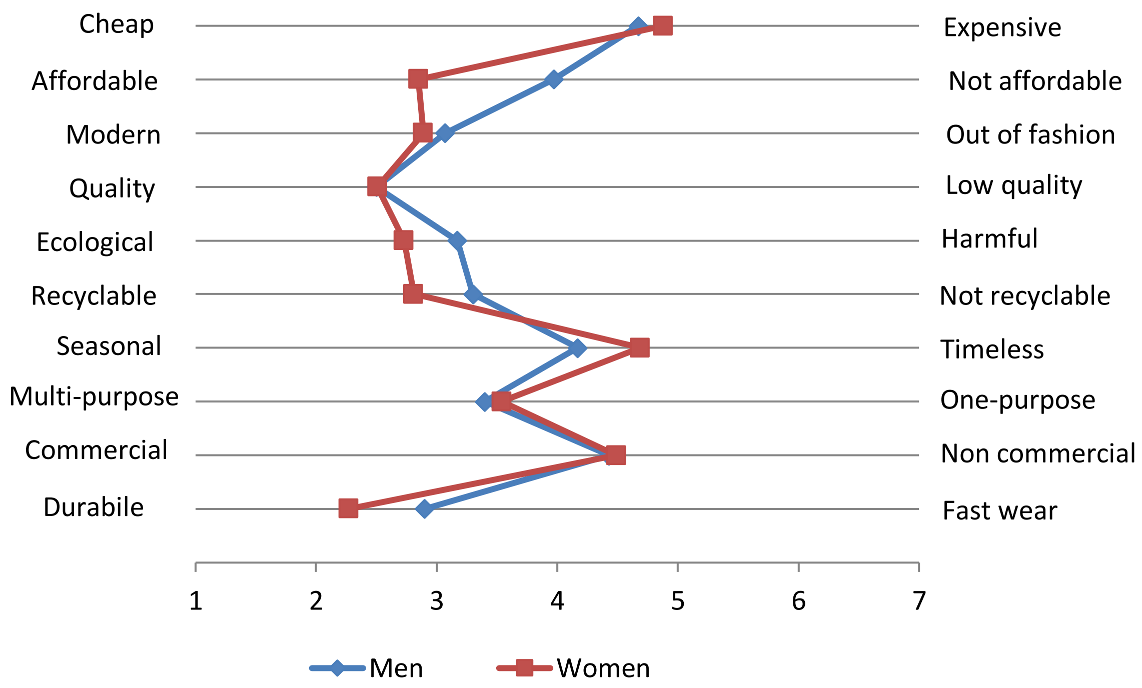


Source: Own survey

Sustainable fashion is perceived similarly by men and women. Almost the same rating has been attributed by men and women to perception of following characteristics: cheap - expensive, modern - out of fashion, quality – low-quality, multi-purpose – one-purpose, commercial – non-commercial.

Men perceive sustainable fashion as less affordable than women. Women perceive sustainable fashion more environmentally friendly, more durable and more recyclable (Graph 5).

Graph 4 Perception of sustainable fashion by women and men



Source: Own survey

Tab. 2 shows the average values and standard deviations in the characteristics of Fast fashion and Sustainable fashion in three categories of respondents: all respondents, women and men. Within each respondent category, we stated three terms with highest standard deviations. The most striking differences from the average value among all respondents (5.2) were the perceptions of durability - fast wear out within Fast Fashion (1.7). Women had most diverse opinion in terms of multi-purpose – one-purpose use of fast fashion (1.69) and the average value (3.86). The most striking differences were among men whose rating of fast fashion had the most significant variations between durability - fast wear out (1.87) with average value (4.37) and commercial – non-commercial character of fast fashion (1.8) with average value (3). Differences in evaluation of surveyed characteristics can be caused by insufficient respondent knowledge, or the wish to respond in line with expectations of surveyors.

The average values of fast fashion and sustainable fashion are on a similar level. The difference can be seen in the standard deviations. The most significant differences compared to the average were within the Fast fashion evaluation by women (1.42) with average value (3.58) and all respondents (1.20) with average value (3.55). The smallest deviations from the average value in perception of the terms Fast fashion and Sustainable fashion were found among men (Tab 2). Men had tendency to indicate middle values. The smallest deviation in perception of the characteristics fast fashion and sustainable fashion among men can be caused by lack of interest in the topic.

Tab. 2 Average values and standard deviation

	Fast fashion		Sustainable fashion	
	Average values	Standard deviation	Average values	Standard deviation
All respondents	3.55	1.20	3.52	0.86
Seasonal - Time-less	2.74	1.37	4.56	1.54
Multi-purpose - One-purpose	3.71	1.67	3.5	1.4
Durabile - Fast wear	5.2	1.7	2.77	1.33
Women	3.58	1.42	3.37	0.97
Seasonal - Time-less	2.68	1.31	4.69	1.61
Multi-purpose - One-purpose	3.86	1.69	3.54	1.47
Durabile - Fast wear	5.49	1.55	2.72	1.32
Men	3.48	0.63	3.56	0.71
Ecological - Har-mful	4.13	1.61	3.17	1.37
Commercial - Non commercial	3	1.8	4.43	1.45
Durabile - Fast wear	4.37	1.87	2.9	1.35

Source: Own survey

The dependence between gender and evaluation of individual characteristics of fast fashion and sustainable fashion were found only in fast fashion. Statistically relevant differences between men and women on p-value less than 0.05 are the following. Women consider fast fashion more affordable than men, p-value = 0.0031. Women consider fast fashion to be more harmful to the environment as men, p-value = 0.0176, and more commercial as men, p-value = 0.00296.

Conclusion

The aim of the paper was to identify consumer perception of fast fashion and sustainable fashion. Based on the primary survey using the standardized query method, we found that 71 (61.7%) of respondents are aware of the concept of fast fashion as well as the concept of sustainable fashion. 65 respondents, (56.5%) were aware of fast fashion brands. Based on this, we can say that consumer awareness of fast fashion and sustainable fashion is not high. Still many consumers do not know how their purchases affect the environment in a negative way. The resulting low awareness of sustainable fashion can be caused by insufficient information to consumers but also insufficient marketing support.

Based on standard deviations, we can see that the most diverse view of the respondents' perception is in the fast fashion. These deviations may be due to inadequate knowledge in this area, or the responses of some respondents who have tried to respond as they think it is expected from them. The biggest deviations in the ratings of the individual features of fast fashion were among men, which may be due to lack of importance of this product segment to men.

Consumer perception of fast fashion and sustainable fashion differs. Fast fashion is rather perceived as cheaper, more affordable, more modern, and more commercial. Sustainable fashion is perceived as more expensive, not so modern and non-commercial. The most striking difference in respondents' perceptions is in terms of quality, durability and ecology. Sustainable fashion is perceived as more positive in this respect.

Lower consumer awareness and knowledge in some areas, such as fast fashion brands, may be due to insufficient information about fast fashion, so consumers cannot assess the origin of individual pieces of clothing. Various marketing tools have impact on consumers. This tools offer consumers the best products for them, but these products may not be the best for the environment that is negatively affected by the production of fast fashion goods.

It is worth pointing out that the issue of fast fashion and sustainable fashion is important to pay attention to, because this topic is very current and textile and apparel industry is responsible for high environmental pollution. In the paper we used the standardized query method and the semantic differential. Our survey is the basis for further exploration in area of consumer perception and preference of eco-design product solutions. It is also necessary to extend the survey to other product categories such as home accessories, kitchen utensils and drugstore products for their high consumption and environmental impact.

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Forming desired behaviour by using social marketing

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Abstract

Social marketing is any marketing effort made by organizations in order to sell ideas, such as an idea of healthy diet, stop smoking, or prevention of diseases. It represents an effort to enforce certain desirable ideas, practices, or a specific subject matter, resulting in a form of desired social behaviour. The starting point for achievement of the objectives of social marketing is to build an appropriate marketing mix. The specific feature of the mix of instruments in the social marketing is that it is much larger and complex than in the commercial marketing and it is made by "8 p". To ensure that we have achieved success in the social marketing, it is necessary to proceed systematically. Successful social campaign requires knowledge of each target group. An integral part of the approach to the development and implementation of social campaigns is the evaluation of their efficiency.

Key words

social marketing, socially desirable behaviour, social marketing programmes, social campaigns, prevention

JEL Classification: I12, M3

Introduction

In recent years, we have much more than ever before seen efforts of various entities in such a conduct, which is in the professional marketing literature referred to as socially desirable behaviour and marketing which covers behaviour as social marketing. It does not encourage to purchase, but to make a change of behaviour. It is a broad, complicated and complex theme, very often with the global impact (e.g., protection of the environment and health, safety, etc.). The goal of the submitted paper is to highlight the essence of social marketing and its benefits to achieve social changes in form of social behaviour of the target group. The paper focuses on one of the major topics in the society, such as the prevention and protection of health concerning the selected target segment of the public (young women) and their attitudes and behaviour towards this subject matter.

1 Literature Review

1.1 The essence of social marketing as the latest approach in order to achieve desired social changes

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At present, we encounter the concepts of "social marketing" and/or "social and change" more often than ever before... These concepts are closely related. For this reason, first, we clarify the options for achieving social change.

According to Andreasen (2006), there are five approaches and methods, by which governments, businesses and various organizations can achieve social changes:

1. Educational approach. It is because people act correctly only if they know what to do and how to do it.

2. Approach of persuasion. Supporters of this approach believe that people will act properly only if they are sufficiently motivated.

3. Approach of adapting behavior. It emphasizes behavioural theory that people do what they do because they might have developed common practice or it seems beneficial to them.

4. Access of social impact. It says that the most effective way to achieve social change is to affect social norms.

5. Social marketing approach. It is a new ideology, social marketing, which may prepare the groundwork for a comprehensive and effective social change. It uses elements of all of the approaches above. Thus, it is the most comprehensive and wide-ranging approach.

In the marketing literature, we have been using it since the seventies of the last century. According to the authors - Lazer and Kelly (1973), social marketing applies knowledge, concepts, and techniques of marketing in order to achieve social and economic objectives (Andreasen, 2006). Kotler and Roberto (1989) defined social marketing as an organized effort conducted by one group, which intends to convince others to adopt, change or abandon certain ideas, attitudes, practices or behaviour.

Social marketing deals with the analysis of social impact of marketing strategies, decisions and activities. It represents one of the concepts in the context of marketing, whether general or specific thoughts (Kotler, Armstrong, 2004).

Andreasen and Kotler refer to social marketing as distinctive only in the objectives of the traders and their organizations. By changing social behaviour, it is trying not to give benefits to the merchant, but to the target group and the general society (Weinreich 2006). Similarly, Kopecký (2005) underlines that the attribute "social" does not change the fact it is a marketing tool, which has its own product lines and sales stage, that it is the business of its kind where normal market mechanisms work. This means that even in the social programmes the concept of a well-known marketing mix4 p's, though with some caveats, is used.

One of the pioneers of social marketing concepts, A. Andreasen, defined six characteristics, which are specific for social marketing (Letter, 2006):

1. The ultimate purpose of social marketing is to change the behaviour of people. It does not encourage to buy a product or service, but to change behaviour. In doing so, the target group does not benefit from the changes and very often, those who benefit are not the same groups, to which the campaign is targeting.

2. In social marketing, in order to know the target audience, research, pretests and monitoring results in a much larger scale are carried out.

3. To ensure the maximal effectiveness of a marketing campaign the target audience is carefully segmented. Often, it is necessary to identify a specific group inside the company, according to the context of history, religious beliefs or culture, to be able to lead exactly a focused campaign, aiming at the given group of the company. In social marketing, however, instead of the term "segments"

the terms "stakeholders" and "social roles" are used. In case of stakeholders, they are specific groups of persons, institutions and organizations, which are interested in socially desirable behaviour and in the social conduct (for example, in the campaign against smoking, non-smokers, political parties, health care facilities on one hand and smokers, cigarette producers, etc., on the other hand). The stakeholders can be clearly identifiable and social roles tend to be more closely associated with a specific medium. To achieve the greatest effect possible, it is necessary to set out the target audience groups that are homogeneous and able to create special links for each one of them.

4. The main element of an effective social marketing campaign is to create an attractive and motivating exchange for the target group.

5. Social marketing uses all of the "4 p", which are, however, different from commercial marketing tools. Other "4 p" are added to them.

6. The path to the desired behavior is deeply examined, which in the case of commercial marketing happens rarely.

Social marketing is any marketing effort made by organizations in order to sell ideas, such as an idea of healthy diet, stop smoking, or prevention of diseases. Therefore, it can be seen as an effort to enforce desirable ideas, practices or a subject, that will result in a form of socially desired behaviour. In order to achieve the objectives of the social programs it uses common tools of commercial marketing, by which organizations seek to benefit from a better quality of life for the whole society. Purely social marketing is applied by non-profit organizations in particular, however, in the present social marketing is getting into the commercial sector.

1.2 Social marketing tools and their specifics

The starting point for achievement the objectives of social marketing is to build an appropriate marketing mix. Social marketing, as well as the commercial marketing, consists of 4 p: product, price, place and promotion. Since the social marketing is not dealing with a product, but the thoughts, it is in a way specific and it adds four more tools to the standard tools that are characteristic for social marketing. The tools are public, partnership, politics/strategies and purchases. Thus, we can conclude that the specific mix of instruments in the social marketing is that it is much larger and complex than in the commercial marketing and it is constituted of the "8 p".

Product

The existence of the product in the social marketing is conditioned by the fact that makes the company see real problem and the fact that the idea promoted by the campaign is its solution. In the process of implementing social marketing in connection with the product, two paradoxes arise:

1. Social marketing is pushing certain (socially desirable) behavior, but a product that is the subject of this behaviour will not be sold. For example, in the campaign for healthy diet the recommended food is not sold.

2. Behaviour that is advocated by social marketing usually does not bring personal benefits to the target market in the short term. Benefits of such a behaviour bring a social dimension and, in particular, are significant in the long term.

According to Kotler and Robert (1989) an idea, practice or a specific object (tangible product) may be the product of social marketing. The idea may be a belief (feeding a child is the best), attitude (it is better to undertake preventive health checks than a follow-up treatment for the disease) or a value (equal rights for all). The notion of a practice can be understood as a single activity (vaccination) and repetitive activities (behaviour) leading to the common behaviour (using the seat belts in the car). The subject of (tangible products) can be, for example, a soap or screening test.

Price

The price in the marketing can usually be understood as something that the consumer has to make in order to obtain the product. From another perspective, the price includes the cost. In case of social marketing, it could be something intangible, such as the sacrifice of time, effort, to risk difficulties or disagreement. Kotler and Roberto (1989) divide these non-cash expenses in two categories: 1. the time cost (for example, the time spent waiting for results of tests) and 2. Perceived risk (psychological risks – for example, the fear of finding disease). In social marketing the cost principle is the same as in the commercial marketing, however, it is more complicated to express the motivational factors.

Place

According to Kotler and Robert (1989), a place in the social marketing is seen as a network of institutions and agencies involved in the task to move products from the point of production to the point of consumption. Thus, it is about a group of persons, institutions and organizations, which are interested in socially desirable behaviour. The point of production is a social campaign and the point of consumption is the target group. Distribution channel in the social marketing is characterized by a few specifics:

- It serves as an information channel, through which the group receives information and creates awareness of the existence of a social problem.
- The primary distribution channels are the media, followed by personal interaction of individuals.
- A product that is distributed in the social marketing may not be primarily oriented to paying customers.
- Often, the only distribution route is the cooperation with volunteers.

An important part of social programmes is planning distribution routes. These plans differ from the commercial ones only in the fact that they are much more concerned with the distribution of intangible values.

Promotion

Since marketing communication and its effect is visible, this element of the marketing mix is mistakenly considered the social marketing. In this connection, we may note that many people consider social marketing only as social advertising. The aim of the communication mix in social marketing is to find a way to recall and make idea more attractive, to wake the attention and interest of the target group and finally, invite the target group to take action. A more appropriate term in social marketing than advertising campaign is a hit — the programme. Consumers react to normal advertising campaign in a few days, but to change the habits of lives takes a few years.

Public

Social campaigns tend to include:

1. External group. It consists of target groups, secondary groups, policy makers and gatekeepers.
2. Internal group. It consists of those who make and implement the social agenda.

The total potential of social marketing is used only if its activities focus on the society as a whole, not only on the individuals whose behaviour is to be changed.

Partnership

Social issues are so extensive and complex that one organization cannot solve them on its own. In order to achieve the real efficiency of social programmes, it is necessary to cooperate with many entities and individuals. It is necessary to look for partners who contribute to the achievement of the ultimate goal with their activities. The search for partners includes the process of persuasion about benefits of joint marketing. Getting a partner and their engagement lies in the proper definition of joint marketing and preparation of a package of benefits in partnership, exceeding the costs, which include financial, but also non-financial incentive factors.

Politics/strategies

Social marketing strategies can be classified according to whether the behavior of target groups is consistent or different with their attitudes:

1. Positive attitude/consistent behavior. A socially accepted behavior will be brought into effect. The behaviour is consistent with the attitudes, and therefore, if there is a predisposition the effect will be accomplished. The appropriate strategy is to reinforce the behaviour, attitude, or both, in order to keep them in the long term.

2. Negative attitude/behaviour. Social behaviour is deprecated. A similar situation is when the socially desirable behaviour is accomplished, but the attitude of the target groups towards such behaviour is negative. For example, many of us are aware of the harmful effects of smoking, but they still smoke. In this case, it is appropriate to apply a strategy of streamlining, which aims to change the attitude so that it was consistent with the behaviour.

3. Negative attitudes/consistent behaviour. Socially deprecated behaviour is not accomplished. It may happen that the attitude is consistent with the behaviour, but in the opposite meaning to the previous case. A situation can be changed with the highest level of difficulty. The recommended strategy is a confrontation of behaviour and attitudes.

4. Positive attitude/behaviour. Socially accepted behaviour is not accomplished. When target groups have a positive attitude towards the socially desired behaviour, but this behaviour is not accomplished, an appropriate strategy appears to be a guidance towards a change in behaviour. For example, people are aware of the importance to undergo preventive medical check-ups, but many of them do not take part in them. Therefore, the objective is to overcome the current failure to participate in the implementation of socially desirable behaviour.

Many signs of socially deprecated behaviour are so complex that the linking of the methods above appears to be as an appropriate strategy for their elimination.

Purchases

Lack of funds is often the only problem why social programmes are not implemented sufficiently. There are several options how to search for new ways to raise funds to cover the expenses in social programs and campaigns. One of them, for example, is focusing on new technologies that have become an integral part of the life of society, and in particular, in the field of communication (for example, the internet). Another solution is to link the profit and non-profit sector, explained by the benefits for both parties.

2 Methodology

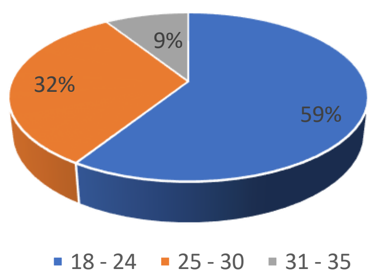
The aim of the article is based on a survey of attitudes and motivation in the segment of young women in the context of preventive medical check-ups, in order to design an effective marketing programme and a model solution to social-oriented marketers for the following period. The paper presents the results of a research study whose objective was to discover the attitudes and motivations of young women to preventive check-ups, and more specifically, to prevent the breast cancer.

The data that formed the basis for the analysis were gathered in the year 2018. Hybrid research, whose partial results are presented, used the method of semi-structured interviews, which were conducted with 97 respondents. These were young women at the age between 18 and 35 years, that is the representation of the generation Y from all regions of Slovakia (graph 1). Mainly women with university education, 75% out of a total number and women with secondary education in a total number of 23% (graph 2) attended the survey. The vast majority, i.e. 70% came from the cities, and 30% from the rural areas (graph 3).

The interview was based on a prepared scenario, in which respondents answered questions related to their attitudes and motivation to care about the health and the health-related behaviour aimed primarily at preventing breast cancer.

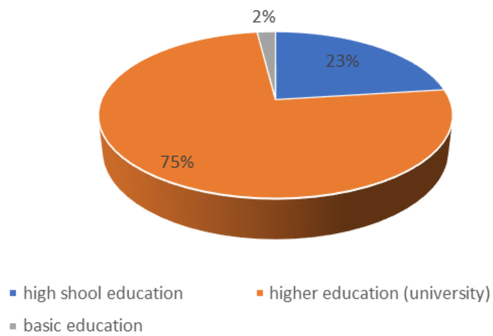
The interviews were conducted face to face, one researcher one participant, usually in their home environment. The descriptions were processed first individually (file of the selected "representative" interviews was analyzed by using qualitative analyses – making up the codes by using the methods of the GTM), then all the interviews (n = 97) were analyzed and structured again to provide comparable results. The analysis of the data was used by the contingency table with the 2- test of a good match.

Graph 1 Age



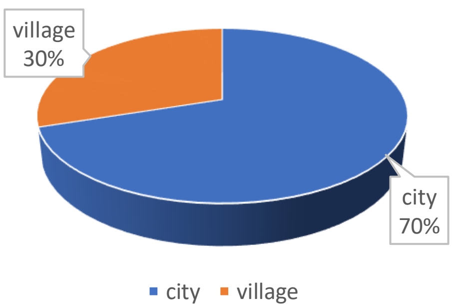
Source: survey results

Graph 2 Education



Source: survey results

Graph 3 Place of living



Source: survey results

We have set the following research questions:

Q1: What is the attitude and behaviour of young women to the prevention of health problems? Do they undergo preventive medical check-ups? Do they pay close attention to the preventive check-ups in case that there was cancer in their family?

Q2: Do they practice a breast self-examination?

Q3: What is the awareness among young women about the cancer diseases?

Q4: Do promotion events on cancer prevention motivate young women to taking part in preventive medical check-ups?

Based on the processed results and according to the above-mentioned goal next steps have been proposed.

3 Results and Discussion

3.1 An overview of partial results of the research

Because of the objective of the survey, we looked at young women at the age of 18-35, what are their attitudes and motives on the prevention of health with a focus on the breast-cancer prevention and breast-cancer-related behaviour. We wanted to know if they annually go to preventive medical check-ups, and if they regularly go to preventive check-ups to a gynecologist. Furthermore, we wanted to find out if cancer has occurred in their family, if they pay close attention to preventive check-ups aimed at the detection of the disease. We tried to find out where they get the information about the cancer. To what extent they pay attention to events focused on cancer prevention, what events they have already participated in. We have also asked them, if they were motivated by some events or by obtained information on this disease that would make them start going to the preventive medical check-ups. The presented results are structured to give the factual results of the data analysis.

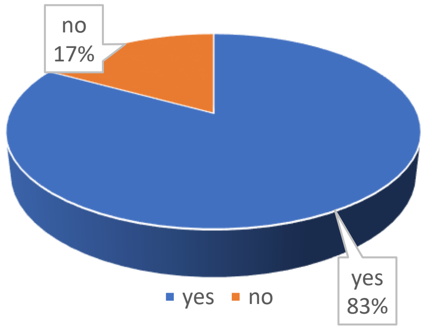
Young women's attitudes towards preventive check-ups and their behavior

In the Slovak Republic the breast, cancer is the most common malignant disease of women. It represents 18% of all carcinomas in the female population. More than 2000 new cases are detected each year (Pleško et al.,2005). In the past 20 years the number of diseases on the breast cancer by women at the age of 25-45 increased by more than 30%, while in the past, the disease occurred most frequently by women around the age of 60 (Kuzma, 2009).

According to a survey carried out by the Cancer Institute in Bratislava 72% of women go to preventive gynecological check-ups, almost a third of the 72% of women neglect the prevention and a potentially early diagnosis in this area. The breast check-up within the framework of a preventive check-up is taken by only 54% of the women (Hudecová, 2017).

Therefore, we examined whether young women at the age of 18-35 years undergo preventive check-ups every year. Preventive check-ups, according to our survey, as shown in graph 4, is taken by 84% of young women. 16% of women do not go to preventive check-ups every year. The most common reasons given by them were the fear of doctors, and long waiting hours at the doctor discourages them. Author presents main findings, results and discussion based on other authors´findings in the field of interest. This section of the paper can be divided into subsections.

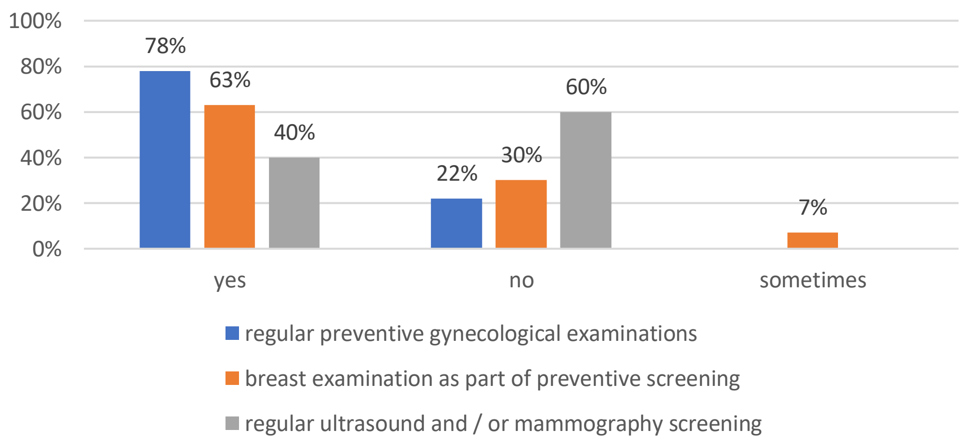
Graph 4 Undergoing annual preventive check-ups



Source: survey results

We wanted to find out if young women go to preventive gynecological check-ups. Out of a total number of 97 young women surveyed, 78% go to a gynecologist for regular preventive check-ups. The doctor investigates the breast within the preventive check-ups, as 63% of young women have stated. The ultrasound examination or the mammograph examination within preventive gynecological check-ups are taken by 41% of young women (graph 5).

Graph 5 Undergoing regular preventive check-ups at the gynecologis

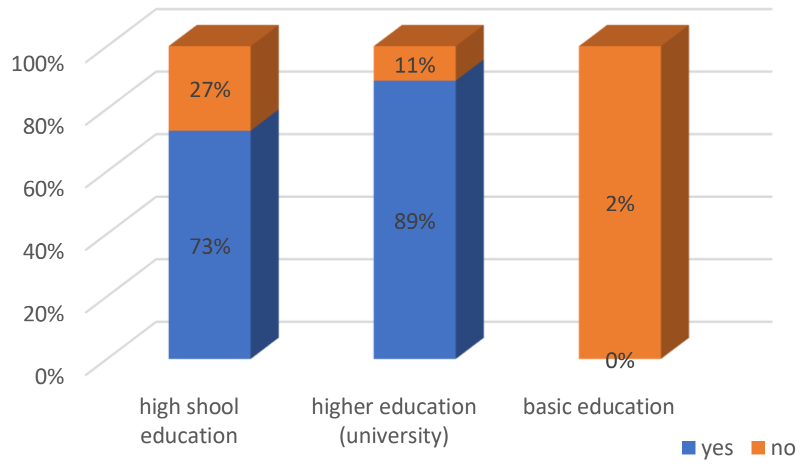


Source: survey results

By using contingency tables, we have analyzed if the education has an impact on the regular attendance in preventive check-ups. Since the sample has specifically been chosen as an analysis of the young women behaviour, it turned out, that young women undergo preventive check-ups. The significant difference, which we tested by using the chi-squared distribution test, in which $p = 0.01$, 89% of women with university education undergo preventive check-ups more frequently, compared to women with secondary education (graph 6).

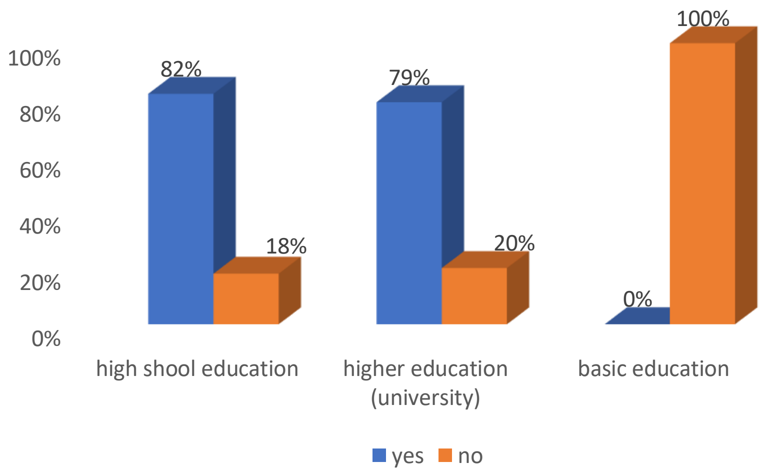
In the analysis of the impact of education on regular check-ups at the gynecologist, we confirmed the significant difference that the regular preventive gynecological check-ups are attended by more women with secondary education (82%), compared to women with university education. Significant difference has been confirmed by the chi-squared distribution test, $p = 0.024$ (Graph 7).

Graph 6 Undergoing preventive check-ups from the point of view of education



Chi-square test (p = 0.001)
Source: survey results

Graph 7 Undergoing gynecological preventive check-ups in terms of education

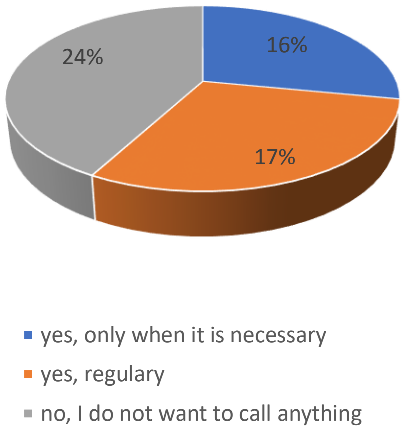


Chi-square test (p = 0.024)
Source: survey results

Both significant values went out less than 0.05 and therefore, on the level of significance of 95% we can confirm that a completed education has an impact on the behavior of young women on the prevention of health problems.

In the survey, we have found out that young women pay more attention to preventive check-ups in case that cancer has already occurred in their family. The results showed that 24% of women, despite the fact that cancer has occurred in their family, do not pay attention to the undergoing preventive check-ups aimed at the detection of the disease, and because of the fact they do not want to fetch any complications, only 17% dedicate more attention to the prevention and go to preventive check-ups regularly, and 16% said that they pay more attention to the prevention only when it is necessary.

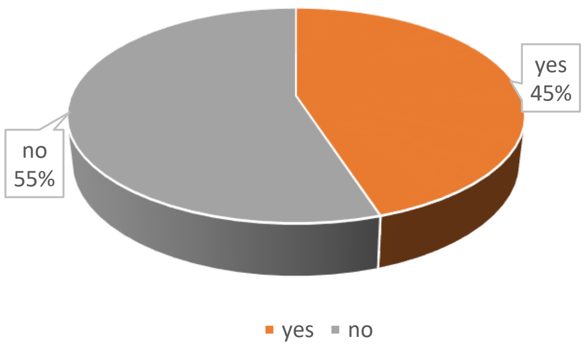
Graph 8 Higher attention to preventive check-ups in case of the occurrence of cancer in the family



Source: survey results

Self-examination of breast (graph 9), according to our research, makes less than a half, only 45% of young women out of a total number of 97 surveyed women. When examining the impact of the education we do not show significant differences.

Graph 9 Self-examination of the breast



Source: survey results

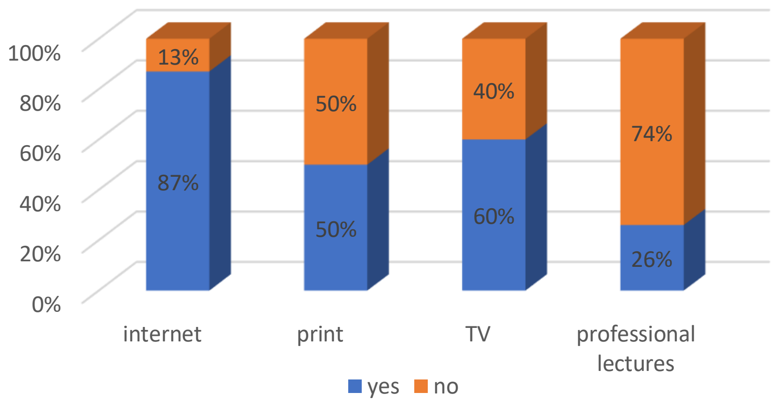
As far as young women are concerned, regardless of their education, as demonstrated by the analysis, the self-examination of the breast is carried out only by 36% of women with secondary education and 49% of women with university education. The rest were the women with elementary education, which do not make the self-examination. The analysis showed that more than half of young women make the self-examination of the breast.

Awareness among young women about cancer and motivation

A study on Millennials + company Kantar TNS Australia (2014) showed that young people live over the Internet, thanks to the availability of constant communication on social networks. This generation takes the environment and sustainability into account, particularly in terms of health. They turn to nature, when they are sick and they are looking for ways to prevent diseases. They search for information from multiple sources, not just online and social networking.

However, as the Slovak statistics show, due to a low awareness of women, there is still a high incidence in advanced stages of newly diagnosed breast cancer findings in Slovakia. Therefore, we have tried to find out where the young women got the information about cancer. The most commonly cited source in 87% of women was the internet, 60% the TV, 50% the press, and 26% said that specialized lectures were a source of the information.

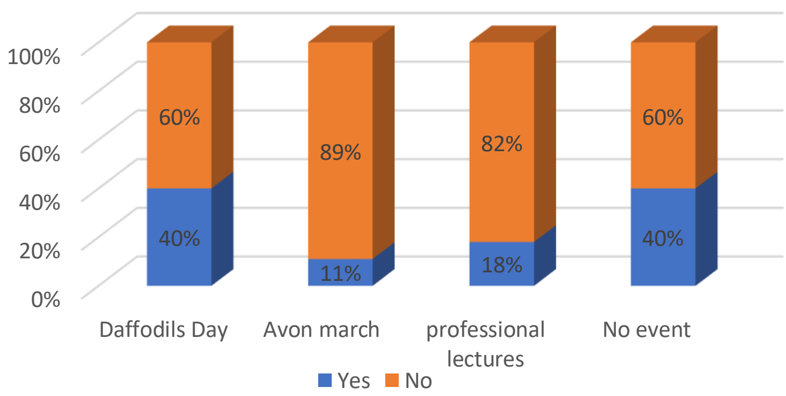
Graph 10 Sources of obtaining information about cancer



Source: survey results

We wanted to find out, whether they have ever attended an event focusing on cancer prevention. Most women, i.e. 40% participated in the event "Day of daffodils", 18% have visited a specialized lecture, 11% attended AVON marching, and 41% did not participate in any event

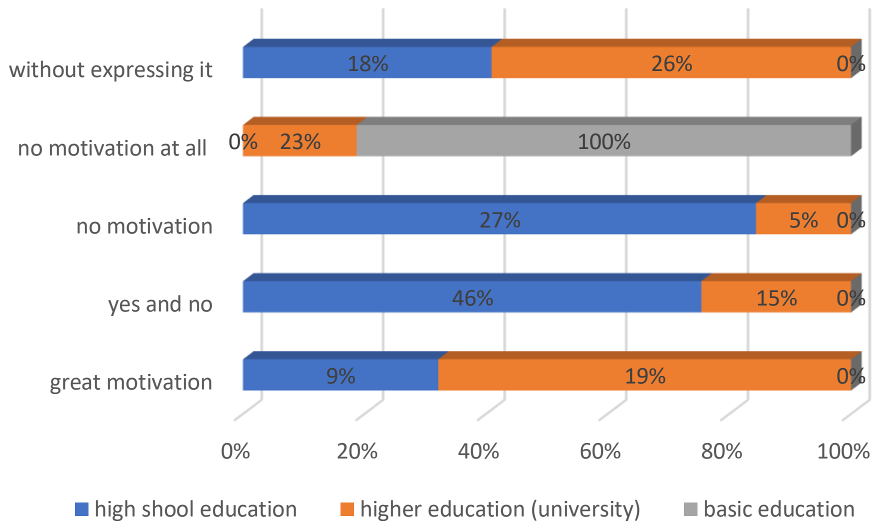
Graph 11 Participation in events aimed at the prevention of cancer



Source: survey results

In line with the events, we have tried to find out if the participation in such events encourage the women to undergo regular preventive check-ups. Only 17% of those surveyed were motivated by such an event, 32% of women expressed a neutral stance and 20% were not motivated by such events to start going to regular preventive check-ups.

Graph 12 The motivation to undergo preventive check-ups based on the participation in events aimed at prevention, from the point of view of education



Chi-square test (p = 0.00)
Source: survey results

By the analysis using the chi-squared distribution test we have confirmed significant differences of the influence of education on the motivation to start going to the preventive check-ups, based on the participation in the event on the prevention of cancer. Significant differences are confirmed by the chi-squared distribution test, p = 0.00, 95% significance level, therefore, we can say that education has an impact on the fact that young women are not motivated, based on the participation in events that promote the prevention of cancer diseases. It has been confirmed that women with secondary education are more hesitant and were unable to clearly say, if their participation in the event motivated them going to the preventive check-ups. Moreover, for those with university education, only 19% were very motivated to undergo preventive check-ups, and 23% were not motivated by any of such events on the prevention of cancer. The results are shown in the graph 12.

In case that woman find a lump in the breast, as shown in the results of the survey, 76% of them will go to a specialized check-up to a doctor as soon as they detect it and 26% of them will go as well, but they would wait for one month. The analysis using the chi-squared distribution test did not prove any significant differences in the behaviour of women in terms of education.

Finally, we could observe that young women at the age of 18-35 go to preventive check-ups every year, but rather to general check-ups, dentists or ophthalmologists, rather than to a gynecologist. More women with secondary education undergo regular gynecological preventive check-ups than women with university education. In case of the occurrence of cancer in the family, paradoxically, young women do not show more interest in preventive check-ups aimed at revealing the cancer disease because they do not want to fetch a disease. Self-examination of breast is made by less than a half of young women. They encounter the information about cancer mostly on the internet and on television. Less than a half of women participated in the "Day of daffodils", and more than a half has not participated in any event aimed at the prevention of cancer yet. Likewise, the participation in events does not encourage young women to start going to preventive check-ups aimed at the detection of cancer disease. Most of the young women would start to take action, if they found a lump in their breast.

3.2 The process of social marketing campaign

It is obvious that just a simple implementation of social marketing campaigns to achieve the desired social behaviour in the area of prevention and health protection is not sufficient. To ensure that we have achieved success in the social marketing, it is necessary to proceed systematically. It might be assumed that this procedure eliminates the existing low-efficiency campaigns and ensures better outcomes for the desirable social behaviour. An algorithm of the following steps appears to be appropriate:

1. Listening. First, it is necessary to detect and identify the key problem. In order to achieve the maximal response of the target and general group towards the defined problem, it is necessary to define the socially desirable behaviour that is going to be enforced, modified or/and strengthened.
2. Analysis of the target group. Just the target group is the most common cause of the failure of social campaigns. Along with it, the marketing staff who are preparing the social campaigns must be mentioned, when they do not pay enough attention to the target group and know nothing about it to develop an effective social marketing campaign. Therefore, when planning social campaigns, it is necessary to find the answers to these questions:
    - What does the target group think of the advantage offered?
    - How does the target audience perceive an alternative offer?
    - What are the weaknesses of the target group?
    - Does the target group have the information on how to change the behavior or the direction desired?
    - Is such a change inadequate from the perspective of the target audience (e.g. because of religion or culture)?
    - Is the target group ready to change the behavior in a desirable direction?
    - How many people do not reflect the behavior, which is the subject of the social marketing campaign?
    - How many people will be affected, if the social agenda will be successful?
    - Which segments will respond immediately, and that will require more time and greater marketing efforts?

Successful social campaign requires knowledge of each target group according to socio-demographic characteristics (age, education, etc.), the social profile (attitudes, values, motivation, personality), and on the characteristics of behaviour (patterns of behaviour, shopping habits, behaviour and media, etc.).

3. Planning. It is necessary to transfer the knowledge to specific social programmes and activities. Planning must also include the setting of goals and the identification of the entity/entities, which are responsible for its success.
4. Preliminary testing. This step is often underestimated, which is one of the major errors in the preparation of social campaigns, its planning and implementation. Simple test interviews with representatives of the target group will help to identify weaknesses of the chosen approach to prepare a campaign.
5. Implementation. It starts by launching a specific social campaign. However, it should follow the evaluation of the results of preliminary testing and removal of identified deficiencies.

6. Monitoring. It should be noted that social marketing campaigns usually do not run in such a way as they have been planned. The cause is the fact that the target group is changing frequently, and unexpected obstacles often occur. For these reasons, it is necessary that social campaigns have clear monitoring system that detects whether the social agenda and its implementation go in the right direction.
7. Checking. It detects differences between plan and reality and proposes a system of measures to remedy the deficiencies. It helps to maintain the right direction in leading the social campaign and, if necessary, it might give a signal whether a new approach or even a context to the idea that has been referred to are necessary.

Following the research activities on the social campaigns, it is important to include the target group segmentation according to their characteristics. In the research, it is also necessary to focus on how the problem is perceived, the problem that has to be the core of the social campaign, target group and that raises socially undesirable behaviour. You also need to determine how important it is for target groups to take specific action to eliminate the problem. This is also the theme for our next research activities planned in conjunction with the National Cancer Institute of St. Elisabeth in Bratislava for the next period.

3.3 Evaluation of the effectiveness of social marketing programmes

An integral part of the approach to the development and implementation of social campaigns is the evaluation of their efficiency. In reality, however, this activity is the weak point of social marketing.

To assess the effectiveness of the social campaign several criteria can help. Social campaign is effective, if:

- The target group has noticed the communicated link, it can see it.
- It will attract attention by the target group.
- The target group is interested in the information for the purpose of knowledge.
- It results in a change of attitude in the direction of the behaviour desired.
- The target group prefers socially accepted behaviour before the socially undesirable one.
- It will strengthen the belief about the importance of change in behaviour.
- It triggers a change in the behaviour of the target group in the direction of the behaviour desired.

In general, it can be stated that the social campaign is effective when it has met all its objectives. Several objectives can be set, in relation to the character of the problem, the marketing situation (attitude/behavior), target group, its characteristics and behaviour of the media in relation to the communication/medial and creative strategy, as well as achievements of the campaign.

Conclusion

In conclusion, it can be said that the social changes that result in socially desirable behaviour and its solving is a challenging task, not only in terms of time and finances, but also in terms of a carefully selected approach. This approach can be applied in the form of social marketing strategies and the promotion and intervention through education and legislation. Therefore, a part of the preparation and implementation of such campaigns must be to find answers to questions, whether in promoting an idea, the education and/or legislation is sufficient, and what the role of social marketing is and how is it different from other mechanisms. The appropriateness of these techniques will be assessed according to the motivation, the opportunity and the ability of the target groups to take action. If the target groups are inclined to take action and if they have a high motivation, training and education could be a sufficient direction of the whole procedure. The awareness of successful teaching practices is a precondition of the benefits and advantages by the target group, which will be gained if they accept the social change.

The second case is when the individuals do not want to act, or if they constantly tend to prefer other alternatives. In such a case, the legislation might be the best instrument or, at least, a suitable complement. The government and legislative bodies have the obligation to make efforts to avoid undesirable social phenomenon and to avoid such behaviour.

If the target groups are socially incapable to behave socially, this is a perfect case for social marketing. Social marketing, education and legislation do no exclude each other. There are many ways how they can complement each other appropriately. Education can create awareness of the problem and of the desired change, laws can resolve the problem leading to a change and social marketing approaches can affect target groups towards socially desirable behavior.

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The online business impress young [1]

Jamal Hasan[2] – Saad Hasan[3]

Abstract

The article's contribution aimed to collect relevant information about young people's attitudes toward the business's attractiveness in the online world. The main goal was to point out the growing interest in registering young websites with the Slovak domain, bringing agencies promoting online business in Slovakia or mentioning the advantages of doing business online. The paper deals with useful steps and advice for young start-ups and at the same time characterize the skills that every start-up entrepreneur should have when deciding to do business online. At the same time, the article presents the results of a survey in which paper investigated whether young people are interested in doing business in the online world and further investigating why they are not interested in doing business online.

Keywords

Online business, impress, young people, advantages, interest, and research

JEL Classification: M13

Introduction

Entrepreneurship is the activity of an individual or a group of people in their name, on their responsibility for profit. Entrepreneurship, in general, is an activity dealing with a particular subject or service. It is not easy to start a business. A great deal of effort is needed to do business to achieve the desired result. When starting a business, an individual must have fundamental professional knowledge and practical experience at least. In doing so, the entrepreneur learns all his life. They must continuously learn, enrich their theoretical and business intelligence, or business practices. This work requires patience, energy, and enough time for one's personal development, both for the entrepreneur and his company.

When starting a business, it is necessary to set the primary goal that the entrepreneur wants to achieve for a certain period and from which sub-goals are derived. When the primary goal fulfilled, the company can continue with what it has started or can change the character of the target. The goal achieved by teamwork and the problems is much easier to solve than if the individual had to deal with it alone. Teamwork spreads through the collaboration among team members, in which each involved in proportionally involved in solving a given task or problem.

The entrepreneur should have expertise. In today's digital era, one needs to control his work with computers and various applications that simplify administration and accounting. It is essential to be able to navigate in the virtual world, that is, "in the world of the Internet," in which it immediately gets the necessary information and helps to solve the problem.

Today it is a modern trend to sell products and services over the Internet. When selling products and services over the Internet, the entrepreneur needs to own a website through which

[1] Supported grant VEGA 1/0066/18: Model marketingovej komunikácie na zdravie orientované nákupné správanie spotrebiteľov.

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they can make themselves visible and publicize the variety of products and services they want to sell. When creating a simple website, he should manage editorial programs such as Joomla, Wordpress, through which he will make his website or e-shop. Selling products over the Internet brings many benefits to the entrepreneur. These benefits include:

- Cost savings in order processing,
- easier communication with customers,
- the ability to track interest in particular products through site visits,
- faster payment for goods to customers,
- support for the sale of ancillary services, such as transportation, modification of the overall product characteristics before the auction, and complaint.

The Internet serves as an essential tool for marketing communication. Through social networks, there are opportunities to promote products and ads. Their advantage is a high level of visibility because most of their users are present on social networks. They are easier to support by sharing and loving the created page on the Facebook social network, through which the company expands its products or services.

1 Methodology

Our contribution aimed to collect relevant information about young people's attitudes to the business's attractiveness in the online world. The main goal was to point out the growing interest in registering young websites with the Slovak domain, bringing agencies promoting online business in Slovakia or mentioning the advantages of doing business online. To achieve our goals, we have used a second method where we have drawn on available online business articles based on which we have learned about the current business situation on the Internet. As a primary method, we conducted our survey using online questionnaires to collect information. The object of our survey was to find out the current interest of young people in doing business on the Internet and to clarify the reasons why they do not want to do business on the Internet. We used a simple table to evaluate.

2 Results and Discussion

Surveyed performed among high school and university students in doing business on the internet using a structured questionnaire that created with Google Docs and then sent out electronically to 533 respondents aged 14-28. Luckily had a 100% success rate as returned all 533 questionnaires (data collected by master's student's marketing and management)

2.1 Characteristics of e-business

The term e-commerce refers to the provision, acquisition, or exchange of business information, money or goods using electrical equipment and fixed or mobile networks.

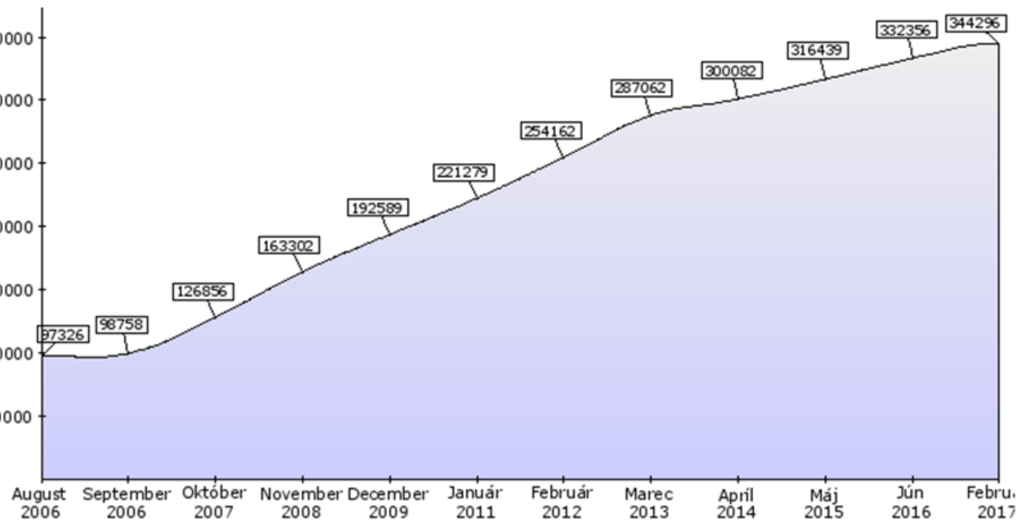
In terms of enterprise information systems, it is important to distinguish the following terms:

- e-commerce,
- e-business.

E-commerce is the purchase and sale of goods, services using information-communication technology, with e-business linking the organization's business activities with customers, suppliers, and employees.

Better doing business in an industry that is growing. Today, the service sector is already making its mark in post-crisis years, especially for online sales. The following Fig. 1 shows the growth of the number of Slovak domains over ten years, it means from 2006 to 2016. The number of Slovak domains grew by more than 70%.

Graph 1 Statistics for .sk domains for 2006 - 2016



Source: http://www.backorder.sk/statistika

The Amway Company (2015) has conducted a survey of 50,000 respondents in 44 countries (including Slovakia) with a question about their own business in the online world. The study focused mainly on business potential (the percentage of people who would like to do business on their own). In Slovakia, the share increased from 28 to 33% compared to 2014. The Statistical Office of the Slovak Republic reports that only 6% of the population in Slovakia is doing business, thus creating a business gap of up to 27%. Thirty-seven percent of people under the age of 35 think that there is a friendly business resource in their country. The growth of .sk domains for 2006 – 2016 shown in table 1.

The main attraction of its own business is:

• for 44% of the participants remarked, it is independence from the employer,

• for the 39% advantage, the second income option is in addition to employment,

• 36% of respondents report their ideas and ideas,

• 21% talk about better career and leisure-family links.

And we asked 553 respondents how high school and university graduates look at e-business. 58% of them were secondary school students 309 respondents, university students 224 respondents, which represents 42%. This is better illustrated in Table 1.

Tab. 1 Respondents were thinking about starting a business in the online world after high school or universities.

Were answered	Number of respon-se	%	segments	Respondent by segment	In %
Yes, I concerned	420	79,00%	Highschools	256	48,00%
			Universities	164	31,00%
Nie, neuvažoval som	113	21,00%	Highschool	53	10,00%
			Universities	60	11,00%
Spolu	533	100,00%	-	533	100,00%

Source: Collected by Masters students marketing and business department, OF EU (2017)

From the analysis of data, the paper further investigated why young people are not interested in doing business online. Respondents expressed themselves as follows:

• 27% say they do not like their online business and want to do something else in the future,

• 21% of respondents do not have computer skills to create e-shops,

• 17% of respondents lack personalities for doing business in the online world,

• 17% of respondents say they are discouraged by a great deal of responsibility, many responsibilities, much time spent on e-business,

• 18% do not have a sufficiently creative business plan.

The survey showed why young people are not interested in doing business online. Respondents expressed themselves as follows:

• 27% say they like their business and want to do something else in the future,

• 21% of respondents do not have computer skills to create e-shops,

• 17% of respondents lack personalities for doing business in the online world,

• 17% of respondents say they are discouraged by many responsibilities,

• 18 According to David Švejd (2015), the fundamental common denominator of all trends is: "A clear turn to a digital - shared economy that changes everything from the ground up." The primary role will be played by more and more personalized internet, output-oriented instead of products, rapid platform advancements, the emergence of smart businesses, and a shift in the workforce.

According to a survey by Accenture (2015), up to 35% of respondents use partner interfaces (APIs) to integrate data and collaborate with business partners, with another 38% planning it. Philips, in partnership with Salesforce, has created a platform that changes the way healthcare is delivered. Thanks to the use of digital ecosystems, progressive companies have the opportunity to grow and generate new sources of income. In its study, Accenture defined five technology trends:

Personalized Internet - the Internet of

• focus on customer value,

• (r) evolution of platforms,

• smart business,

• new workforce - cooperation between man and machine.

2.2 Business support in Slovakia

In the next section, the reader will be informed (or a promising young entrepreneur) about the organizations that help with business in Slovakia, not only on the Internet.

1. Slovak Business Agency (SBA)

Agency specializes in Slovakia since 28.02.2014. The SBA is the leading institution to support small and medium-sized businesses. Slovak Busines agency provides:

• comprehensive assistance following the principles of the Small and Medium Enterprises Act,

• complete business support at the national, regional and local level,

• Enhancing the competitiveness of entrepreneurs within the EU common market and in third-country markets,

• The SBA provides potential entrepreneurs with answers to the questions: "How to start a business?" "How to start a company?" "Looking for finance ..." "Before you start ....", "Doing business next door ... ".

For entrepreneurs, it brings useful information in the following sectors: Natural person, Legal person, Freelancers, Business and Law, Business abroad, Looking for finance, Startups, Current legislative changes, Contract templates, and others.

2. Slovak Franchise Association (SFA)
   The Franchise Association is the only official franchising center in Slovakia, so it is the only competent partner of franchise associations worldwide. It is a voluntary grouping of franchise business participants (franchisor, franchisee, business, and franchising).

   It offers various services to its members as well as to other interested parties, such as consultations, pre-lecture, knowledge about franchising, discussion meetings, expert advice in the franchising business, the publication of expertise of association members.

   The Slovak Business Agency and the Slovak Franchise Association are generally engaged in business as such. They provide valuable advice and information not only to their members but also to the general public on how to be successful and how to successfully run their own business.

   The following two so-called. Institutions - The E-Shop Association and the Internet Advertising Association will already familiarize themselves with online business practices.
3. E-shops association

The e-commerce association created as a result of the increasing pressure of foreign and domestic emerging monopolies in the field of e-commerce, the influence of control institutions, buyers, and ultimately, the loss of competitiveness.

Since 2015, the e-shops association has been operating a new information platform. It connects three entities of online business premises in the Czech and Slovak Republics - B2C, B2B, and e-commerce services.

The growth of online sales in the EU in the world in 2015 was approximately 425 billion euros. EUR. The association expects a quarter increase to 2020, up to 600 billion. EUR. The number of e-shops in Slovakia and the Czech Republic increased by almost 30,000 e-shops from 2011 to 2016. In 2011, both markets operated 17,400 e-shops (2,400 in Slovakia and 15,000 in the Czech Republic). Last year, e-shops reported 46,200, of which 9,400 were Slovak, and 36,800 were Czech.

4. Internet Advertising Association (IAB Slovakia)

The Interactive Advertising Bureau Slovakia (IAB Slovakia) is an online advertising interest group. It focuses on standardizing the digital advertising market by introducing uniform rules and standards for online advertising, ethical practices in the digital industry. It acts as a platform for mutual communication between Internet advertising and communications channel operators with Internet professional organizations or government agencies. The association currently has 37 members, the most significant Slovak publishers, and media agencies. The association has been in the digital sector since 2005 (predecessor of the Internet Media Association) and is a member of IAB Europe.

From previous information, here can be stated that the Slovak business environment is not the most ideal of the EU environment, but many institutions, organizations, agencies or associations are trying to make a start-up entrepreneur as a business or online business more accessible.

English playwright George Bernard Shaw (1856–1950) captures successful and persistent entrepreneurs in the following sentences: "People still blame the environment for what they are. People who want to succeed in this world are people who go looking for the environment they need, and when they cannot find it, they create it."

2.3 How to start a business?

Nowadays, every entrepreneur needs to think globally. Today, even the smallest company should focus its services on international markets, sell or to buy also products made abroad. Today it is much easier than in the past. Time requires that shops be "online."

The global market entails:

• competition and small businesses globally,

• the price advantage of purchases of overseas goods,

• profit from favorable exchange rates for purchases outside the EU where the dollar is higher than the local currency,

• rapid adaptability to new conditions,

• fast international shipping,

• flexibility, comfort.

Therefore, before a potential entrepreneur starts a business, he/she should acquire the following personality skills to help him/her bring the business plan to the desired goal.

• observation,

• patience,

• learn to say "NO,"

• correction,

• accounting basics.

• free speech,

• web site programming.

Of course, there is nothing more important than taking the first step. The first step in the Slovak business environment is to spend weeks running around the authorities, handling permits, stamping various certificates. So, this was how it worked a few years ago until the Single Points of Contact came into being, and later on Electronic Online Systems, which not only made it easier for start-ups but more established entrepreneurs to work and reduce business-related administration.

Points of single contact established under the provisions of Directive 2006/123 / EC on services in the internal market. Through the JKM it is possible to provide all mandatory administrative acts related to the start of business and some activities related to business activities in one place (e.g., to report a trade, apply for registration in the Commercial Register of the SR, ask for the health and social insurance system, report changes, terminate business, etc.). In addition to the services mentioned earlier, the points of single contact also provide information regarding the establishment of a business authorization. They operate through 49 physical and 1 electronic contact points.

Online marketing specialist Lukáš Pítra claims (2016) that more than 50% of e-shops will not survive their first year of operation. Many others work with zero economic profit and live only on inertia. Therefore, the start-up entrepreneur who wants to start his business on the Internet is wondering what he should do before he does business on the Internet?

To do so, follow these steps:

Get to know the customer - before one starts planning, it is essential to say Who is the customer? Moreover, what will be the reason for his purchase in the e-shop? Based on this, an entrepreneur can choose the right way - to become attractive as a customer-seller,

• SWOT analysis - represents an analysis of the internal environment: knowledge of its strengths and weaknesses, as well as the external environment from which it determines its opportunities and threats. It is also essential to develop a SWOT analysis on competitors, market leaders, to help the entrepreneur find out what he can benefit from,

• Financial Plan - is an estimate of financial development during the business. It is essential to start with high investments at the beginning, and only after 2-3 years, when the company becomes stable and growing,

• a long-term vision and brand - this is the way the entrepreneur wants to influence his customers and the general public. It is essential to answer the question of what offer wish to represent one-shop for a few years,

• Inspire - The essential part of the whole business preparation is the creation of a business plan. That is why it is necessary to pay great attention to this part, which should be focused mainly on details.

2.4 Entrepreneurial skills and assumptions of a young entrepreneur

To make the entrepreneur's work successfully and profitability over an internet business, it is necessary to have as many of the following hard skills that facilitate online trade. An entrepreneur acquires these skills by educating and applying expertise to work with computers.

HTML - is a hypertext markup language designed to create web pages. It is a common thread that virtually connects every webpage, from large corporate sites such as Microsoft to simple classroom pages at primary school. Website creation is much easier than writing a computer program such as Microsoft Visual Basic or C ++. A simple article can create in a few minutes in a simple text editing program such as Notepad.

• CSS - links that design with many features such as color, font-family, background, and another task. HTML and CSS coding provide the entrepreneur with the benefits of saving employee recruitment costs, adjusting various changes to the website, such as moving the image on the web in the header, increasing the space above the title, improving the link in the header. It costs more time but less money.

• Photoshop - represents an image processing application and design of all creative projects. Different Photoshop applications can be on the computer or mobile devices. Used to create and enhance photos, web and mobile app designs, 3D works, and videos.

Search engine optimization - introduces search engine optimization and aims to increase website traffic. It helps increase interest in the website or products that the company offers on the web. However, be aware that not every visit to a website can be beneficial. The most popular search engines in Slovakia are Google.com, Yahoo.com, and Seznam.cz.

• Copywriting - is the writing of texts, especially advertising articles, promotional materials, ad texts, or newsletters. It is a doctrine of how to write an ad text that at first glance. A Good Copywriter is a person who writes the books as mentioned earlier. It should entirely control the language in which is written, have a rich vocabulary, and master technical terms. When writing text, synonyms that make the book more pleasant and enriching when they read. When writing lyrics, Copywriter himself should not use such technical terms that are not known to a wide range of readers. When writing a text or an article, they must have as much information as possible to make use of it in their writing. When writing a book, Copywriter must use his creativity to make his text useful and to enrich the text with real facts.

• Wordpress - is a web-based software designed to create an attractive website, e-shop, or blog. Hundreds of community volunteers develop the core of the software. There are thousands of modules, themes, templates, and plug-ins that make the Web site almost anything. The user can back up and optimize his website through Wordpress for the highest performance. Knowledge with Wordpress helps to better delegate work and to better communicate with programmers, so better to solve problems than if the entrepreneur had no knowledge of Wordpress and would only see the Web Analytics - includes various measurement tools, data collection tools, and their subsequent analysis and evaluation. Through web analytics, can find out the following data:

- total number of visitors to the website,
- unique Visitors,
- the way users have accessed a specific website,
- the most commonly used search keywords,
- the length of time that web pages viewed.

Web analytics also serves to monitor the functionality of the subpages. Based on this web analytics data, developers can find out which of their sites are most popular and have the most popular so-called. "White screen."

To carry on business, the entrepreneur must have the necessary prerequisites for the performance of his business. The entrepreneur must be free in free time and working hours. It needs to be able to promote its ideals and the possibility of achieving success. Managing a business as a separate business unit is not easy. A young start-up entrepreneur must be able to take responsibility for himself, have self-discipline, be purposeful, communicative, and have a positive attitude towards health risk.

Some companies were created and founded without the founder's expertise due to the "brilliant" idea. The content of work needs to be understood. The entrepreneur must have a business spirit within him. They must be able to engage and sell their products to the customer if they want to be profitable. Trade and sales expertise can be learned and developed through a variety of professional courses, lectures, and workshops.

Every entrepreneur needs to have financial knowledge. They have to monitor the economy, taxes, and accounting. This economic knowledge is always a big plus if the entrepreneur can move about it, especially in the area of frequently changing legislation, tax returns, and tax payments. It must also control the commercial code, which helps it to create specific business contracts.

To be an entrepreneur, the entrepreneur must have certain personal assumptions. Many entrepreneurs are somewhat similar and different in many ways. Entrepreneurs are different from ordinary people, mainly because of their attitude, they believe their dream, and they work hard to make their dreams a reality. An entrepreneur should have at least a few of the following personality assumptions:

- determination to succeed,
- emergency,
- Flexibility,
- risk-prone
- creativity,
- responsibility,
- ambition,
- ability to lead by,
- a sense of observation,
- positive orientation towards all people.

2.5 Advantages in e-business

Entrepreneurship over the internet and online business has been growing relentlessly in recent years. Nowadays, many companies are setting up websites and e-shops through which they sell their products. The advantages of e-commerce include the following:

- 7/24 and 24/7 availability
- routine driving, parking, and on-the-spot shopping, saving costs and time
- speed - Compared to traditional postal communication, all electronic mails are delivered within a few hours
- reducing human error factors
- reduction of storage and document costs
- decreasing overheads and increasing potential intervention
- e-shops are unlike traditional NON-STOP shops.

Choose to sell food through an established internet business, and there are certain specificities and responsibilities in the e-shop. When selling products via the e-shop, trade with the designation of the subject of the activity must explain in content.

When running an e-shop, the entrepreneur must provide mandatory information that must be readily available, and that is as follows:

- Contact the business in which it operates,
- business name, registered office, and business location,
- the legal form of marketing, if it is a PO,
- Company identification data (IČO, DIČ, SK DIČ),
- the trade or trade register designation and the registration number,
- phone number and email where the customer can file a complaint or complain,
- the address of the supervisory authority.

A practical and best way to deal with a claim is to prevent the content of specific and correct product information from appearing on the e-shop. This information is large images, parameters, features, colors.

Conclusion

Through this work, the authors tried to penetrate deeper into the issue of motivating young people to do business in Slovakia, namely to do business on the Internet. In the beginning, the authors described in detail the characteristics of electronic business in the Slovak market. Further, they have discovered which qualities are essential for a successful entrepreneur. The authors have assessed which skills are the driving force for entrepreneurship to survive the first years of its life and motivate young people to start a business and start their own business.

The results of this research showed that almost 80% of young people surveyed are interested in starting their business online after graduating. Of the total number of respondents attending secondary school (309), 256 were interested in doing business while only 31% (164) of college students were positive about e-commerce.

The fact forced research to focus on the business environment for entrepreneurs in Slovakia. Obviously, the older the respondent had, and his higher education, his affection for his own business fell. On this basis, it can be stated that the above-acquired knowledge enabled them to see and know the disadvantages and risks of doing business. Their motivation to open up their own business fell directly in proportion to access to new information.

However, it is also important to point out the differences between Generation Y and Z. The results of the survey influenced by the development of the Internet and globalization. While Generation Y met with the Internet, a web browser for the first time at the age of "Adolescent," Generation Z was born into this re-engineered world. While "we" - Generation Y - had to learn to start using information and communication technologies, Generation Z grew on the latest technological trends. Even this fact and psychological diagnosis of personality could have a significant impact on the outcome of the survey. College students represent Generation Y - who do not trust the Internet and its business. They like security in their lives and avoid the risk.

Conversely, Generation Z searches for "drive" in everything they do. They are mobile, high in innovation, abandoning certainty and ideas, forming their worlds. The proof is that their generation is also called iGeneration.

The analysis shows that the state should create conditions for making the business environment attractive to both domestic entrepreneurs and young people. An essential and priority role of the government should be to improve business conditions. Through a favorable climate for entrepreneurs, the standard of living of the population increases, and the quality of goods and services rises. On this basis, the policy of the state should be concerning with supporting small and medium-sized enterprises, which form the "gro" concerning the Slovak market.

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Knowledge management implementation at Higher Education Institutions in Slovakia

Ivan Hlavatý[1] – Peter Filo[2]

Abstract

Higher Education Institutions (HEIs) are complex institutions, with diverse history, culture, resources and missions. These institutions are in today's knowledge economy presented with two main priorities. One, which aims to provide quality education and research activity, and the other, to ensure effective and efficient management and administration within an increasingly competitive market. They are also expected to be the leaders in knowledge generation and dissemination in the new economy era. Academic aspects of HEIs knowledge management have been prevalent in the scientific discourse, with the organizational view lacking behind. Focus of presented research was to determine the stances of Slovak HEIs and their faculties to knowledge management as well as to compare these to how they communicate with stakeholders about their knowledge initiatives, projects, and other KM-related issues by examining the publicly available resources on their websites. Primary data was collected by two methods, a survey of Slovak HEIs and faculties and data about websites was collected by analyzing selected keywords related to knowledge management. The results reveal, that while HEIs declare their intent to implement knowledge management initiatives on a institutional and/or faculty scale, it is prevalently a declaration that is not followed by implementation of respective policies. Statistical evidence confirms that the intensity of communications about KC-related topics increases with the age and size of the HEI. Public HEIs are more active and communicate about KC significantly more than private, state, and foreign HEIs.

Key words

Knowledge management, higher education institutions, knowledge culture, marketing communication

JEL Classification: M1, M54, D83

Introduction

The role of conventional education institutions has in many respects remained unchanged for centuries. Education has been a foundation phase in a person's life. However, at the year 2000 and beyond, the need for a vastly expanded education system, the diverse expectations placed on learning achievements and the revolution in the methods of learning provide universities with new roles and new challenges. It may, then, be reasonable to suppose that knowledge management (KM) may have something to offer higher education institutions.

Knowledge management has been widely discussed over the past decade, including its benefits, enablers, barriers, risks etc. HEIs have traditionally had two main roles: creating knowledge and disseminating knowledge. Research has been the main vehicle for creating knowledge and teaching has been the main vehicle for disseminating knowledge. In today's rapidly-changing economic environment, the traditional role of universities as providers of knowledge is greatly challenged.

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Education institutions must recognize and respond to their changing role in a knowledge-based society. They need to be consciously and explicitly managing the processes associated with the creation of their knowledge assets, and to recognize the value of their intellectual capital to their continuing role in society (Rowley, 2000).

Similar to other organizations, implementing KM in HEIs can have various positive impacts. Some of these impacts include facilitating a collaborative environment, improving organizational culture, making more informed decisions and increasing efficiency of management processes. These aspects of university KM are regarded as organizational (non-academic) and they establish the foundations for sustainable competitive advantage (de Guimarães et al., 2018; Lee et al., 2016). Limited studies have assessed both organizational and academic aspects of KM in HEIs (Demchig, 2015; Hu, Hou, & Chien, 2019), although academic aspects of University KM have been prevalently discussed in literature (Adeinat & Abdulfatah, 2019; Draghici, Baban, Gogan, & Ivascu, 2015; Ghabban, Selamat, & Ibrahim, 2018). These studies have shown, that the quality of academic outputs is greatly affected by KM. Exchange and use of knowledge by teachers, researchers, and supporting staff positively influence the quality of education provided by HEIs as well as of research carried out.

The management of an organization's knowledge has become one of the most important strategic vehicles to an organization's sustainable competitive advantage. This is evident from current business reports that reveal increased investments in intangible assets such as knowledge, as opposed to tangible assets like plants and equipment, "indicating a major shift toward a knowledge-based economy" (Hao et al., 2011). Similar shift is notable in higher education environment as well, with emphasis on knowledge sharing and knowledge communication. Communication is one of the key aspects of successful KM implementation, enabling the exchange of knowledge internally between colleagues, units, and departments, and externally with other stakeholders.

The fourteen stakeholder categories that need to be engaged in innovation management and entrepreneurship development, according to Leonidou, Christofi, Vrontis, & Thrassou (2018), are academia, customers, government, service intermediaries, community, suppliers, friends and family, business networks, start-up teams, innovation intermediaries, social media, university peers, nongovernmental organizations and industry clusters. Kovacikova (2010) and Soukalova (2012) introduce a different categorization of HEIs' stakeholders, namely stakeholders in both the internal and external environment: departments and faculties; teachers and researchers; other employees; sponsors; high school students; current students; competitors; companies and other organizations; government; alumni and their employers; public. Perks & Moxey (2011) consider the ability to attract, interact and communicate with certain stakeholders as vital for engaging in an innovation project with the lead firm. It can only be expected that communication with stakeholders will also encompass knowledge-related topics.

HEIs are expected to be leaders in knowledge generation and application. Despite the advantages and disadvantages of the commercialization and marketisation of universities (Hall, 2018), this trend cannot be stopped. Universities and other types of HEIs need to continue their transformation towards becoming efficient organizations with streamlined management processes. Thus, implementing KM and effectively communicating about these initiatives must become part of their integrated marketing strategy.

Presented research focuses on determining the stances of Slovak HEIs and their faculties to knowledge management as well as comparison of these stances to the communication with stakeholders about their knowledge initiatives, projects, and other KM-related issues.

1 Methodology

The aim of the paper is to identify attitudes of Slovak HEIs and their faculties to knowledge management implementation and the level of communication with stakeholders about their knowledge initiatives, projects, and other KM-related issues.

Following the aim, two research questions have been formulated:

RQ1: What is the Slovak HEIs awareness of knowledge management?

RQ2: Which KM areas (knowledge creation, knowledge retention, knowledge use/sharing, knowledge management) are prevalent in the communication?

To be able to give answers to the research questions, a two-part collection of primary data was conducted. First part was a questionnaire targeting the general awareness of knowledge management and related issues. The second part was analysis of HEIs communication using websites of HEIs and their faculties.

Sample and data collection:

Total population sampling was used to select the entities for the research. This type of purposive sampling was used because of the relatively small number od Slovak HEIs. Publicly available lists of Slovak HEIs were used to populate the sample, including the Register of HEIs on the 'PortalVS' website which is operated with the support of The Ministry of Education, Science, Research and Sport of the Slovak Republic - https://www.portalvs.sk/en/informacie-o-vysokych-skolach, and the website of the Slovak Centre of Scientific and Technical Information http://www.cvtisr.sk/en.html?page_id=58. A total of 37 Slovak HEIs were included in the research sample - 20 public, 12 private, 3 state and 2 foreign.

The questionnaire was structured along four different types of questions:

- What is HEIs attitude toward knowledge management? In this part we wanted to know if HEIs understand the concept of knowledge management, what benefits it brings to the institution and stakeholders, etc.
- Examination of HEIs implementation of KM at institutional level.
- Communication of HEIs about initiatives, projects, and other KM-related issues. Special note was given toward three group of stakeholders: employees, students and external stakeholders.
- General information about the institution.

Out of the 37 questionnaires sent, 19 questionnaires (51%) were returned and and the responses could be used. Because of the low return rate, examination of websites for relevant directives, guidelines etc., was added to supplement the questionnaires (website analysis was originally intended for analysis of communication of HEIs only).

When looking at the communication of HEIs about KM, websites of additional 103 faculties of public HEIs, 8 faculties of private HEIs, and 4 faculties of state HEIs were included in the examination. The two foreign HEIs did not have any faculty. To collect and analyze data from the websites of Slovak HEIs, content analysis, defined as a research technique for making replicable and valid inferences from texts or other meaningful matter to the contexts of their use (Krippendorf, 2013), was used. The combination of keywords were used to look at each area of KM that was examined, as shown in Table 1.

Tab. 1 Keyword combination used to examine each of the KM areas

Variable (area)	Keywords used
Knowledge creation (KC)	build knowledge, building knowledge, create knowledge, creating knowledge, generate knowledge, generating knowledge, acquire knowledge, acquiring knowledge, improve knowledge, improving knowledge, increase knowledge, increasing knowledge, develop knowledge, developing knowledge, expand knowledge, expanding knowledge, gain knowledge, gaining knowledge, knowledge building, knowledge creation, knowledge expansion, knowledge acquisition, knowledge generation
Knowledge retention (KR)	knowledge retention, knowledge capture, knowledge base, retain knowledge, retaining knowledge, retention of knowledge, capture knowledge, capturing knowledge, body of knowledge
Knowledge sharing (KS)	knowledge culture, knowledge sharing, knowledge transfer, knowledge exchange, knowledge dissemination, knowledge application, sharing knowledge, apply knowledge, applying knowledge, share knowledge, dissemination of knowledge, disseminate knowledge, transfer knowledge, transfer of knowledge
Knowledge management (KM)	Implement knowledge, manage knowledge, managing knowledge, knowledge implementation, knowledge management

Source: in form A. Miklošík, 2019, p. 177

For each of the variables, all the keywords from Table 1, closely related to the examined area, were used as search strings. The number of online resources for each category consisted of the total of the number of online resources containing each of the keywords listed in Table 1. Keywords were entered in the Slovak language when performing the data collection (when available, all possible Slovak equivalents were used). This enabled the researchers to include documents from all HEIs' websites, as not all of them operated an English version. Keywords listed in Table 1 represent their English equivalent.

The chi-square test of independence was used to analyze the two-way contingency table for each variable combination to determine whether there is an association between two variables of interest. If the result was significant, indicating an association between the categories of the two variables, then post-hoc analysis was applied to identify the categories producing a significant result. In the two-way tables where cell counts equaled 0, violating a fundamental assumption of the Chi-Square test of independence, Fisher's Exact Test was used to validate the results of the Chi-Square test. To determine associations between variables that included Size and Age, the sample consisted of 35 HEIs (the Size and Age could not be determined for the two foreign HEIs).

2 Results and Discussion

Higher education institutions are considered to be knowledge-intensive organizations (Howell and Annansingh, 2013), knowledge-creating institutions and in the knowledge business (Rowley, 2000). They create new knowledge through research, disseminate knowledge through teaching and learning and transfer knowledge through consultancies, cross-pollination between research and business, communication, popularization of science and job creation through spin-offs (Alexandropoulou et al., 2009; Fullwood et al., 2013).

To be able to fulfill all these functions to the full capacity in today's environment, HEIs need to implement KM. Implementation of knowledge management has four important factors - culture, structure, people, and technology. (Lee, H. & dan Choi, B., 2003) Therefore it is not enough to implement knowledge management system, but users and culture of the system should also be considered so that the implementation of knowledge management system is effective.

2.1 Awareness of knowledge management and its implementation at Slovak HEIs

HEIs in Slovakia operate in highly competitive markets. The competition extends outside the boundaries of Slovakia, as Slovak HEIs also compete within HEIs in other EU countries. There are two types of HEIs in Slovakia, namely universities and colleges, with larger organizations consisting of faculties and departments. Regarding ownership, these HEIs are categorized as public, private, state, and foreign. The HEIs develop and offer two main products to their customers, namely a) education, where students represent the customers and b) research results, where a different spectrum of organizations, companies, government etc. form the customer and partner base.

Out of the 37 Slovak HEIs participating in the study, 22 declare the need for knowledge management in some for in one of their program documents – bylaws, directives or guidelines. This declaration is found most in documents of public HEIs (85%). Private and state HEIs are relatively far behind with 33.3% of institutions declaring the need for KM implementation, and foreign HEIs are not mentioning the need at all. (Table 1)

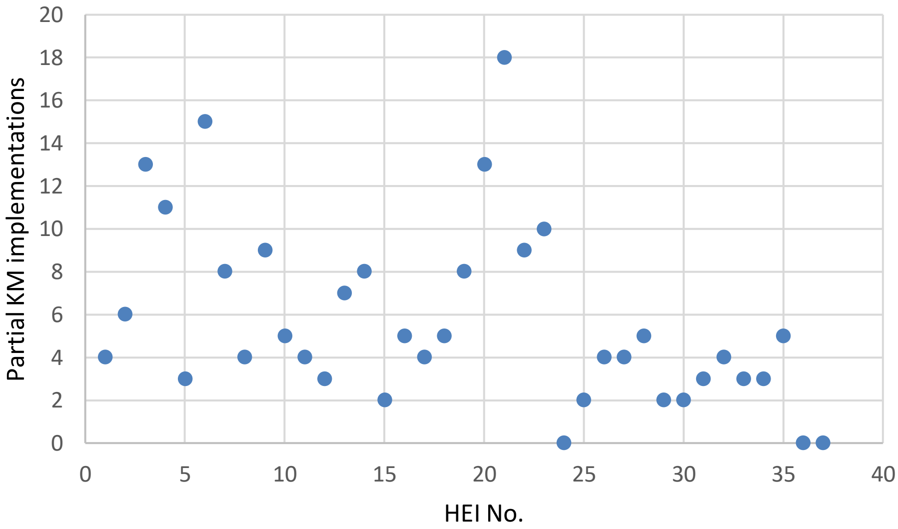
Tab. 2 Awareness of KM and its implementation

Type of HEI	Total HEIs	Declare need of KM in program documents	Have implemented complex KM solution	Have partial KM implementation in selected areas
Public	20	17	0	20
Private	12	4	0	11
State	3	1	0	3
Foreign	2	0	0	N/A

Source: author's research

Although many HEIs declare the need for KM, none of the participants in the study had a complex KM solution implemented (some of the HEIs have declared the need for KM solutions for many yoars, the oldest document found to declare it was from year 2007). Partial solutions of KM best practices have been found implemented at many HEIs, even on those, that don't declare the need for complex KM solutions. Many of those are centered around the area of information technology infrastructure and structure (roles and responsibilities). As shown in Graph 1, The number of areas, that have implemented KM even partially is different at each HEI. The areas, that have the least number of standards implemented are culture and people (employees).

Graph 1 Partial KM implementations at HEIs



Source: author's research

The data for foreign HEIs could not be obtained, so assessment of partial implementations could not be done.

2.2 Communication of knowledge management at Slovak HEIs

Marketing communication usually represents the most developed part of HEIs' marketing mix. Marketing communication of Slovak HEIs is conducted on the top level (institutional), and the faculty level. An organization's website represents a fundamental tool in its marketing communication mix. For HEIs, information in any form published on the websites of the school and its faculties is the centerpiece of their integrated communication. The often ineffective and inconsistent on-line presence, when managed, shows an institution in step with the times and closely related to its members (Dal Buono & Fortezza, 2017).

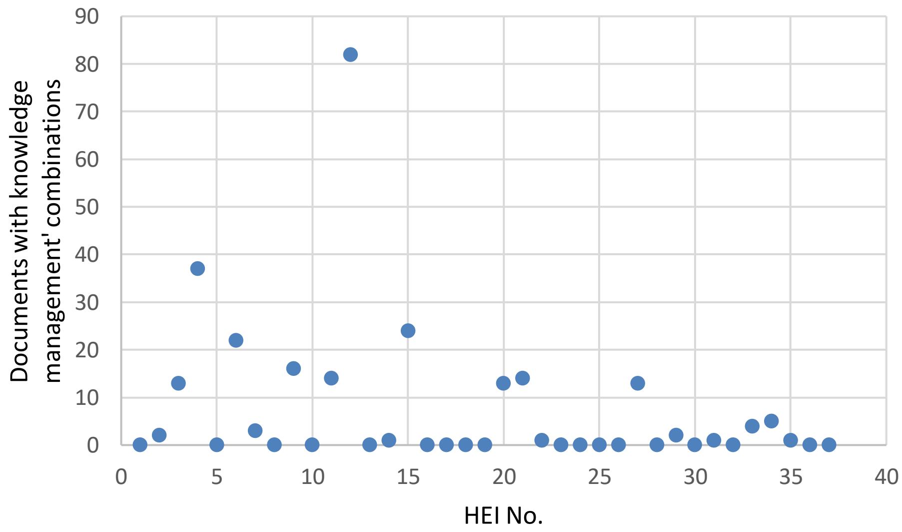
Stakeholders of HEI use both cross-session and cross-device searches to complete their information research. To be sure that the HEI remains considered within the decision-making process, its websites needs to be visible when clients search for a new school, for an academic partner for product development and co-creation or any other query.

All 37 HEIs operate a website on their own 2nd level domain name. This means that the structure of their website is deep and consists of multiple pages, organized into a logical hierarchy.

The frequency of the occurrence of the standalone keyword "knowledge" in available resources on these websites may already indicate the reflection of knowledge culture in the communications of the HEI. However, these general occurrences related to a broad spectrum of contexts. The keyword was found in educational resources about certain classes, themes of diploma theses, academic publications or also, which correlates with the topic of this paper, reports, updates, and other communications channeled towards HEIs' stakeholders. The number of website resources containing this keyword varied from 2 to 297, with the mean 98.14, and median 44. Standard deviation s=89.14 indicates that the differences between HEIs are quite substantial.

Following this general indication, all occurrences of keyword combinations specifically designated to assess the level communications that relate to the area of 'knowledge management' and reflect the knowledge culture of the HEI were analyzed. For each keyword from Table 1, the presence of the keyword in all website resources was determined and the number of resources/pages containing at least one occurrence of this keywords was returned. Values range from 0 to 82, with the mean and median values being lower (mean 7.24, median 1). Standard deviation is lower (s=15.09). As Graph 2 indicates, there are many HEIs were the number of occurrences is very low, with all of them, except one, under 40.

Graph 2 Distribution of values for variable 'knowledge management'



Source: author's research

Table 3 shows descriptive statistics revealing the distribution of values for variables from Table 1. HEIs communicated about topics related to knowledge creation (KC) more than about the three other topics. Within the topic of knowledge creation, there also were more notable differences between HEIs, as indicated by higher values for variance and standard deviation.

Tab. 3 Descriptive statistics for variable KC, KR, KS and KM at HEIs level

	KC	KR	KS	KM
Min	0	0	0	0
Max	196	72	74	82
Mean	11.65	3.11	4.57	7.24

Median	2	0	1	1
Variance	1076.46	139.32	159.09	234.13
St deviation	32.81	11.80	12.61	15.30

Source: author's research

The results for HEIs websites show a dire situation in communication about knowledge management issues to their stakeholders. To be able to look at the full picture, we analyzed the same data for all the faculties of the HEIs. (Table 4)

Tab. 4 Descriptive statistics for variable KC, KR, KS and KM at faculties level

	KC	KR	KS	KM
Min	0	0	0	0
Max	79	24	40	46
Mean	5.43	1.38	2.77	3.45
Median	1	0	0	0
Variance	145.58	12.31	37.75	84.77
St deviation	12.07	3.51	6.14	9.21

Source: author's research

The results showing the dispersion of values indicate that the differences between the intensity of KM communications at the faculty level are less apparent than those at the top level of the HEI main website, but it also shows, that faculties are universally not the main holders of KM initiatives.

Conclusion

When assessing the KM awareness of Slovak HEIs, we must acknowledge the relatively high level of awareness at the public HEIs (85%). Often, it's not only declarative awareness, but many institutions actively take steps to improve their KM issues in different areas. The main areas, that are focused on by these institutions are information technology environment and structure (roles and responsibilities). The most overlooked areas were culture (with lack of directives and guidelines for employees as well as other stakeholders) as well as the area of employees (with no motivation, no clear guidelines, etc.). Private and state HEIs are in not only implementation, but acknowledgement of KM importance much behind the public HEIs. Only 33% of them even acknowledge KM importance and declare to try to implement it.

Another important factor of KM implementation is communication of KM related issues to their stakeholders, internal as well as external. This is an area, where all the Slovak HEIs lag behind HEIs from other countries. The fact, that most websites of HEIs or their faculties lack any factual information about implementation and guidelines for KM areas makes it hard for employees, students and any other stakeholder effectively engage the HEIs in many areas (project participation, cooperation, even student recruitment, etc.).

The results have also confirmed that there are many HEIs that utilize their websites as a channel for communication KM-related topics. Substantial differences in the level of these communications have been revealed by the analyzed data. Dependencies between variables have also been shown resulting in the finding that the extent to which HEIs use this communication with stakeholders is affected by their type, size and age.

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Strategic policy decisions to improve competitiveness of countries by development of artificial intelligence[1]

Tatiana Hlušková[2]

Abstract

The aim of the paper is to analyze and compare the AI (artificial intelligence) strategies of Slovakia, Czech Republic, Germany and China in terms of their possible effect on competitiveness of these countries. Artificial intelligence is a common factor in many of the rapid changes occuring in economy and society. Each of the strategies reflect specific environment in the aforementioned states, but there are also similarities such as raising public awareness of AI and pilot projects of its use in practice. However, the key to competitiveness will be in constant adaptation to technological changes, not in long-term static comparative advantages.

Key words

artificial intelligence, competitiveness, government policy

JEL Classification: O32, O38

Introduction

The world is undergoing turbulent changes which affect not only the economy, but the whole way of life in an unprecedented way. The common factor for these changes is the usage of artificial intelligence (AI). In economy, the most visible expression is the fourth industrial revolution (also known as Industry 4.0) with the vision of complete automation of manufacturing. On the personal level, smartphones and various software apps, self-driving vehicles or Internet of Things are the factors closely associated with the AI. Nevertheless, all of these innovations are in the range of narrow AI, which is focused only on one task. This first development stage brings serious changes into economy and everyday life, however, the other two stages – artificial general- and super intelligence can completely transform the economic system and the role of mankind. The problem is that the nature of these changes cannot be predicted with a sufficient level of probability.

Slovakia is the country with the highest threat of losing jobs to automation among OECD countries. Another risk factor is an extreme openness of the economy and its inclusion in the global value chains. This means that Slovak companies – whether those with Slovak owners or affiliates of foreign investors – have to adjust to changes already implemented by their suppliers and customers. With the relatively high share of manufacturing on Slovak production and exports, it seems inevitable that producers will have to adopt the Industry 4.0 principles as soon as possible.

The reshaping of economy of this extent has to be mirrored in reshaping of government policies as well. According to the European Commission, every meber country has to have a national AI strategy approved by June 2019. Nevertheless, the implementation of these strategies should be swift, otherwise the government policies would only try to catch up the market development.

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[1] VEGA No. 1/0546/17 (2017-2019): Impact of the geopolitical changes on enforcement of the EU strategic foreign trade interests (with implications for the Slovak economy)

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1 Methodology

The aim of the paper is to analyze and compare the AI strategies of Slovakia, Czech Republic, Germany and China in terms of their possible effect on competitiveness of these countries. The Czech Republic was chosen as one of Slovakia's main trading partners and the country with similarly strong position of industrial production in the structure of economy. Germany is the main trading partner of Slovakia and one of the main investors in the country. Automotive industry is one of the most prominent in all of the three countries. China is one of the leading countries in AI development and its application in the economy and society as a whole. Another reason for the choice of these states for the comparison is that they adopted comprehensive AI strategies as a basis for their actions in this field. Scientific methods of analysis and synthesis, induction and deduction were used while writing of this paper. Their outcomes were assessed by the method of comparison.

2 Results and Discussion

Authors focusing on the economic impacts of artificial intelligence have several fields of interest, predominantly impact of AI on human labour, company management and government policy (including competition policy).

Agraval, Gans and Goldfarb (2018) refer to two kinds of challenges that the policy must address: policies affecting diffusion patterns and policies addressing consequences of this diffusion. As for the diffusion policy, the authors deem privacy, trade and liability as the most relevant. They also stress the need to balance the diffusion and retention of societal values. The main consequences of AI proliferation will be on jobs, inequality and competition. Education policy, social safety net and antitrust policy will be the most important in solving the potential problems.

Cockburn, Henderson and Stern (2018) point out that deep learning as one of important aspects of AI development is an invention in the method of invention itself. Moreover, the companies in different industries which will reap the benefits of deep learning as the first might create a barrier to entry for other firms not only by the deep learning usage, but also by generating data about i. e. consumer behaviour which will not be available to their competitors. The key challenge therefore would be to ensure that the AI would not create monopols and barriers to entry in various industries.

DeCanio (2016) states that precautionary foresight is not a strength of today's governance structures. However, the AI expansion is happening regardless of policies or public opinion. Rising elasticity of substitution between AI and human workforce will likely decrease wages and therefore increase inequality unless the returns on AI assets are spread across the population.

Dirican (2015) stresses the innovations in customer-relationship management such as hologram technology as a new delivery and sales channel. Companies and governments should adapt to these changes as quickly as possible. He also mentions concepts and theories such as Philips curve, purchasing power parity, GDP or inflation that will face changes in the near future.

Holtel (2016) argues that when the AI is taken as a problem that needs to be solved within the company, it does not have any right or wrong solution. It is because the company has to consider societal and organizational impact of AI while involving many stakeholders with different levels of understanding of the problem and its solutions. He advises the firms to involve all stakeholders, talk about values and move fast forward from failed attempts of solution. Discussing the third point, he mentions policy makers as an example of those who choose the best available option instead of thinking about all possible options.

Horowitz et al. (2018) advise the U.S. government to create national AI strategy to take advantage of benefits while mitigating disruptive effects of AI. They also recommend to develop metrics to evaluate scope and effectiveness of government AI funding, to integrate AI tools in government operations or take the lead in developing norms and principles internationally for the safe and responsible use of AI along with other like-minded countries. On data, the authors comment that data regulations must balance a range of competing interests: protection of individual privacy, competitiveness, support of innovation, and national advantage.

In terms of human-machine collaboration, Jarrahi (2019) notes that machines, i. e. AI depend upon humans when subconscious decision heuristics are necessary to evaluate and facilitate the decision outcomes. AI still cannot outperform humans in tasks that require intuitive thinking processes, namely in ambiguous or equivocal cases. Those cases use to be i. e. novel situations occurring on every level of company management. AI therefore does not replace human decision-making but rather aid it.

According to Makridakis (2017), AI revolution will probably have greater impact than industrial and digital revolutions combined. The challenge in dealing with this development will be in what could be done for maximum exploitation of the benefits while avoiding the negative consequences. The author highlights two positive aspects of this challenge: the world understands the dangers and has a lot of time to deal with them. Even though the probability of occurrence of dangers such as end of human race is small, the preventive actions need to be taken because of their serious potential impacts. As the AI proliferation cannot be stopped, the only possible solution would be to identify the risks involved and prepare effective actions to avoid the negative consequences.

Plastino and Purdy (2018) suggest that AI can work not only as a productivity enhancer, but it can as well be an entirely new production factor, because it can add to the profits of any industry via these ways: intelligent automation, augmenting labor and capital and accelerating innovation. The three sectors with the highest potential gains are information and communication, manufacturing and financial services. In recruitment, new human employees should possess skills as expert judgment, communication and creative thinking that complement AI "co-workers".

Soni et al. (2019) attribute the growth of AI to two major factors: the increasing availability of big data and hardware accelerators (GPUs – graphics processing units and TPUs – tensor processing units developed for neural network machine learning). The AI offers possibilities of process innovations and also product innovations. Nevertheless, the security, privacy and ethical issues need to be addressed. The authors also point out to possible "AI divide" between regions adapting the AI in economy and those who do not. The divide would deepen the inequality in economic, cultural and social sectors and will present the "dark side" of AI.

Varian (2018) focuses on machine learning which is central to the AI development and a sector which will possibly create a lot of new employment opportunities in the near future. The author also underlines the rare feature of the data industry (or, more precisely, cloud computing) that companies which need large data processing power use to sell their additional capacity to other, typically smaller firms. This model of building excessive capacity and then selling it to competitors for their use is rare in traditional industries such as automotive.

Webster and Ivanov (2019) expect that the importance of human labour in production of goods and services will gradually decrease. The competitive advantage of humans in the labour market will be the ability to create, to interpret, and to work with others. On the government level, the shift from human labour to AI and rise of flexible employment contracts or their entirely new forms (e. g., as in sharing economy) would have to be answered by adjustment of the taxation system. The authors also warn about the possible lack of ability to develop skills needed for "the new economy".

To sum up, institutions as government and education system will have to change to be relevant and consistent with the needs of a society increasingly influenced by the AI and automation. In the light of these theoretical findings, other subsections of the paper analyze the AI strategies of China, Czech Republic, Germany and Slovakia.

2.1 China – A New Generation of Artificial Intelligence Development Plan

The strategy explicitly mentions the aim to build China's first mover advantage in AI development (State Council of China, 2017). It is dedicated to all levels of governments and municipalities and was approved by the State Council in July 2017. Responsibility for implementation is on the Ministry of Science and Technology along with other relevant institutions. The vision is to create a "data-driven, man-machine collaborated, cross-border integrated, and collective intelligent economy". However, the plan is more generalized and written from more theoretical point of view than other documents analyzed in this paper.

In the beginning, it lists the strengths of the country in the field of AI as voice recognition, visual recognition technology, adaptive autonomous learning, intuitive perception, comprehensive reasoning, mixed intelligence and group intelligence. In the number of international scientific papers published and the amount of patented inventions, China has been ranked second in the world. The country deems combination of accelerating accumulation of technical capacity, massive data resources, huge application requirements and open market environment as its unique comparative advantage. However, lack of major original results, gaps in the basic theory, the core algorithm, key equipment, high-end chips, major products and systems, components, software and interface are perceived as weaknesses.

The strategy is bulit on four basic principles: leadership of technology, systematic layouts (using „the advantages of socialist system“), market orientation, open source. It also mentions the Three in One principle: promotion of research and development, product applications and industrial training. China has three strategic goals differentiated by their deadlines.

1. By 2020, to keep up the overall technology and application of artificial intelligence with the advanced level of the world.

2. By 2025, to achieve a major breakthrough in artificial intelligence basic theory, and parts of the technology and application will be at a worldleading level. Make artificial intelligence become the main driving force of China's industrial upgrading and economic transformation, and make positive progress in the construction of an artificial intelligence society.

3. By 2030, make artificial intelligence theory, technology and application achieve the world's leading level to be the major artificial intelligence innovation center of the world, intelligent economy, intelligent society achieve remarkable results, and lay an important foundation for China's entry into the forefront of the innovative countries and economic powers.

Contrary to the other strategies, China dedicated one part of the strategy to theoretical aspects of AI and their development. These aspects include large data intelligence theory, group intelligence theory, advanced machine learning theory or braint inteligent computing theory. It is important to note that the country also want to focus on quantum computing, which is one of the most promising fields of research when it comes to evolution from narrow to general AI. As in the case of Slovakia, natural language processing is an issue.

Special attention is given to the talent support and education, including cooperation with AI research institutions abroad. As in the Czech Republic and Slovakia, one of the goals is to increase enrollment in master and doctoral study programmes in AI. The plan is specifically focused on various industries and AI fields, which differentiates it from other three strategies. In AI emerging industries, it mentions intelligent hardware and software, smart robots, intelligent vehicles, Internet of Things, virtual and augmented reality and smart terminals such as watches, glasses or headphones. As for the industries, the aim is to integrate AI and innovations. Basically every sector important for the Chinese economy should be “intelligent” or “smart”: manufacturing, agriculture, logistics, finance, factories, cities and even homes. Support for the SMEs' development towards AI should be achieved via outsourcing of manufacturing capacities. The network of innovation clusters and National AI Industry Park is another measure. Society is mentioned many times throughout the plan, but more details are stated bout education, medical care and protection of environment. The government should be “intelligent” as well and the AI should help to solve complex problems such as policy assessment, risk warning and emergency response.

Issues which are listed exclusively in the Chinese strategy are food safety protection, natural disasters, energy effectiveness and military. Part on the infrastructure system specifically mentions 5G network, which is a comparative advantage of China to virtually every country except USA. Social credit system to evaluate Chinese citizens is connected with technologies such as video image and biometric identification technology, intelligent security and police products and intelligent monitoring platform, which also should use AI. As in the other strategies, regulations and ethical framework should be adjusted to support the AI development (e. g., ethical framework for man-computer collaboration). China does not want to be aside of international activities in this field and wants to adhere to international regulations in this area (when available) and to participate in AI governance.

2.2 Czech Republic – National Strategy of AI

The strategy was approved in March 2019 (Ministry of Industry and Trade, 2019). It was created in cooperation with academic and private sector. The main coordinator is the Ministry of Industry and Trade, which will create Committee on AI. The strategy builds on the EU documents such as Coordinated Plan on Artificial Intelligence, and strategies Digital Czechia and Innovation Strategy of the Czech Republic 2019 - 2030. The strategy is basically a list of aims and measures with a brief introduction on current situation in each of the seven chapters. In every chapter, goals of the strategy are divided into short-term (by 2021), mid-term (by 2027) and long-term (by 2035). The years are connected with the EU funds programming period. The three main goals of the strategy are:

1. The Czech Republic will be one of the European and world leaders in the research of AI in cybersecurity, defense, industrial production, data, robotics and human-centric AI.

2. Czech economy will climb the value chain to a production with higher productivity and more value added, with the help of mainly SME automation and rise of new national champions.

3. Czech society will evenly benefit from the results of AI development, with the support of equal opportunities and personal qualifications without any form of discrimination.

The first chapter is dedicated to the support and concentration of science, research and development. The comparative advantage of the country is the excellent basic and applied AI research. Building of European Centre of Excellence in AI (the V4 countries are also mentioned in this case as in Slovak Action Plan) is a key goal, along with the creation of Digital Innovation Hubs as centers of knowledge transfer. The commitment to increase the number of graduates in AI study programmes is also presented (along with the improvement of conditions for researchers from abroad). The second chapter is focused on the investment and financing of AI ecosystem (e. g., support of AI start-ups, revison of legislation to enable funding by business angels or venture capital or support for creation of Czech-foreign joint ventures). The third chapter has a broad scope of competitiveness of the country (pilot projects of AI usage in public administration, third-country investment facilitation, relocation of Czech citizens from abroad). The fourth chapter aims at human capital and education, with emphasis on lifelong learning and re-skilling and the continuous impact assessment of automation and AI on labour market and society. Impacts of AI on labour market and social system is a topic of the fifth chapter. The measures are focused support of self-employment and entrepreneurship, flexible work engagements and solutions of automation impact on taxation and social insurance. The sixth chapter talks about the legal, ethical and security issues and consumer protection. An analysis of legislation obstacles to AI development should be conducted along with analysis on the data availability. Regulatory sandboxes and goals similar to the future proof regulation (as in the Slovak Action Plan) are also included. The final chapter is about international cooperation, namely ith the V4 countries and the participation on the level of EU, UN or OECD.

2.3 Germany – Artificial Intelligence Strategy

The strategy was approved by the Federal Government in November 2018 (Federal Government of Germany, 2018). It was created in cooperation of several ministries: Federal Ministry of Education and Research, the Federal Ministry for Economic Affairs and Energy, and the Federal Ministry of Labour and Social Affairs. The writing of the strategy was preceded by the nationwide online consultation. The aim of the Federal Government is to strengthen Germany's position as a centre for AI research. The strength of the country can be found in its broad research base.

The strategy is focused on the "weak" or narrow AI in these fields: deduction systems and machine-based proofs, knowledge-based systems, pattern analysis and pattern recognition, robotics and smart multimodal human-machine interaction. The vision is to „safeguard Germany's outstanding position as a research centre, to build up the competitiveness of German industry, and to promote the many ways to use AI in all parts of society in order to achieve tangible progress in society in the interest of its citizens." The funds for the implementation of strategy are 3 bil. € up to 2025. The goals stem from the situation in internal but also external environment and they include also the cooperation at the EU level.

1. To make Germany and Europe a leading centre for AI and thus help safeguard Germany's competitiveness in the future: the broader than national focus is documented by the commitment to develop Franco-German research and development network and formation of European innovation cluster. The Government also wants to extend the network of Centres of Excellence for AI to at least twelve. German Research Centre for AI is the largest AI research institute in the world, with more than 70 spin-off companies. Financial support will be in the form of Tech Growth Initiative (venture capital) and targeted support for start-ups. This goal is also about building of a trustworthy data and analysis infrastructure.

2. Responsible development and use of AI which serves the good of society: the international context is stressed also by the establishment of German observatory for artificial intelligence and support to formation of similar structures at European and international level and the initiation of European and transatlantic dialogue on the use of AI in the workplace. This goal is mainly work-centric, as other initiatives include fostering the skill of the workforce and the creation of Skilled Labour Strategy. The country even plans to approve the Opportunities for Qualifications act which aims to provide large-scale re-qualification for workers. This goal also mentions the position of works councils in the introduction and use of AI in companies (e. g., in the use of AI for monitoring of employee's performance). In terms of environment and climate, the government plans to initiate 50 flagship applications. The regional disparities (namely between former East and West Germany) will be addressed by the Centres for the Future aimed at skills improvement. The government also wants to evolve digital skills such as coding from an early age.

3. Integrate AI in society in ethical, legal, cultural and institutional terms in the context of a broad societal dialogue and active political measures: the third goal can be also described as to facilitate the acceptation of AI in society. To achieve this the government plans to engage in broad discussion with data protection authorities, business associations, science and civil society.

The subject of security and data security specifically is present throughout the strategy, with the accent on the right of people to control their personal data. Large sets of quality data are a prerequisite for any AI to work properly. Government data will be therefore open by default. Proposal of guidelines to for data governance will be one of the tasks of the Commission on Competition Law 4.0. The country wants to build on its leadership in Industry 4.0 (a German concept originally) and to become a leader also in the AI applications in this area with the branding “AI made in Germany” as a future measure of quality. The responsible use of AI in terms of ethics is another horizontal aspect of the strategy, as the Government commits to take into account the recommendations of the Data Ethics Commission. This goes hand in hand with raising awareness on the limits of the AI use and creation and the analysis of regulatory framework fitness for the widespread use of AI in economy and whole society. In order for the AI to be trustworthy in the eyes of society, it must be evident how it makes decisions in terms of criteria, objectives and logic.

In fact, all of the measures are considered to be horizontal in their nature and the Government also invites other government levels (Länder), business, academia and civil society to participate in the implementation of this strategy. As mentioned in the introduction to the paper, the future development of AI is really difficult to predict and this is why Germany has chosen rather to build an ecosystem for AI development than focusing on various applications.

The German strategy also draws from the Mittelstand – the unique strength of German economy. This category of companies cannot be described by merely categorizing them by their size as SMEs. More emphasis should be given on the corporate culture and values such as family ownership and focus on customers, region and society. The risk is that many of these companies have no experience with AI in their operations. Therefore the Mittelstand 4.0 centres of excellence wil have AI trainers who will support AI usage in SMEs. One of the ways how to achieve it is the establishment of test beds and living labs (e. g., for autonomous driving) which enable companies to try new technologies and business models in real life and the regulators to observe regulatory sandboxes – tests of how would the modified legislation work in practice. Regulatory sandbox can actually provide an answer if the new legislation should be used for the whole environment, not only in certain place and time.

2.4 Slovakia – Action Plan for Digital Transformation of Slovakia 2019 - 2022

The Action Plan is in process of approval as of June 25, 2019. Development of AI is one part of the Action Plan (Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatization, 2019), whose focus is broader, namely education, data management (including in public administration) and innovation. Every measure in the plan has an institution responsible for the implementation, specific date of implementation and the source of financing. In this viewpoint, it is the most specific strategy of all four compared. The entities responsible for implementation are Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatization, Ministry of Education, Science, Research and Sport and Ministry of Economy. The priority of the plan dedicated to AI is "**We will support the development of AI"**. It is divided into two topics.

1. Research and education in AI: the ambition is to enable AI experts from home and abroad to work in Slovakia and to raise awareness of AI in public. As Slovakia is relatively small country, the emphasis is given to participation in the EU initiatives, such as European Centres of Excellence. Based on limited AI research capacity in public and private sector, the aim is to cooperate with other V4 countries. In the education policy, a coordination committee should be created to advise on worldwide trends and measures to modify the education system in Slovakia. Natural language processing tools should be supported in order to clarify Slovak regulatory framework (Slovak language with relatively small number of users can be a barrier in the AI development efforts). As in China and Germany, the government wants to prepare pilot projects to solve issues with important impact on society which can be facilitated by AI. First results should be delivered in a year from the beginning and the project should last no more than five years. Basic, applied and multidisciplinary research would be financed also by schemes from the state budget and EU funds. The number of students AI study fields should be increased by courses in English language and higher number of foreign students. On the other hand, the high quality study programmes should decrease the number of Slovak students studying abroad.

2. Higher economic growth by using of AI: the ambition is to make use of AI experts to create an industry with high value added and a potential for global expansion. This topic is focused on the regulatory environment and private sector support. As for the latter, the plan aims to create a roadmap for companies which would like to implement AI in their business, but lack information on how they can do it. Another measure is to improve conditions for research centers and to build a strong start-up ecosystem, including an improvement of intellectual property protection and law enforcement. The analysis of regulatory environment should be conducted in terms of existing legal obstacles to AI development, scope of open data and framework for intellectual property rights. Transparent and ethical use of AI is another measure, including the protection of personal data. The government also wants to make a public survey on the perception of AI (expectations and threats concerning AI). Policy to support AI trustworthiness will be build up on the survey results. The independent Permanent Committee on Ethics and Regulation of AI will assess and comment projects involving AI usage. It is important to note that the creation of methodology for future proof regulations (regulations which do not inhibit innovation but also protect the economy from negative effects of unregulated innovation) is a measure included in another part of the Action Plan.

2.5 Comparison of the AI strategies

As can be seen in table 1, pilot projects and raising awareness of AI are common topics in all of the strategies. This might be result of relative novelty of the subject and the need to test in on smaller scales first. On the other hand, continuous impact assessments of AI usage, which would provide opportunity for modification of strategy during its implementation, can be found only in the Czech strategy. High importance is given to SMEs and the analysis of regulatory environment.

Tab. 1 Fields of action in AI strategies

Field of action	**China**	**Czech Republic**	**Germany**	**Slovakia**
Analysis of regulatory environment		X	X	X
Commission on AI ethics and regulation			X	X
Continuous Impact assessments		X		
Data protection	X		X	
Environment and climate	X		X	
Inclusion of different government levels	X		X	
Increase enrollment of university students in AI fields	X	X		X
Intellectual property protection	X			X
Joint-venture creation		X	X	
Natural language processing	X			X
Quantum computing	X			
Pilot projects for AI usage	X	X	X	X
Raise awareness of AI in public	X	X	X	X
Regulatory sandboxes/living labs		X	X	
Roadmap for companies about AI usage				X
Sectoral approach	X			
Self-employed		X	X	
SMEs	X	X	X	

Source: author based on Federal Government of Germany (2018), Ministry of Industry and Trade (2019), Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatization (2019) and State Council of China (2017).

The significance of education can be seen in commitment to increase enrollment of students in AI fields. Majority of fields of action can be found in at least two strategies, with the exception of sectoral approach, quantum computing and roadmap for companies. It is evident that the countries recognize the need to address the topic of AI from a broad perspective, combining economic and social point of view, because AI will deeply affect both of these environments. Each of the four countries adapts a specific set of measures which are more or less accustomed to the situation in respective states. However, despite some exceptions (Germany's Mittelstand) the strategies do not seem to draw from the unique strengths of the countries (none of them has SWOT analysis included). It can be assumed that in the near future, the competitiveness of countries will depend on their ability to adapt to the technology innovations represented mainly by the AI development. This is extremely important for the countries dependent on industry to a large extent, notably Slovakia and the Czech Republic, but also Germany. Chinese strategy shows that it wants to be at the forefront of the AI revolution and focus on variety of different fields of AI use, many of them unique for China among the analyzed countries. It is made possible by their vast resources – whether human capital or financing – which they are willing to dedicate to the strategy implementation.

Conclusion

The implementation is crucial for every country, but if the strategy is ambitious yet realistic in the strengths and weaknesses, it gives the country a better starting line. The most important measure to be taken is the adjustment of education system on all of its stages in order to prepare labour force for the work in future, not for today, as is often the shortcoming of education in many countries. Priority should be also given to analysis and optimization of regulatory environment which should encourage innovation but at the same time limit its negative impacts on various groups of stakeholders. To sum up, if the countries want to stay competitive in the rapidly changing world, they should be prepared to be constantly changing their policies accordingly. As for Slovakia, the focus should be given only to certain problems or aspects of AI, as the country does not have enough resources or capacities to cover broader AI context on a competitive level. The choice should be made based on current situation and already existing fields of research which seem to be promising. The role of the state administration should be in creation of a platform for various stakeholders from business and academic sector and to ensure that the regulation concerning AI is future-proof and would not inhibit the research and its application in practice.

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A Contractual Penalty as a mean of securing the Obligations of private Law

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Abstract

Contracts are concluded to be fulfilled. The law enforcement agencies reinforce the creditor's position and allow the debtor's claim against the debtor to be fulfilled. The contractual penalty is one of the most frequently used security means in both civil and commercial law. This popularity is mainly due to the simplicity of its arrangement, while the existence of assets serving to secure the claim is not required. The contribution analyzes the functions of the contractual penalty as well as the relationship of the contractual penalty to the damages and interest on late payment.

Key words

Contract, contractual penalty, commitment, compensation, default interest, commercial law, civil law

JEL Classification: K39

Introduction

The principles of contractual liberty and freedom of entrepreneurship that are characteristic of a market economy are linked to the risk of non-compliance. When concluding contracts, the parties are aware that in the future, for some reason, a party that has assumed a contract obligation will not be able to meet its obligations.

The legal order of the Slovak Republic creates institutes that strengthen the creditor's position and ensure the satisfaction of his claims in a substitution way, unless the debtor is able or unwilling to fulfill his obligation properly and on time. In a particular case, a creditor may use multiple hedge institutes to secure his claim if their implementation is not mutually exclusive. Security law institutes are governed by both codes of private law, the Civil Code, and the Commercial Code. One of the security institutions is a contractual penalty, which can be characterized by the fact that it is an agreement-determined performance in the event of a breach of the secured obligation that the beneficiary is obliged to provide to the breach (Ovečková, 2011). In practice, the most frequent cases are those where the debtor's own fault the debt is not fulfilled at all or not in time or not properly. In particular, the purpose of the contractual penalty is to prevent the debtor from late performance, and is bound to breach the contractual obligation by the debtor.

The contractual penalty as a security institute is governed by the amendment to the Civil Code by Act no. 509/1991 Coll., With effect from 01.01.1992 and a special regulation in the Commercial Code, while the amendment in the Commercial Code has the character of a supplementary (subsidiary). For business-related relationships, the contractual penalties contained in the Commercial Code shall be applied preferentially, and only issues not provided by the Commercial Code shall be applied by the amendment to the Civil Code.

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1 Methodology

The aim of the article is to define the content of the contractual penalty institution as a mean of securing private law obligations. Another goal of the article is to analyze the relationship between the contractual penalty and the damages, the interest on late payment and the moderation right of the court in relation to the contractual penalty. The set goals require that to be fulfilled in a certain sequence, in a positive adjustment to defining the problem, holding it, and then analyzing it. The method of elaboration of the article is the description and analysis of security institutes, based on valid legal regulations, valid case law of Slovak and Czech courts, available professional legal literature.

2 Results and Discussion

The legal basis of a contractual penalty is the obligation to pay a certain amount in case that a contractual obligation has been breached by the parties in the case of a violation. If there is no contractual obligation, there may be no obligation, even if agreed by the parties, to pay the contractual penalty. This may be any contract concluded under the Civil Code, the Commercial Code, a special law, or an unnamed contract. The contractual penalty obligation is of an accessory nature, since its existence and consequences are linked to the existence of a major obligation relationship between the debtor and the creditor. In the absence of a principal obligation for any reason, the effects of an ancillary obligation that should have ensured the performance of the contractual obligation cannot arise (Fekete, 2011). The contractual penalty may be limited to a breach of an obligation. If such a restriction does not result from the contract, it must be assumed that the right to a contractual penalty arises in any breach of the contract, e.g. failure to fulfill obligations properly and on time

2.1 Contractual penalty functions

Defining the functions of a contractual penalty is important because, on the basis of their knowledge, its use in a particular case can be considered.

The primary function of the contractual penalty is its prevention or security feature. The purpose of the contractual penalty enshrined in the provisions of § 544 and § 545 of the Civil Code is to force the debtor to a proper fulfillment of the obligation with threat of the property penalty. In particular, a contractual penalty constitutes a threat to the debtor that, if he fails to fulfill his (in particular) contractual obligation, he is under an obligation to provide an agreed performance for that case, i.e. fine. The agreed contractual penalty is primarily intended to counter the breach of the obligation because if the obligation is fulfilled, the main function of the contractual penalty was spent (The Judgement of the Supreme Court of Slovak Republic , 2007).

The repressive or contractual penalty function applies when the contractual penalty acts as a lump sum compensation. Applying a contractual penalty as a flat-rate damages is much easier than applying damages through a damages institution. If the parties have agreed on a contractual penalty as a lump-sum compensation for damage incurred as a result of a breach of the secured obligation, the entitled party may only base its claim on the fact that the secured obligation has been breached.

The repressive (penalty) function of a contractual penalty constitutes a penalty for breach of the secured obligation, with the provision that pursuant to the provision of § 545 par. 1 of the Civil Penalty, the obligation secured by a contractual penalty shall not cease to exist.

2.2 Contractual Penalty Agreement

The legal regulation of the contractual penalty is contained in the Civil Code and the Commercial Code. In general, the relationship between the Civil Code and the Commercial Code is a relationship between a general rule (lex generalis) and a special regulation (lex specialis). The Commercial Code complements the regulation of the contractual penalty in the Civil Code. The supportive application of the modification of the contractual penalty from the Civil Code is due to the fact that the regulations of §300 to §303 are disposable.

As far as the form is concerned, the contractual penalty may be negotiated within the meaning of § 544 par. 2 of the Civil Code only in writing. This regulation is also applied to business relations, pursuant to § 272 para. 1 of the Commercial Code, e. i. written form is required by law (in this case the Civil Code). The contractual penalty agreement should have a simple written form that presupposes a document indicating the content of the relevant legal act. Mostly it will be a text. The written form of the contractual penalty agreement requires the signatures of the contracting parties in order for the written statement to take effect, namely the handwritten signature of the authorized persons. The authenticity of signatures does not need to be certified in the case of a contractual penalty agreement. However, the Act allows the handwritten signature to be replaced (§ 40 par. 3 of the Civil Code) by mechanical means - machine, print, or stamp. In case of failure to comply with the written form of the contractual penalty agreement required by law (§ 40 par. 1 of the Civil Code), the legal act shall be null and void.

The contractual penalty agreement must contain, in addition to the signing of the contracting parties, the obligatory requirements, which are the determination of the contractual obligation, the fulfillment of which the contractual penalty must secure and the determination of the contractual penalty or the method of its determination. The obligation to be fulfilled by the debtor and whose failure to comply is sanctioned by a contractual penalty must be lawful and must be met by the debtor.

The contractual penalty is a fine, which results from the regulation of § 544 par. 1 of the Civil Code, which refers to the "payment" of a fine, but also that the term fine is used for a fine. The determination of the amount of the contractual penalty or the method of its determination depends on the mutual agreement of the parties. In practice, when it comes to contractual penalties, it is sometimes difficult to determine it. It is important to require the clarity of the method of determining the contractual penalty at the moment of the contractual penalty agreement, so that this method can determine whether or not to set the contractual penalty or to calculate the specific amount of the contractual penalty. However, there is no decisive point in the occurrence of a contractual penalty agreement, as in the case of an agreement on a specific amount of the contractual penalty, when that amount is known at the time of the contractual penalty agreement and is fixed. In determining the method of determining the amount of a contractual penalty, the law merely requires that, at the time of the contractual penalty agreement, it is clear how the contractual penalty can be calculated when the contractual penalty is due.

The amount of the contractual penalty is not regulated in the Civil Code and the manner of its determination is not established either. A contractual penalty agreement must address this matter. In assessing the appropriateness of the contractual penalty, the value and significance of the obligation to be secured is taken into account. The amount of the contractual penalty can be expressed either by an agreed and unchanged amount, or linked to circumstances that the participants consider significant, but whose values are not known at the time the contract is concluded, e.g. share of the value of performance. Under § 544 of the Civil Code, a contractual penalty must be determined in such a way that its amount can be ascertained on the date of the breach of the contractual obligation, to which a specific one-off amount corresponding to the contractual penalty arrangement can be ascertained. This amount may not be included in the contract, but the method of determining it in the contract must allow the contractual penalty to be quantified by a lump sum at the time of the breach of the contractual obligation.

The Civil Code does not provide for a maximum amount of contractual penalty. At the same time, however, §545a stipulates that the court may impose a disproportionately high contractual penalty with regard to the importance and value of the secured obligation and § 301 of the Commercial Code for Business Obligations is based on the same principle.

The amount of the contractual penalty shall not contradict good morals and commercial obligations of the principles of fair trade. A contractual penalty, the amount of which exceeds the amount of the actual damage actually incurred, is disproportionate and void for conflict with good morals.

Another essential element of a contractual penalty agreement is the determination of the security obligation. A contractual penalty can be negotiated for any breach of the contractual obligation, both main and secondary. This range of obligations, which can be ensured by a contractual penalty, is not limited in any way (Ovečková, 2011). Consequently, a contractual penalty can be a single contractual obligation, but also a commitment as a whole. If the obligation to pay a contractual penalty is to be agreed upon in the contract, the contractual penalty arrangement must be unequivocal; arise in order to be secured by a contractual penalty (The Judgement of the Supreme Court of Czech republic, 2002).

2.3 Contractual penalty relationship to damages

The obligation to pay a contractual penalty is not dependent on the actual occurrence of the damage, i.e. the damage caused by the regulation of § 544 par. 1 of the Civil Code, the debtor is liable to pay the contractual penalty if he breached the secured obligation, even if the creditor did not incur the damage. Consequently, the negotiation of a contractual penalty favors the position of the creditor in that it does not have to prove the occurrence of the damage or its amount, since it covers its claim for damages with a contractual penalty. Thus, by negotiating a contractual penalty, potential damages can be excluded beforehand.

In case that the breach of the obligation ensured by the contractual penalty results in damage, the creditor is not generally entitled to claim compensation for it in addition to the contractual penalty. It follows that the contractual penalty can be combined in several ways.

The first way of dealing with the contractual penalty to damages is that nothing else has been agreed in this respect. In such a case, the creditor is not entitled to claim damages for breach of the obligation to which the contractual penalty applies. In this case, § 545 par.2 of the Civil Code provides for a contractual penalty to be a lump sum compensation claim, whereby the creditor can only demand payment of a contractual penalty, irrespective of whether the breach of the obligation arises damage to the creditor as well as irrespective of whether the amount of the contractual penalty .

The second way of dealing with the contractual penalty to damages is that it is agreed in the contractual penalty agreement that the creditor is entitled to compensation for the entire damage incurred in addition to the payment of the contractual penalty. This situation can be addressed in two ways. The first is that the parties agree that the contractual penalty will be set off against damages, and the creditor is entitled to damages in excess of the contractual penalty. The second is that the parties agree that the contractual penalty will not be set off against damages, in which case the creditor is entitled to a contractual penalty in addition to the claim for full compensation.

The third way to settle the contractual penalty for damages is to agree in the contractual penalty agreement that the creditor is entitled to claim damages and has the right to choose between a contractual penalty and damages, provided that the damage is in relation to the contractual penalty significantly higher, the creditor may choose to pay damages if the difference is small, apply a contractual penalty.

2.4 Relationship of contractual penalty to late payment interest

In practice, default interest is often confused with a contractual penalty. The contractual penalty as well as the default interest represent a property penalty affecting one and the same fact, namely the delay of the debtor with the fulfillment of the monetary obligation. paying a certain amount of money, e.g. purchase price. In practice, as a result of a single delay in fulfilling a monetary obligation, the creditor is entitled to a contractual penalty as well as the right to default interest on the amount owed. Given that the amount of the contractual penalty and default interest can be determined in the same way, e.g. percentage of the amount owed, it is not always clear whether the defaulting debtor can at the same time demand both of these sanctions.

The law does not exclude the possibility of negotiating a contractual penalty for the debtor's delay in paying a monetary obligation. In such a case, the relationship between the contractual penalty and default interest must be addressed.

The contractual penalty, unlike the default interest, is not an accessory of the claim (§121 par.3 of the Civil Code), but an independent right. Entitlement to late payment of interest and payment of a contractual penalty has a separate legal ground (Judgement of Supreme Court of Czech Republic, 1999). This means that the contractual penalty agreement, unless the fine is linked to the debtor's delay, does not preclude the debtor's obligation to pay default interest.

In case of a contractual penalty being agreed by the participants for a case of a delay in the fulfillment of a monetary or non-monetary obligation, the debtor shall be obliged to pay the creditor the agreed contractual penalty and, in addition, interest on late payment according to §517 par. 2 of the Civil Code. The breach of this obligation is thus sanctioned twice. The regulation of §545a of the Civil Code and §301 of the Commercial Code, which, in case of a litigation for the payment of a contractual penalty, allow the court, with the knowledge of double sanctioning of the same, to reduce the amount of the contractual penalty.

Unlike a contractual penalty, which is a separate claim, and the parties must expressly agree on it, interest on late payment as an accessory of the claim is a property penalty imposed by law. In case of delay in the debtor's payment of the cash payment, the creditor is entitled to a right to payment of default interest in the amount stipulated by the implementing regulation. The current rate of statutory interest for late commercial relations on 1 January 2019 is 8% per annum (Justice.gov.sk, 2017). In practice, it is quite common for business partners to indicate on invoices that in case of late payment they will require a default interest of 0, 05% per day from the amount owed. At the same time, they often do not have a contractual agreement at all. In case of litigation, if the parties have not agreed on the default interest rate of 0.05% per day on the amount owed, the court would not grant such a 0.05% per day default interest, but would admit a maximum of 8% per annum.

It follows that, if the debtor accepts the invoice on which the creditor has determined the amount of the default interest, that figure is not in itself sufficient for a valid late payment agreement. Delay interest may be agreed on a daily, monthly or annual basis. An agreement on the amount of interest on late payment may not always be concluded in writing, but we can only recommend it in writing for legal certainty of the parties. At the same time, however, we do not recommend using synonyms as penalty penalties, a delay fee, as they may cause confusion in the event of a dispute.

2.5 Court's moderation law

The court's moderating right is that the court may, on application, decide not to award the contractual penalty in full, i.e. at the amount agreed by the parties, even if the creditor was entitled to the contractual penalty.

The court's moderation right in respect of a contractual penalty is set out in the Commercial Code in §301, according to which a disproportionately high contractual penalty may be reduced by the court, taking into account the value and importance of the obligation to be provided up to the amount of damage incurred up to the time of the court's breach of the contractual obligation to which the contractual penalty applies.

By January 1, 2008, the Civil Code did not have an amendment to the court's moderation law. The moderation law of the court is, as of 1 January 2008, regulated by the Civil Code in § 545a, according to which the court may reduce the excessively high contractual penalty taking into account the value and importance of the obligation to be provided, as well as the amount of damage caused by the breach, and how much contractual penalty exceeds the damage incurred. The regulation of §545a of the Civil Code is mandatory, that is to say, this regulation cannot be ruled out by agreement of the parties, as it is the law given by the law of the court. However, the court is entitled to decide on the amount of the contractual penalty on the basis of a request by the party to the proceedings. On the other hand, the possibility of reducing the contractual penalty is limited because it is bound by statutory conditions.

The law distinguishes between cases where, as a result of a breach of the obligation to which the contractual penalty applies, the creditor is not directly liable for the damage and the loss incurred by the debtor, but the creditor is not entitled to claim compensation.

The court should use the moderation right to take into account the value and importance of the obligation to be served. This is also confirmed by the case law of the Supreme Court of the Slovak Republic, according to which: “the court's right to reduce an excessively high fine is an interference with the contractual freedom of the parties to a business obligation relationship, which is one of the fundamental principles of commercial law. The Commercial Code foresees and modifies the possibility of such intervention. In addition to the security function, the contractual penalty also serves as a flat-rate compensation. Although the right to a contractual penalty arises regardless of the occurrence of the damage, there is a link between the contractual penalty and the damage caused by the breach of the secured contractual obligation. Granting a contractual penalty many times greater than the law it provides would result in a wholly unjustified property benefit to the creditor and would result in a disproportionately strict and unjustified sanction that is not necessary to fulfill the security function of the contractual penalty” (Judgement of the Supreme Court of Slovak Republic , 2004). The importance of the security obligation that the debtor has failed to meet will be assessed by the court in the light of all circumstances and taking into account the total value of the obligation. One of the aspects taken into consideration by the court is the amount of possible damage that might arise in the event of a breach of the debtor's obligation. The amount of the contractual penalty is manifestly disproportionate if, given the nature and extent of the fulfillment of the obligation, there is no risk of breach of duty. In such a case, the court may reduce the contractual penalty up to the amount corresponding to the possibility of such damage.

Each business case is specific and it is not possible to generally limit the amount of the contractual penalty. The amount of the contractual penalty in specific business cases may be limited by the compliance of the contractual penalty agreement with some general requirements of the law. For example, the Civil Code provides in § 39 for civil and commercial relations the requirement of legal compliance with good morals. In trade relations, the criterion of fair trade must also be taken into account. According to Oveckova, the purpose of the moderation right is to allow the court to additionally reduce the contractual penalty after the right to pay a contractual penalty in exceptional cases ... in order to eliminate the harshness of the law ... in order to prevent a total case inadequate property consequences in the event that a disproportionately high contractual penalty could lead to unjustified profits in relation to the material damage on the part of the legitimate and disproportionate economic damage of the liable entity, or even to its liquidation (Ovečková, 2011).

Conclusion

The basic prerequisite for a contractual penalty is a valid contractual penalty agreement between the parties in the event of an obligation breach. The contractual penalty obligation is always an accessory obligation and therefore its existence and consequences are linked to the main obligation. The determination of the amount of the contractual penalty or the method of its determination depends on the mutual agreement of the parties. In practice, when it comes to contractual penalties, it is sometimes difficult to determine it. The assessment of the question of the adequacy or inadequacy of the contractual penalty depends on the circumstances of the particular case, in particular the reasons for the contractual penalty and the importance and value of the obligation to be secured.

Since the contractual penalty in the system of law is not alone, we have provided an analysis of its functions because, on the basis of their knowledge, its use in a particular case can be considered. Next, we analyzed the contractual penalty relationship for damages and default interest. We pointed out their similarities and differences. We also deal with the issue of court moderation law. However, in this court's jurisdiction, we consider that the question of the court's right to impose a contractual penalty is not entirely admissible or questions of the appropriateness of a contractual penalty, with reference to the importance and value of the obligation to be secured.

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Antecedents and Consequents of Attitudes toward the Use of Non-Plastic Shopping Bags

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Abstract

Purpose – The objective of this study is to investigate the antecedents and consequents of attitude toward the use of non-plastic bags. Design/methodology/approach – We proposed hypotheses to examine relationships of environmental concern, environmental knowledge, and green value on green attitude, and the influence of green attitude, subjective norm, and perceived behavioral control on behavioral intention toward the use of non-plastic bags. The influence of behavioral intention on behavior of using environmentally friendly shopping bags were also examined. Research limitations/implications- Survey data was collected from 130 consumers of supermarkets in Jakarta. Structural equation modelling was used to test hypotheses. Practical implications – This study will provide information on factors that influence and affect consumer's behavioral intentions and behavior to use non-plastic shopping bags. Limitations-Since consumers may have the different characteristics, is likely that consumers' attitude and behavior will be different based on the characteristics. Originality/value – Little research has been done on understanding consumer attitudes and behavior toward the use of non-plastic bags in Indonesia.

Key words

Environmental concern, environmental knowledge, green attitude. Green value, behavioral intentions, behavior of using non-plastic shopping bags

JEL Classification: M31

Introduction

Indonesia has a major waste problem today. The country is ranked second after China regarding the dumping of plastic waste into the ocean. It is estimated that around 3.23 million metric tons of plastic waste was thrown into the oceans. The plastic waste problem is also causes river pollution (Ariffin, 2018).

Plastic bags constitute an environmental hazard, as they are not biodegradable (Zen et al. 2013). Plastic bags may also decompose and contaminate water and food systems, which may in turn cause numerous hazards for life. In handling these waste problems which is caused by the use of plastic bags, it is deemed very important to identify various psychosocial determinants of behaviors that could reduce plastic bag use, and all related parties such as government , consumers, and business owners must play an important role in the promotion of green marketing practices.

Eco-friendly behavior, is necessary to reduce this environmental problem, such as the individual's support regarding bans imposed by government or retailers to reduce the use of plastic bags and any other innovative approaches that are adopted (Bamberg et al. 2003; Heath and Gifford 2002).

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Research on ecologically conscious behavior among consumers in emerging markets is limited. Little researches have examined ecological behavior of Indonesia consumers' ecologically conscious behavior, more specifically regarding the use of environmentally shopping bags. Exploring antecedents of consumers' ecological behavior in Indonesia can provide a fruitful insights for marketers as well as policy makers.

Therefore the objective of this study is to investigate the antecedents and consequents of consumer's attitudes toward intentions and behavior of non-plastic shopping bags.

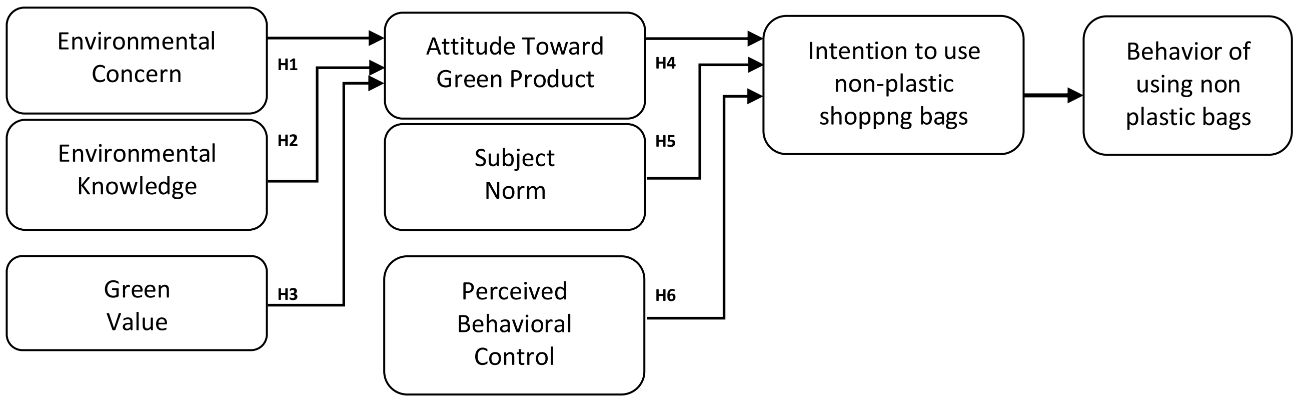
1 LITERATURE REVIEW

Theory of Planned behavior (TPB) is used to understand the psychosocial determinants of human social behavior (Ajzen 1991), which has been employed in various fields of social sciences and become one of the most frequently referred models in the literature (Ohtomo and Ohnuma 2014).

Theory of Planned Behavior (Ajzen, 1991) is used to explain the antecedents of intention to use environmentally friendly shopping bags. The theory argues that an individual's intention to perform a behavior is influenced by a combination of behavioral attitudes (i.e. a person's beliefs about the desirability of behaviors); subjective norms (i.e. a person's perceived relevance and importance of opinions of significant others); and behavioral control (i.e. a person's sense of control over behavior).

Specifically, this study considers consumer environmental awareness or consciousness, environmental consciousness and consumer knowledge as an antecedents of attitude, subjective norm , perceived behavioral control, support for the banning of plastic bags, and perceived value as predictor of intention and behavior (See Figure 1).

Fig. 1 Conceptual Framework



1.1 Environmental Concern, Environmental Knowledge, Green Value and Attitude towards Green Products

Certain human activities have caused negative impact on the environment such as pollution, carbon emission, deforestation, depletion of natural resources, destruction of ozone layer (Kahoka et al, 2014).

The global concern regarding these issues has been reflected in various studies, related to people attitude and behavior. Environmental concern or consciousness is a multi-dimensional construct, it consists of affective, dispositional, and active dimensions or pro-environmental behavior (Sánchez and Lafuente, 2010).Bamberg (2003) suggests that environmental concern only affects specific environmental behavior through the situation specific attitude. As a global attitude, environmental attitude has an effect on specific attitude such as attitude towards green products (Khaola, et al, 2014).

A study of Li, G, et al. (2019) found that environmental concern and environmental knowledge have a positive impact on attitude and indirectly affect residents' willingness to purchase energy-efficient appliances.

Environmental concern refers to the degree of people's willingness to recognize and support the resolution of ecological problems (McCright, A.M, 2014). Environmental concern not only affects behavioral willingness but also influences the attitude toward behavior; consumers with stronger environmental concern tend to have a more positive environmental attitude, which in turn increases their willingness to act (Chen, M., & Tung, P. ,2014).

Environmental knowledge refers to an individual's understanding and knowledge of theenvironment and related issues (Chan, R. Y., & Lau, L. B., 2000). Individuals with certain environmental knowledge have a positive attitude toward environmental behavior and are strongly willing to take action (Li, G, et al, 2019; Clark, C. F., et al, 2003).Mostafa, M. M. (2009) foundthat environmental knowledge has a positive impact on consumers' attitude toward green products.

Slotegraaf, R. J. (2012) defines green value as a consumer's overall evaluation of the net benefit of a product or service between what is received and what is given based on the consumer's environmental desires, sustainable expectations, and green needs.Based on this perspective, consumer who avoid using plastic bags, and he/she prefers to use environmentally friedly shopping bags can be considered that it is related to green value.Therefore Consumers ascribe value to the green attribute of non-plastic shopping bags.A study of Yu, S., & Lee, J. (2019) regarding the effect of consumers' perceived value on upcycled products found that green value had a significant positive effect on product attitude.

The following hypotheses were proposed:

H1: Environmental Concern has a positive effect on Attitude towards Green Products.

H2: Environmental Knowledge has a positive Effect on Attitude towards Green Products.

H3: Green value has a positive effect on Attitude towards Green Products.

1.2 Attitude towards Green Products, Subjective Norm, Perceived Behavioral Control, Intention to use non-plastic shopping bags, and Behavior of using non-plastic shopping bags.

Eagly and Chaiken (1993, p. 1) defined attitudes as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour".

The influence of attitude on behavioral intention has been found to be higher than the influence of attitudes on behavior (Kim and Hunter, 1993). A study of Ohtomo and Hirose (2007) previously regarding the recycling behavior, found that behavioral intention is influenced by both attitudes and subjective norms. Bamberg(2003) found that attitude, subjective norms and perceived behavioural control influenced intention.Attitude had a strongest effect, followed by subjective norms and perceived behavioural control.

A study of Chang, S., & Chou, C. (2018) regarding consumer intention toward bringing your own shopping bags indicated that that consumers' attitude and perceived behavioral control has a positive relationship with BYOB intention The attitude of a person toward the performance of a certain behavior affects the intention regarding the performance of the behavior, and consequently will affect the actual behavior (Wu and Mweemba2010; Sudarmadi et al. 2001). Intention is the most important part of behavior in social psychology (Abraham and Sheeran 2003).

Subjective norm is defined as the individual's perception of the likelihood that the potential reference group or individuals approve or disapprove of performing the given behavior (Ajzen, 1991). Subjective norm is shown as a direct determinant of behavioral intention (Ajzen, 1991) A strong relationship between subjective norm and intention has been shown in previous research (Kim and Chung,2011;Bamberg, 2003; Kalafatis,et al., 1999).

A study ofArı, E., &Yılmaz, V. (2016) revealed that subjective norms influenced the intention to reduce plastic bag use. it was also shown that Environmental awareness regarding plastic bag use affects the intention to Use cloth bags, positively. On the other hand intention to use cloth bags, affects the behavior to use fewer plastic bags, positively,

Perceived behavioral control refers to the degree of control that an individual perceives over performing the behavior(Chen, 2007; Kang et al., 2006). Thus, those who perceive a higher degree of personal control tend to have stronger behavioral intention to engage in a certain behavior (Ajzen, 1991). People belief concerning higher resources such as time, money, and skills will increase their perceptions of control and hence will increase their behavioral intentions (Kim and Chung 2011).

Based on review of the literature, the following hypotheses were proposed:

H4: Attitude towards Green Products has a positive effect on Intention to use non-plastic shopping bags.

H5: Subjective norms has a positive effect on Intention to use non-plastic shopping bags.

H6: Perceived Behavioral Control has a positive effect on Intention to use non-plastic shopping bags.

H7: Intention to use non-plastic shopping bags will have a positive influence on Behavior to use non-plastic shopping bags.

2 Methodology

2.1 Sample and Data Collection

To test the hypotheses proposed in this paper, a quantitative (survey) research method was adopted. Consumers of 3 supermarkets in Jakarta participated in this study. A purposive sampling was used in term of their regular shopping in the supermarkets. These respondents are selected based on their understanding of green issues. Before distributing the questionnaires. the objective of study and questions were explain to the respondents.From 150 responses collected, 130 valid responses were used for further analysis.

2.2 Measures

Environmental Concern was measured using instrument adapted from Mufidah, I ,et al (2018). It consists of 3 items:

1. I am very worried regarding the condition of the world environment and what that will mean for my future so I need to keep the environment by using non-plastic shopping bags.
2. Humans are very often misusing/damaging the environment, so it is necessary for me to help save the environment by using non-plastic shopping bags.
3. When humans interfere with nature, nature produces disastrous consequences so I need to participate by using non plastic bags, to avoid/reduce the disruption of nature

Green value was measured using instrument adapted from Yu, S., & Lee, J. (2019):

1. This product has more environmental benefits than other products.
2. This product is environmentally friendly.
3. This product has more environmental concern than other products.
4. This product's environmental functions provide a very good value

Environmental Knowledge was measured using 3 items statements adapted from Li, G., Li, W., Jin, Z., & Wang, Z. (2019):

1. I can tell if non-plastic shopping bags are good for the environment
2. I know more about plastic bagsnegative impact to the environment than other ordinary people
3. I thoroughly know about environmental issues

The following constructs were measured using instruments adapted from Ohtomo, S., & Ohnuma, S. (2014):

Attitude was measured using 2 items statements:

1. I think I should take action to reduce the usage of plastic bags
2. I think using plastic bags is harmful to the environment.

Subjective norm. Two items were used to measured subjective norm:

1. Most people who are important to me (e.g., family or friends) would support a decision not to receive free plastic bags.
2. Most people would approve of me not receiving free plastic bags

Perceived behavioral control. Three items were used to measure perceived behavioral control:

1. It is easy for me to decline free plastic bags
2. It is convenient for me to bring reusable shopping bags.
3. If I want to, I can use reusable shopping bags instead of free plastic bags.

Behavioral intention was measured using two items:

1. intend not to receive free plastic bags
2. I intend to go shopping with reusable shopping bags in the future.

Behavior of using non-plastic shopping bags was measured using two items:

1. I prefer to use non-plastic shopping bags during daily shopping .
2. I often refuse to use free plastic bags

3 Results and Discussion

3.1 Results of Quantitative Analysis

Following the two-step approach, a measurement model was first estimated using a confirmatory factor analysis (CFA).Each measurement item was loaded on its prior construct. The instrument reliability was assessed using Cronbach's alpha. The alpha values range from 0.73-89.

Convergent validity meets the requirements in this study all the items had relatively high factor loadings on the underlying construct, the values range from 0.78 to 0.83.Overall model fit for CFA was asses using the Chi-square test and goodness of-fit-indices. Others indices of fit were assessed i.e. Comparative Fit Index (CFI),the Normed Fit Index (NFI), Root Mean Square Error (RMSEA) indicated the measurement model fit the data well (CFI=0.950), NFI=0.901, RMSEA=0.06).

As the second step, the proposed structural model was assessed, on the basis of CFI=0.97, NFI=0.92, RMSEA=0.04) indicated that the model fit was acceptable. Results of estimated structural coefficients were presented in Table1.

Author presents main findings, results and discussion based on other authors´findings in the field of interest. This section of the paper can be divided into subsections.

Tab. 1.. Structural model results

Hypothesized relationship	Standardized coefficient	t-value	Results
H1 Environmental Concern → Attitude	0.38	6.77*	supported
H2 Environmental Knowledge → Attitude	0.33	5.80**	Supported
H3 Green Value → Attitude	0.29	4.72**	Supported
H4 Attitude → Intention	0.46	5.28**	Supported
H5 Subjective Norms → Intention	0.39	5.66*	Supported
H6 Perceive Behavioral Control → Intention	0.19	5.25*	Supported
H7 Intention → Behavior	0,22	5.32*	Supported

*p<.05 **p<.01

All antecedents of attitude were found to be significantly and positively influenced attitude of using non-plastis shopping bags. Therefore H1,H2, H3 were supported (β=0.38, t=6.77, p-value<0.05;β=0.33,t=5.80;β=0.29,t-4.72).The results of the study was consistent with the study of Li, G, et al. (2019) who found that environmental concern and environmental knowledge have a positive impact on attitude .

It also supported by Chen, M., & Tung, P. ,(2014) ,Clark, C. F,(2003) who indicated that consumers with stronger environmental concern tend to have a more positive environmental attitude, which in turn increase their willingness to act. Similarly Mostafa, M. M. (2009) discovered that environmental knowledge has a positive impact on consumers' attitudes toward green products.

Regarding the effect of green value on attitude (H3), it was consisten with a study of Yu, S., & Lee, J. (2019) who found that green value had asignificant positive effect on product attitude.

Attitude to use non-plastic shopping bags positively influenced Intention of using non-plastic bags (β=0.46;5.28), Supporting H4. Similarly Subjective norms and perceived behavioral control influenced intention, thus supporting H5 and H6 (β=039;t=5,66;β=0.19;t=5,25).The results were consistent with the study of Kim and Hunter (1993) who mentioned that influence of attitude on behavioral intention has been found to be higher than the influence of attitudes on behavior.The current study was also consistent with findings of Ohtomo and Hirose (2007) who reported that behavioral intention is influenced by both attitudes and subjective norms. It also supports the findings of Bamberg(2003) who described that attitude, subjective norms and perceived behavioral control influenced intention.Attitude had a strongest effect, followed by subjective norms and perceived behavioural control.

Finally intention to use non-plastic bags positively influenced behavior of using non plastic bags (β=022;t=5.32). The findings was consictent with the study of Arı, E., &Yılmaz, V. (2016), and Ohtomo, S., & Ohnuma, S. (2014).

Conclusion

The present study examined a conceptual framework that predicts the antecedents and consequents of attitudes of using non-plastic shopping bags. Attitude, follow by subjective norms, and environmental concern, revealed had the strongest effect on Intention of using non-plastic bags.

This research provides insights for policy makers regarding how to encourage consumers of not using plastic shapping bags.

The findings of this study suggest that policy makers and marketers need to consider

environmental concern to create a positive attitude towards the use of non-plastic shopping abgs.

There are several limitations of this study.Another variable that might have influence on actual behavior such as government policy to charge the use of plastic shopping bags during shopping , and consumer demographic factors were not included in the model.

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Slow food and Culinary Heritage as European activities to promote traditional and regional foods and dishes[1]

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Abstract

Traditional and regional foods and dishes are specific to their composition, way of production and origin. They are parts of the country's cultural identity. In recent years, these products have been highly preferred by European consumers. These consumers refrain from processed food products containing large quantities of additives produced by large national enterprises. The article aims to characterize selected European activities promoting traditional and regional foods and dishes such as Slow Food and Culinary Heritage. The methods of analysis and synthesis were applied to obtain theoretical backgrounds on this issue. Using these methods, information gained from domestic and foreign scientific and specialist sources, e.g. the information provided on the websites of the European association promoting traditional and regional food has been analyzed. Only Slow Food activities are implemented in a limited extent in Slovakia to promote traditional and regional foods and dishes. Slovakia should become a member of a European network Culinary Heritage dedicated to the promotion of traditional and regional foods and gastronomic specialties of the country.

Key words

Slow food, Culinary Heritage, traditional foods, regional foods, promotion

JEL Classification: Q13, Q10

Introduction

Countries need to maintain their history and culture also in the field of gastronomy. Old food manufacturing techniques and recipes should not be forgotten and replaced with new and modern alternatives.

Nowadays, more and more consumers and producers are aware of the importance of preserving traditional products and traditional gastronomy. Manufacturers are beginning to associate in smaller groups, but also in large organizations. They organize various events aimed at supporting other producers as well as informing consumers on ways of protecting cultural heritage. Such sales-oriented events and promotion of traditional and regional products have become highly sought out by consumers, because they know they will find quality foods there. Another important aspect related to traditional and regional foods is their environmentally friendly production, and also the use of packaging them into natural, recyclable packaging materials such as glass and paper.

It is important that there are organizations that seek to protect this gastronomic heritage and inform consumers about it. Such organizations are for example Slow Food International and South East Skåne Committee of Cooperation. Slow Food International is an international movement

1 This article is an output of the VEGA 1/0543/18 project title "The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic".

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founded in 1986 by Carlo Petrini in Italy. It was his response to globalization, the accelerating pace of life, disappearing of local, gastronomic traditions, and the declining interest of consumers in what they eat, where food comes from and how its consumption affects the environment around us.

Its origin (Slow food) dates back to an episodic reaction of Carlo Petrini and his friends to the appearance of the first fast food in Italy, though from the very beginning it was opposed not only to the food model, but to the entire culture: “fast food was backed by a new culture and a new civilization having one value only: the profit” (Simonetti, 2012).

The philosophy of the Slow Food movement expanded in several directions: Slow Travel and Tourism, Slow religion and Slow Money (Paul, 2014; Lacková &Rogovská, 2014).

The philosophy of the Slow Food Movement can be easily applied also to tourism. Central to the meaning and concept of Slow Tourism is the shift in focus from achieving a quantity and high volume of experiences while on holiday towards the quality of (generally fewer) experiences (Heitmann et al. 2011).

There is registered more than 100,000 members of this association, 1 000 000 worldwide supporters and volunteers in 160 countries, 1500 local associations (convivia) and a network of 2,400 food communities which produce food in a sustainable way, with great emphasis on quality (Slow Food worldwide, 2019).

The second organization is South East Skåne Committee of Cooperation. This is a Sweden non-profit public organization. Southeast Skåne Committee of Cooperation (SÖSK) is a cooperative body between municipalities Simrishamn, Sjöbo, Tomelilla and Ystad. SÖSK’s role is to be coordinating, advisory and recommendatory and has the following purposes; Apart from activities within Sweden, SÖSK is also active in following networks: South Baltic Four Corners (www.four-corners.org) and European Network of Regional Culinary Heritage (www.culinary-heritage.com). The SÖSK is the owner of the trademark Culinary Heritage. The logotype is protected as a community Trademark throughout Europe (Sydostskane, 2019).

The concept for Regional Culinary Heritage was developed and introduced in Southeast Skåne of Sweden and on the Danish Island of Bornholm in 1995. In 1996, Culinary Heritage was introduced as a project within the still existing cooperation Four Corners (www.four-corners.org, Southeast Skåne, Bornholm, Rügen & Swinoujscie). The project developed rapidly and received considerable interest from businesses and from other regions in Europe. In 1997 it, therefore, started to expand to other regions in Europe (Culinary Heritage, 2019).

1 Methodology

The article aims to characterize selected European activities promoting traditional and regional foods and dishes such as Slow Food and Culinary Heritage.

The methods of analysis and synthesis were applied to obtain theoretical backgrounds on this issue. Using these methods, information gained from domestic and foreign scientific and specialist sources, e.g. the information provided on the websites of two European associations such as Slow Food International and Southeast Skåne Committee of Cooperation (SÖSK) that are promoting traditional and regional food and dishes, have been analyzed.

2 Results and Discussion

The results of the work describe the basic activities of both organizations, i.e. Slow food and Culinary Heritage. The rules based on which they operate are explained. Regarding the Slow food, Slovak food and drinks have been indicated, which have been saved in “The Ark of Taste” and which are waiting for an evaluation. As for the Culinary heritage, it describes regions that belong to the network and presents the benefits for regions that are applying for membership or they belong to the European Network of Regional Culinary Heritage.

2.1 Slow Food

The headquarters of Slow Food is located in Piedmont, Italy, where the movement has started. The Association is coordinated by the International Council and managed by the Executive Committee, which is the highest institutional governing body set up for a four-year period. Carlo Petrini is currently the president. The association operates at a national and local level. Slow Food has a national structure in countries such as Italy, Germany, Switzerland, the United States, Japan, the United Kingdom, the Netherlands, Brazil, Kenya and South Korea. At the local level, convivia are responsible for coordinating and organizing events in cities and municipalities around the world. The Slow Food organization also has two convivias in Slovakia - Slow Food Pressburg, located in Bratislava and Slow Food Banská Bystrica. The Slow Food logo is shown in fig. 1.

Fig. 1 Slow Food logo

Source: http://www.slowfood.com

The vision of the organization is a world in which all the inhabitants of the planet have equal access to safe and quality food. The basic philosophy of the organization is based on three principles: good, clean and fair food. The term "good food" means quality, tasty and healthy foods. The term "clean” indicates that food production is not harming the environment. The term „fair” expresses that food is affordable to consumers but at the same time, it also indicates fair conditions and wages for food producers. Slow Food has its members in countries around the world through local associations and national committees to present their principles around the world. We can summarize these principles in five points (Slow food, 2019):

- present the right of consumers to quality, healthy food that is affordable for consumers, but equitable conditions and wages for food producers,
- protection of the right to food independence for all nations,
- protection of biodiversity and traditional food and products,

- contributing to the expansion of the "Terra Madre" network,
- contributing to the expansion of the international membership base.

Slow Food Association has released a document entitled "Slow Food Manifesto for Quality“ in which it stresses the need to change raw material cultivation and food production. According to the document, the current food production systems are most harmful to the environment, especially to animals and people. The document encourages consumers and producers to protect the planet, the environment and biodiversity, but mainly human and animal health, because they are under constant "attack". According to the association, consumers not only purchase food, but consume it and they are also perceived as co-producers who can change the system and means used to grow and produce food. Association realizes many projects. For the implementation of its projects Slow Food association has created the following:

- Slow Food Foundation for Biodiversity, which was founded in 2003 to support the management of projects on biodiversity, food and tradition,
- Terra Madre Foundation that was founded in 2004 to support the growth of a global network of food communities, cooks, academics and youth workers to sustain the food system,
- University of Gastronomic Sciences (UNISG) founded in 2004 to educate future food experts.
- Many projects such as: "Ark of Taste", "Terra Madre Day", "Slow Cheese", "Slow Fish", "Slow Meat" and "Slow Wine".

The most prominent project is: "Ark of Taste". The "Ark of Taste" project on the protection of foods and products that are part of the history, traditions, culinary and cultural heritage of the countries was created in Turin in 1996. In 1997, the objectives of the project were formulated and a scientific committee was set up two years later to identify the different product categories and to determine the selection criteria. The "Ark of Taste" project logo is in figure 2. Gradually, based on the work of the Italian Commission of "Ark of Taste”, commissions were set up also in other countries - Germany, France, Switzerland, America, and the Netherlands to catalog individual products.

Fig. 2 Logo of the project “Ark of Taste"

Source: http://www.slowfood.com

In 2002, the international commission of “Ark of Taste” set up to identify and adapt food selection criteria. The criteria for inclusion of products in the "Taste Sheet" are as following (Slow Food Foundation for Biodiversity, 2016):

- nominations for inclusion to the “Ark of Taste” can be received only for food products and animals which belong to domestic species (plant varieties), indigenous animal breeds and populations, wild species (only when associated with methods of collection, processing and traditional use) and processed products,

- the products must be specific, the quality of the taste being defined in relation to local traditions and uses,
- products must be tied to specific areas and associated with local traditions,
- products must be produced in limited quantities,
- products must be characterized by the risk of extinction.

The organization stresses that it is necessary to interpret and apply the criteria with regard to the specific local situation of the product while always respecting the cultural, social, geographical, economic and political differences of society, which protect these products. Products are selected to the "Ark of Taste" by the International Commission, which publishes a catalog containing information on protected foods, livestock and plants from the whole world. The project aims to catalog them to become part of the global cultural heritage and be passed on to future generations. To 7th of July 2019 5038 products from around the world were included to the catalog and 659 are nominated. Five products from Slovakia were included in this catalog:

- Bratislavské rožky (from Bratislavský region),
- Ovčia Bryndza (from Prešovský region),
- Parenica Cheese (from Banskobrstrický region),
- White Goose (from Nitriansky region),
- Zázrivský Korbáčik (from Žilinský region).

Three products are nominated to be in catalog the "Ark of Taste" such as Adzymka, Wallachian sheep, Horec vodka.

As mentioned above, one of the criteria for evaluating products included in the "Ark of Taste" is their risk of extinction. According to Slow Food, the risk of extinction of traditional and regional products is related to the expected or likely extinction, for example when knowledge and the skills needed to produce a given product belong only to one or several manufacturers, especially when it comes to older people.

A recipe in writing or an oral explanation of the production of food is not sufficient, because traditional processing methods are the work of craftsmen and control the techniques of production means learning this production process for a very long time. One has to learn skills and get the necessary routine to be able to maintain a constant product quality although the conditions under which production takes place (temperature, humidity, season, animal health, etc.) are changing. The risk of extinction is real, when the product is only produced for domestic consumption or when the introduction and compliance with hygiene rules will cause sudden changes in conditions for maturing the product. Another example is when production applies a specific device or raw material that is important to the product's distinctive taste. There is also a risk of extinction if a small number of a given product (several hundred or a thousand pieces) is produced. In this case, financial support must be provided to farmers and food producers by institutions, experts, etc. (Slow Food Foundation for Biodiversity, 2016a).

Risk can also be seen as a social situation in the medium and long term - it concerns the state of the producers or consumers and the environment (ecosystem), and to reduce their amount or change in the ecosystem can be predicted for the future. Risk features are many and they are different, e.g. changing trends in consumption, a market change causing product price reductions, on the basis of which profitability is gradually reduced, depopulation and emigration of people able to produce traditional products as a result of finding a new livelihood. It may also be the loss of generational benefits or the disappearance of rural ecosystems and landscapes, loss of support for national and international agricultural policies, the threat of the existence of only cheap, poor quality food products which quickly displace traditional products from the market because they do not have enough advertising (Slow Food Foundation for Biodiversity, 2016a).

3 Culinary Heritage

Culinary Heritage Europe is a network for regions and businesses to promote, develop and exploit regional food, preserve culinary traditions, as well as protect theoretical and practical food sector skills in Europe. The network was based on enabling local search and tasting regional foods for tourists across Europe. The Culinary Heritage concept is based on a common logo and joint marketing at local, regional, national and international levels. The European Coordinator is responsible for coordinating the organization's activities and structure.

The owner of the trademark Culinary Heritage Europe is the non-profit organization South East Skåne Committee of Cooperation. The goal of the organization is that the regions keep their gastronomic traditions. Culinary Heritage defines regional foods as those originating from a particular region, and because they are grown or produced in a particular place, they are original, region-specific and contribute to the promotion of the region.

As of 2nd of July 2019 the network had 46 regions which are presented in tab. 1. In each of these regions, events are held to promote area-specific products and meals, which are a significant support for small businesses promoting their local specialties in this way.

The Culinary Heritage network is composed of two parts: Business Members, and Regions. Business Members include businesses only from approved regions (primary producers of agriculture, horticulture & fishery producers & processors of foodstuffs, restaurateurs & caterers, wholesalers & retailers) which can apply for membership. These businesses must meet certain criteria that are assessed and then approved by their region. The membership application is submitted to the Regional License Holder. The fees are determined by the region itself. Culinary Heritage Europe members can be European regions.

Tab. 1 Culinary Heritage Europe members to 2.07.2019

Country name	**Name of the region within the country**
Belarus	Vitebsk
Croatia	Split-Dalmatia
Denmark	Bornholm, Sjaelland, Thy-Mors,Vestjylland
Estonia	Hiiumaa
Germany	Elbe Weser Nordsee, Lüneburger Heide, Pfalz, Vorpommern – Rügen
Norway	Adger Telemark, Buskerud, Oslofjord
Latvia	Kurzeme, Latgale, Riga, Vidzeme, Zemgale
Lithuania	Aukštaitija, Dzūkija, Mažoji Lietuva, Suvalkija, Žemaitija
Poland	Kujawy i Pomorze, Lower Silesia, Mazovia, Małopolska, Opolskie, Pomorskie Voivodeship Warmia Mazury Powisle,Westpomerania, Wielkopolska, Świętokrzyskie Voivodeship
Scotland	Angus
Sweden	Blekinge, Gotland,Skåne, Småland, Őland, Östergötland
Turkey	Alanya, Gaziantep
Ukraine	Kherson, Lviv, Rivne

Source: http://www.culinary-heritage.com/

In the case of the region which wants to be a part of the Culinary Heritage Europe network, it must become a candidate region to acquire knowledge of the functioning of the Culinary Heritage Network. The candidate regions have these advantages (Culinary Heritage, 2019):

- A responsible organization and a Regional Coordinator shall be appointed.
- The region shall actively acquire knowledge about the full concept of Regional Culinary Heritage Europe.
- Participate in the obligatory course of training for Regional Culinary Heritage Europe held by the European Coordinator.
- Candidate Regions may use the logo of Regional Culinary Heritage Europe to promote membership, but without the name of the Candidate Region in the logo.
- Information about the Candidate Region will be published on the official Regional Culinary Heritage Europe website.
- Candidate Regions receive full knowledge of the Trademark of Regional Culinary Heritage Europe and its concept.
- Have firmly established the participation within the network Regional Culinary Heritage Europe with the appropriate regional authorities with the objective of a long term commitment.
- The region shall comply with the set of rules stated in this document.

Candidate regions must meet certain criteria. The criteria set must be met before membership is granted. Approved Regions are granted below benefits and must fulfil the following obligations as a Regional License Holder (Culinary Heritage, 2019):

- A license to use the regional logo of Culinary Heritage to promote the region.
- The right to issue licenses to Business Members that fulfill the criteria for participation in the network according to “Criteria for Business Members Regional Culinary Heritage Europe”.
- Participation in the Regional Culinary Heritage Europe network for development and promotion of regional foods and culinary traditions.
- Publish and update details and promotion about the region and business members on the official website.
- Agree to maintain a good knowledge of the Trademark for Regional Culinary Heritage Europe.
- Pay the annual license fee.
- Provide the European Coordinator with information.

Approved areas should actively participate in the promotion of regional food and thus support the region. They should play the role of representatives of regions promoting local culinary heritage throughout Europe. The region's coordinator is responsible for the correct use of the logo by its participants within the region. The aim is to make the logo known throughout Europe and enable tourists to easily find regional food and partners with this logo. The common logo is visibly placed at the entrances to the restaurants and at the cash desks in the shops, but also on the product packaging.

The Culinary Heritage Europe regions have common criteria for their functioning and marketing at regional, national and transnational levels, and a common logo (Fig. 3). Members of Culinary Heritage Europe have also the right to an enamel table (Fig. 4) placed, for example, above the entrance to the shops or restaurants. The table must have the same appearance throughout Europe and can be ordered from the European Coordinator. From V4 countries only Poland belongs to Culinary Heritage Europe.

Fig. 3 Culinary Heritage logo

Source:www.culinary-heritage.com/

Fig. 4 Enamel Sign with the inscription of Culinary heritage for Warmia Mazury Powiśle region in Polish language

Source: www.culinary-heritage.com/

Conclusion

The article aims to characterize selected European activities promoting traditional and regional foods and dishes such as Slow Food and Culinary Heritage.

The vision of "Slow Food" is a world in which all people have equal access to food that is safe, natural and high quality. "Slow Food" calls on every consumer to demand food that is good, clean and fair. "Slow Food" sees the consumer not as a person who only buys and consumes food, but understands him as someone who is involved in the production process. Its impact on manufacturers can change the system and resources we grow and produce our food. The consumer is a co-producer. The producers play a key role in this process. They must achieve a certain quality of their products and share their experience with others.

Another activity designed to promote regional food and gastronomic specialties of the country, preserve culinary and cultural traditions as well as the protection of theoretical and practical skills related to food production is the Culinary Heritage Europe network. The network was set up to allow tourists to search and taste local and regional foods across Europe. Currently, 46 regions belong to this network.

From European activities to promote traditional and regional foods and dishes only Slow Food activities are implemented in a limited extent in Slovakia. Slovakia should become a member of a European network "Culinary Heritage" dedicated to the promotion of traditional and regional foods and gastronomic specialties of the country.

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Organic foods in European Union: The brief case of organic farming, consumption, distribution and import of organic foods[1]

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Abstract

Consumers' increased interest in healthy lifestyles and products of higher quality affects the dynamic development of the organic food market not only in the European Union, but also in the world. The article aims to briefly characterize organic farming, consumption, distribution and import of organic foods in selected countries of the European Union. The methods of analysis and synthesis were applied to obtain theoretical backgrounds on this issue. The information gained from domestic and foreign scientific and specialist sources have been analysed e.g. EU Agricultural Markets Briefs and Eurostat. The contribution of the organic farming sector is still increasing in most European Member States. Over half of the European Union's organic area is concentrated in Spain, Italy, France and Germany, but if we analyse the share of organic land in total agricultural land, leading countries are Austria (23 %), Estonia (20 %) and Sweden (19 %). Consumers of organic foods buy different organic products, most often eggs, fruit, vegetables, dairy products and meat. The distribution channels are mainly supermarkets and specialized stores. In 2018, about 3.3 million tonnes of organic foods were imported to the EU. According to Eurostat, China is the biggest supplier of organic food to the EU.

Key words

Organic farming, organic food, distribution, import, legislation

JEL Classification: Q18, Q17

Introduction

The contribution of the organic farming sector is still increasing in most European Member States. The growth in consumer purchasing of organic foods is significant. Consumers are motivated by the perceived healthiness of such products (Guido, 2009; Guido et al., 2010; Siegrist, 2008; Pino et al., 2012, Krnáčová, Závodský, 2018), higher nutritional value and also better taste in comparison with conventional food (Lacková, 2015).

The development of organic production is supported by implementing the use of new techniques and substances more suitable for organic production. Genetically modified organisms (GMOs) and products produced from GMOs are not compatible with the concept of organic foods production; therefore, GMOs shall not be used in organic farming or in the processing of organic food products (Regulation (EC) No 834, 2007).

Organic production fulfils a double role. On the one hand, it provides a specific market for consumer demand for organic products. On the other hand, it supplies the public with goods contributing to the protection of the environment, animal welfare and rural development. Organic production is also the use of the production method in accordance with the rules of the said

[1] This article is an output of the VEGA 1/0546/17 project title "Impact of geopolitical changes on the promotion of the EU's strategic foreign trade interests (with implications for the Slovak economy)".

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regulation at all stages of production, preparation and distribution. International Foundation for Organic Agriculture (IFOAM) defines organic farming as a production system that preserves soil, ecosystem and human health. This system relies on ecological production processes, biodiversity and cycles adapted to local conditions. Organic farming is a combination of tradition, innovation and scientific knowledge that benefits the environment and promotes people's quality of life (IFOAM, 2015). This definition was created in 2005 on the basis of four principles of organic farming, which are the pillars of its continuous improvement, development and growth. Organic Farming under (IFOAM, 2016a) is based on the following principles:

1. **Principle of health** - consists of maintaining and improving soil, plant, animal and human health.
2. **The principle of ecology** - concerns production based solely on ecological processes, recycling and establishing an ecological balance in nature.
3. **The principle of justice** - builds on relationships that ensure justice with regard to the common environment and life opportunities.
4. **The principle of care** - emphasizes the management of agriculture in a preventive and responsible way, ensuring the protection of the health and well-being of present and future generations or the environment.

In March 2014, the European Commission presented an Action Plan for the Future of Organic Production in the European Union, focusing on three priorities for organic farming in the EU by 2020 (European Commission, 2014):

1. Enhancing the competitiveness of EU organic producers:
   - raising awareness of EU instruments for organic production and their synergy, implementing a technical solution in organic production through research, innovation and dissemination of learned lessons.
   - raising awareness about organic production sector as well as the market and trade,
2. Consolidating consumer confidence in the European system for organic food and agriculture.
3. Strengthening the external dimension of the EU organic production system.

The Action Plan and future legislative changes aim to promote the growth of organic production, especially in the area of supply and demand. Given that, the overall objective of organic production is to protect the environment. The Action Plan will also contribute to the objectives of the Seventh Environment Action Program for 2020 (European Commission, 2014).

Cultivation of organic crops and organic livestock are the main activities in organic farming, but it is also important to process raw materials, import, export and trade through wholesalers and retailers. Today, more and more consumers are showing an interest in healthy lifestyles and quality food, which is an integral part of it. Consumers pay more attention to what products they consume. In eating, we can see a trend of returning to natural or minimally processed food whose composition consumers know and know they are safe and healthy for them.

1 Methodology

The article aims to briefly characterize organic farming, consumption, distribution and import of organic foods in selected countries of the European Union. The methods of analysis and synthesis were applied to obtain theoretical backgrounds on this issue. Information gained from domestic and foreign scientific and specialist sources have been analysed e.g. EU Agricultural Markets Briefs and Eurostat. The information about organic farming, consumption, and distribution of organic foods in selected countries of the European Union was used from EU Agricultural Markets Briefs - Organic farming in the EU. A fast-growing sector and Eurostat Statistics Explained - Organic farming statistics. Information on imports of organic foods to the European Union was used from EU Agricultural Markets Briefs Organic imports in the EU.

2 Results and Discussion

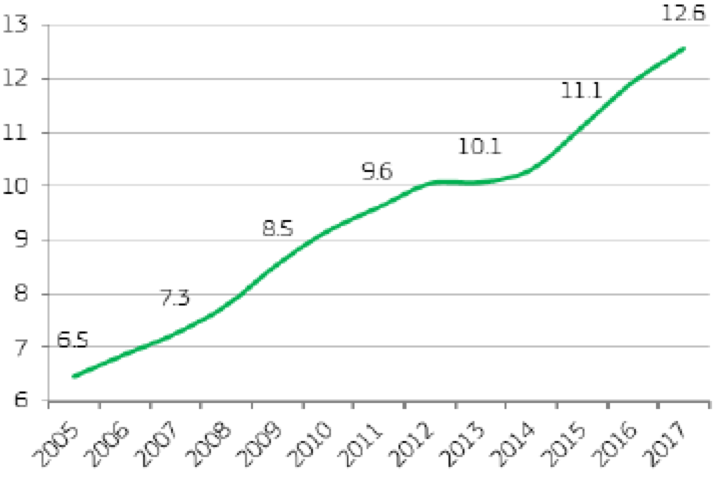
The following issues related to organic food are briefly discussed in relation to the total organic area used for organic agricultural production in European countries in years from 2007 to 2017, main distribution channel of organic foods and aspects related to import of organic foods to European Union.

2.1 Organic area in the EU

The total area of land used for organic agricultural production is the amount of land at the time of conversion, and after conversion. The soil must undergo a conversion process in order to be considered as organically cultivated.

At a global level in 2017, 69.8 million ha were farmed organically (including an area in conversion towards organic). The EU reached 12.6 million ha, which represents 18 % of the global organic area and 7 % of total EU agricultural land. In the past ten years, there has been a significant increase in organic farmland cultivated in Europe (Graph 1) (EU Agricultural Markets Briefs, 2019). In 2005, there was 6.5 million ha organic farmland in Europe and in 2017 it reached 12.6 million ha.

Graph 1 Evolution of European Union organic farmland in years from 2005 to 2017 (million ha)



Source: Eurostat

Over half of the European Union’s organic area is concentrated in Spain, Italy, France and Germany, but if we analyse the share of organic in total agricultural land, leading countries are Austria (23 %), Estonia (20 %) and Sweden (19 %). In 2017 was 20 % of the 12.6 million ha area under conversion that provides an indication of the potential growth in the organic sector for the upcoming years. On average, organic area in the EU increased annually by 5.6 % over the period

2012-2017 (EU Agricultural Markets Briefs, 2019). Table 1 shows the increase of organic land in selected countries of the European Union in years from 2012 to 2017. The largest increase in ecological land was recorded in Bulgaria (249.1 %) and Croatia (202.8 %) and significant decrease recorded Poland, (-24.5%), Great Britain (-15.6%), Greece (-11.3%) and Romania (-10.3%). In Hungary (52.9 %) and Slovakia (15.1 %) was the largest increase during the mentioned period of time in ecological land among the V4 countries.

Tab. 1 Total organic area by country in years from 2007 to 2017

Country	**Organic area (fully converted and under conversion)**		**2012-2017 (% change)**
	2012	2017	
EU-28	**10 047 896**	**12 560 191**	**25.0**
Belgium	59 718	83 508	39.8
Bulgaria	**39 138**	**136 618**	**249.1**
Czechia	468 670	496 277	5.9
Denmark	194 706	226 307	16.2
Germany	959 832	1 138 272	18.6
Estonia	142 065	196 441	38.3
Ireland	52 793	74 336	40.8
Greece	462 618	410 140	-11.3
Spain	1756 548	2 082 173	18.5
France	1 030 881	1 744 420	69.2
Croatia	**31 904**	**96 618**	**202.8**
Italy	1 167 362	1 908 570	63.5
Cyprus	3 923	5 616	43.2
Latvia	195 658	268 870	37.4
Lithuania	156 539	234 134	49.6
Luxembourg	4130	5444	31.8
Hungary	130 607	199 683	**52.9**
Malta	37	41	10.8
Netherlands	48 038	56 203	17.0
Austria	533 230	620 656	16.4
Poland	655 499	494 978	-24.5
Portugal	200 833	253 786	26.4
Romania	288 261	258 471	-10.3
Slovenia	35 101	46 222	31.7
Slovakia	164 360	189 148	15.1
Finland	197 751	258 672	30.8
Sweden	477 684	576 845	20.8
United Kingdom	590 011	497 742	-15,6

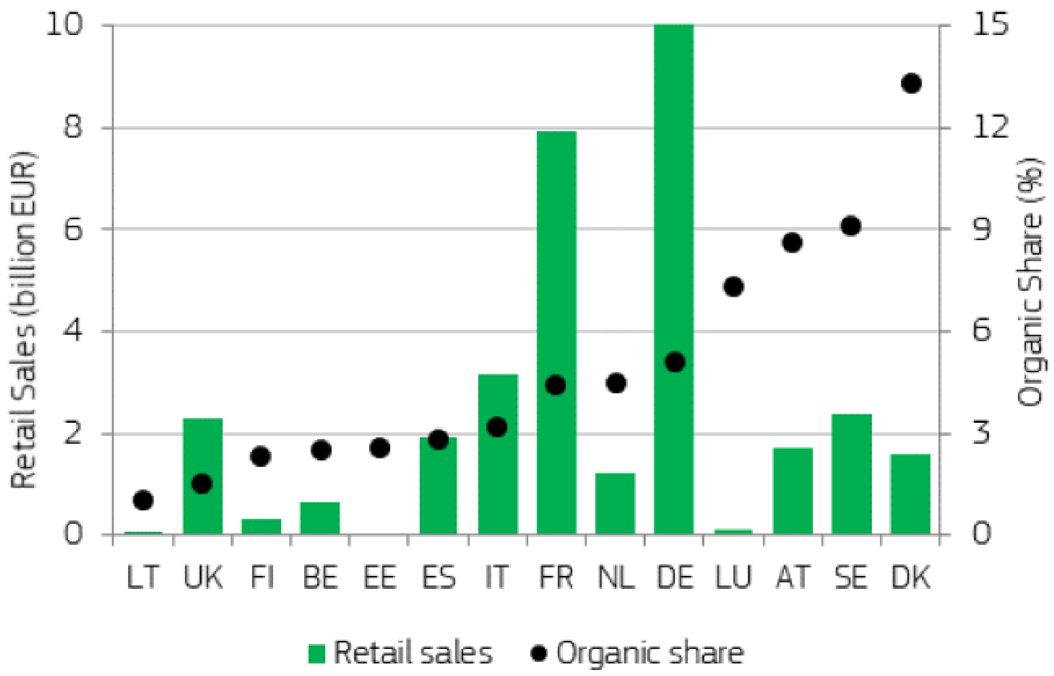
Source:https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Organic_farming_statistics
* The total organic area is the sum of the area ”under conversion" and the "certified area". Before an area can be certified as organic, it must undergo a conversion process, which may take 2-3 years depending on the crop.

The total organic area in the EU-28 was 12.6 million hectares (ha) in 2017 and is still expected to grow in the coming years (EU Agricultural Markets Briefs, 2019).

2.2 Organic food products consumption

The amount of organic food products in the European food market varies significantly between countries. The largest EU markets for organic are Germany, with 10 billion EUR (5.1 % organic in total retail sales), and France, with 7.9 billion EUR (4.4 %) (Graph 2). The French organic retail market is an example of a country where organic foods have overcome its introduction stage and nowadays plays a significant role in the market. French consumers have become more environmentally aware and organic sales increased significantly (18 % in 2017). The growing demand of European consumer for organic foods is well reflected in the annual per capita expenditure, which averaged EUR 67 in 2017, compared to EUR 29 in 2007 (EU Agricultural Markets Briefs, 2019).

Graph 2 Organic retail sales and organic share in billion EUR in 2017



Source: The World of Organic Agriculture, Statistics and Emerging Trends 2019, FiBL & IFOAM

Consumers of organic foods buy different organic products but most often eggs, fruit, vegetables, dairy products and meat.

Eggs have the highest retail market share in organic within the EU, with exceptionally high penetration in some countries such as Denmark (33 %), France (30 %), Austria (22 %) and 21 % in Germany (EU Agricultural Markets Briefs, 2019). Other organic foods which are eagerly bought by European consumers are **fruit and vegetables** with over 10 % organic consumption in Austria, Denmark and Sweden, and a sustained growth rate and organic dairy. Consumption of **organic dairy products** is also significant, in particular in Austria and Sweden, respectively at 11 % and 10 %. Penetration rates of organic drinking milk are particularly high in Denmark and Austria with respectively 32 % and 18 % of consumption. With regard to **organic meat**, despite a relatively low market share in most EU countries, retail sales indicate a high growth, up to 12 % in Italy and 13 % in the UK. In the case of other types of organic foods, significant sales are not recorded (EU Agricultural Markets Briefs, 2019).

Another important aspect regarding the sale of organic foods is the packaging. Many organic products are sold in plastic packaging that causes environmental pollution. Nevertheless, many manufacturers have already taken action to change the packaging used, responding to the European Union requirements for reducing plastic waste.

2.3 Main distribution channel of organic foods

The distribution of organic food products through the various retail distribution channels is different from country to country. In many EU countries, conventional retailers (supermarkets) dominate on the market, with over 75 % in countries like Austria, Denmark and Sweden. The main distribution channel for organic foods in Portugal and Spain are specialized stores (EU Agricultural Markets Briefs, 2019). In other countries like the V4 countries, organic foods are still perceived as an exclusive product, mainly purchasable in specialized organic stores. Other distribution channels include the catering, online sales or direct sales. Growth in consumption through these channels is reported in a number of EU countries over the past years (e.g. public procurement of organic products for schools, hospitals). It reached 33 % of public consumption in Sweden in 2018 and 20 % in Denmark (EU Agricultural Markets Briefs, 2019).

2.4 Import of organic foods to European Union

For a range of organic food products, demand seems to grow at a faster pace than supply. This situation is caused by the production costs and required investments, which may represent a disincentive for producers despite the price premium and also two or three-year conversion process, which creates a time lag to address demand. This applies to some products, such as pork meat, in slow uptake of organic production and consumption. The solution to this situation is the import of organic food (EU Agricultural Markets Briefs, 2019).

In 2018 about 3.3 million t of organic food imported. Significant products include food not or little produced in the EU, such as tropical fruits and nuts (24 %) and coffee and tea (4 %), or commodities with a low share of organic EU production, including cereals (22 %, including wheat and rice), oatmeal and seeds (20 %, including soya beans) and sugar (5 %) (EU Agricultural Markets Briefs, 2019).

Currently, imported organic foods products must prove they conform to standards equivalent to European produced goods. To ensure this, a certification procedure is set up. For countries which standards and control measures have been assessed as equivalent to those in place in the EU (e.g. Canada, etc.), inspection is carried out by the national authorities of the country of origin, which then issues a certification of equivalence. In all other countries, inspection and certification is the responsibility of independent control bodies appointed by the European Commission to ensure that organic producers follow legislation and control measures equivalent to the EU ones (EU Agricultural Markets Briefs, 2019).

In 2021, the new law on organic production will enter into force (Regulation (EU) No 848, 2018). The benefit of this regulation is to harmonize rules for all participants. Imported goods will have to comply with the same production and control rules as applied in the EU. Simplifications have been made in the new regulation. For small farmers, the new group certification scheme is expected to reduce the administrative burden and certification costs and possibility to get an exemption from the annual on the spot controls if the holding has a clean record for the past three consecutive years (EU Agricultural Markets Briefs, 2019).

In 2018, the EU imported a total of 3.3 million tonnes of organic agri-food produce. Table 2 presents the volumes of the organic agri-food imports into the EU (by product class) according to the information received from the DG AGRI “Monitoring Agri-trade Policy" classification (EU Agricultural Markets Briefs, 2019a). Document “The Monitoring Agri-trade Policy" is a monthly published by The Commission's Directorate-General for Agriculture and Rural Development (DG AGRI) that is responsible for EU policy on agriculture and rural development and deals with all aspects of the common agricultural policy.

Tab. 2 Volume of the organic food products imports in to the EU (by product class)

Product class	Tonnes	Share on the total organic agri food (%)
Commodities	1 860 761	57.1
Other primary	1 143 935	35.1
Processed products including wine	196 618	6.0
Food preparations	34 108	1.0
Non edible	14 687	0.5
Non agri	6 557	0.2
Total	3.256.666	100%

Source:https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/market-brief-organic-imports-mar2019_en.pdf

DG AGRI monitors the EU trade of agri-food products. These products are divided into six classes: commodities, another primary, processed, food preparations, beverage and non-edible products. "Commodities" includes, among others: cereals, vegetable oils and oilseeds, sugars, milk powders and butter, unroasted coffee and cocoa. "Other primary" includes meat products, F&V, milk yoghurt and honey. "Processed food" includes cheese, meat preparations, and wine and fruit juices. "Food preparations" includes infant food, confectionary and pasta. "Beverages" includes beers, spirits and soft drinks, while "non-edible" covers: plants and essential oils. Moreover, in its scope, the organic regulation covers also products of the fishery sector, which are reported under the label "non-agri" (EU Agricultural Markets Briefs, 2019a).

Table 3 shows the volume of the organic agri-food imports into the EU by product category. Tropical fruit, fresh or dried, nuts and spices and oilcakes create the largest share in EU imports, together 35.2 %.

Tab. 3 Volume of the organic agricultural foods imports in to the EU by product category

Product	Tonnes	(%)
Tropical fruit, fresh or dried, nuts and spices	793 597	24.4
Oilcakes	352 043	10.8
Cereals, other than wheat and rice	255 764	7.8
Wheat	243 797	7.5
Rice	216 017	6.6
Oilseeds, other than soybeans	192 927	5.9

Beet and cane sugar	166 328	5.1
Vegetables, fresh, chilled and dried	148 108	4.5
Fruit, fresh or dried, excl. citrus and tropical fruits	147 114	4.5
Other	742 837	22.8
Total	3.258.532	100%

Source: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/market-brief-organic-imports-mar2019_en.pdf

Large quantities of organic food are imported into Europe. According to Eurostat (2019) 115 countries exports this kind of food to the EU. China is the biggest supplier of organic agri-food products to the EU, with 415 243 tonnes of produce (12.7%) (Table 4), Ecuador, the Dominican Republic, Ukraine and Turkey each have an 8% share of the market (EU Agricultural Markets Briefs, 2019a).

Tab. 4 The volume of the organic agricultural imports in to the EU by product category

Country	**Tonnes**	**(%)**
China	415 243	12.7
Ecuador	278 475	8.5
Dominican Rep.	274 599	8.4
Ukraine	266 741	8.2
Turkey	264 218	8.1
Peru	207 274	6.4
USA*	170 753	5.2
UAE (United Arab Emirates)	127 806	3.9
India*	125 807	3.9
Brazil	72 353	2.2
Other	1 055 262	32.4
Total	3.258.532	100%

Source: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/market-brief-organic-imports-mar2019_en.pdf

The EU imports organic food products from third countries in two different ways:

1) **production and control system recognised as equivalent**, for certain product category, by the EU, listed in Annex III of Regulation 1235/2008 for the third countries (US, Canada, Japan, South Korea, India, Argentina, Australia, New Zealand, Costa Rica, Chile, Israel, Switzerland and Tunisia),
2) **the control body system**: private bodies authorized by the European Commission and listed in Annex IV of the same Regulation that can operate in third countries and certify operators for the purpose of exports. As from 2021 with the new Regulation 2018/848, the Control bodies will have to apply the compliance to EU rules.

Conclusion

The article aims to briefly characterize organic farming, consumption, distribution and import of organic foods in selected countries of the European Union.

The European organic food market is developing very quickly, causing the growth of land under organic farming. From a global perspective, the European organic food market is the world's second largest market share of global retail sales of these products after the United States. Over half of the European Union's organic area is concentrated in Spain, Italy, France and Germany. The largest increase in years from 2007 to 2017 in ecological land (above 200 percent) was recorded in Bulgaria and Croatia and significant decrease recorded was in Poland, Great Britain, Greece and Romania.

Consumers buy different organic products but most often eggs, fruit, vegetables, dairy products and meat. They mostly buy organic foods in supermarkets and specialized stores. A lot of organic foods are imported to the European Union mainly from third countries, among which the largest supplier is China. In 2018 about 3.3 million tonnes of this kind of foods were imported to the European Union in particular tropical fruit, nuts and spices, oilcakes.

In 2021, the new law about organic production (The regulation (EU) No 848) will enter into force. According to it, imported goods will have to comply with the same production and control rules as applied in the EU. This regulation includes the new group certification scheme for small farmers to reduce the administrative burden and certification costs. Another benefit is a possibility to get an exemption from the annual control if the holding has a clean record for the past three consecutive years. Changes in the regulations may contribute to even greater interest in the production or sale of this type of food in the European Union.

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Improving Product Quality Through Integration of Management Systems[1]

Marta Karkalíková[2] – Alica Lacková[3]

Abstract

The paper deals with the study of increasing the quality of products, which ensures the effectiveness and competitiveness of the organization in the business environment and the integration of management systems that lead organizations to analyze customer requirements, stakeholders, to define processes that contribute to increasing of the competitiveness. The aim of the paper is to use the method of analysis to identify benefits, barriers, reasons for introducing management systems and their subsequent integration, to compare and finally use the comparative method to propose measures to improve their efficiency as a competitive advantage. To achieve this goal, it was based on the analysis of the current state of theoretical and practical knowledge about selected management systems and their subsequent integration. Primary research conducted in the form of a questionnaire provided information on the importance of integrating management systems as one of the conditions to increase the economic potential of each business entity. An efficient and effective integrated management system leads to long-term economic prosperity, performance enhancement and strengthening of the market position of a business entity in a competitive environment.

Key words

quality, management systems, integrated management systems, competitiveness, organization

JEL Classification: M11

Introduction

Increasing product quality requirements encourage product and service producers to address quality assurance and improvement. In today's internationally integrated economy, leading to a knowledge-based society, quality is becoming a key pillar of development. It has a direct impact on the amount of profit and is a decisive factor in the stable economic growth of the organization, while largely influencing macroeconomic indicators. One way how companies can systematically work and continually improve quality is to implement management systems and then integrate them. Implementation and maintenance are dependent on the organization’s management approach, from an effective organizational structure that defines responsibilities and powers and from other management aspects. Implementation of management systems and integrated management systems in the organization may be caused by customers ‘attitude, efforts to differentiate from competitors, or to increase organizational efficiency. The successful operation of the organization requires systematical and transparent approach.

[1] The article is an output of the project VEGA 1/0543/18 The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic.

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The purpose of the integrated management system is to ensure that products and services meet customer requirements, the organization achieves and demonstrates appropriate environmental performance, protects employees' health and creates conditions for generally safe operation. The implementation of integrated management systems is a distinguishing tool, a priority for organizations as well as competitive advantage. It contributes to the identification of risks and it minimizes the risks affecting key business aspects of the organization and stakeholders by integrating individual management systems.

Individual management systems have several common features, such as goal, process management, and mutual respect of stakeholders' requirements. They are compatible and based on the Deming PDCA cycle (plan - do - check - act), which is applicable to all management processes and systems. Process improvement, analysis and evaluation can be achieved at all levels in four basic cycle steps. It is a cycle of continuous improvement that enables companies to ensure that their processes are managed appropriately, have sufficient resources, identify and pursue opportunities for continuous improvement (iso.org, 2017).

The implementation of management systems in order to increase the efficiency and systematic management of the company may cause the processes opacity and administrative burdens, and for this reason, organizations have decided to integrate individual management systems with each other (Mizla, 2018). These are a voluntary tools for implementing effective, systemic and process management of the organization (Galetto et al., 2017). At the same time, they are an opportunity for the companies to demonstrate their commitment to customers whether they are local or global.

The individual management systems are formally compatible, and the integrated management system brings many benefits to the organizations and combines several standards, such as standard ISO 9001: 2015 Quality management systems. Requirements, standard ISO 14001: 2015 Environmental Management Systems. Requirements with guidance for use. Standard ISO 45001: 2018 Occupational health and safety management systems. Requirements is designed to integrate all three management systems standards into one complete system. Other standards of management systems integrate with each other too.

As it involves integrating multiple management systems across multiple domains, this allows organizations to globally identify results and benefits over the entire period, not just individual areas of each management system (Woodcome, 2016). The companies gain benefits at all levels by integrating management systems. From a strategic point of view, the benefit of integration is a reliable interaction with all stakeholders. It helps to use resources efficiently and to monitor and control processes in the organization. Efficiency of activities is increasing and, together with other benefits, it brings firm a greater opportunity to achieve sustainable growth.

The generic structure of management system standards is a main assumption and aspect of their integration. It is their ability to merge into one integrated management system based on processes, customer requirements and stakeholders. The organizations have the ability, through management systems and their integration, to demonstrate their commitment to quality improvement, environmental protection and health and safety at work, thereby gaining a competitive advantage on the market. The implementation of integrated management system can vary across companies, and depends on the organization's size, type, and activity. The selection of a particular implementation process remains the responsibility of the managers, in terms of deciding on the procedures, the relevant criteria when choosing an experienced consulting organization and the certification body (Pop et al., 2018).

When implementing management systems, firms can encounter various obstacles and barriers. The most common obstacle is the obtaining of expert information on the requirements of an integrated management system and a lack of experience. There is also a mismatch between the internal and external environmental concerns of organizations over the interests of improving the quality of products and services. The implementation process can be financially difficult for organizations, leading to increased costs, while the return on this implementation typically exceeds more than one year.

From the economic point of view, the most important reason for implementation of integrated management systems is to reduce the cost of poor quality, as well as losses arising from violations of environmental legislation or safety regulations. A great advantage of the integrated management system is its lower time-consuming audit compared to the auditing of each management system separately (Darabont et al., 2019). The aspects resulting from the integration of management systems are inherently a very positive step in the management of companies. Integration has a positive impact not only on business development but also on whole economy and society.

1 Methodology

The aim of the paper is to use the analysis method to identify benefits, barriers, reasons for management systems´ implementation and their subsequent integration, and suggestions for improving efficiency as a competitive advantage. The basis for drawing on and utilizing the theoretical knowledge necessary to investigate this topic was a literature search that included both domestic and foreign publications. Data were supplemented with current sources in electronic form as well as contributions from scientific conferences and subsequently processed, analyzed and interpreted by using the method of analysis and synthesis.

The method of analysis was used to investigate individual theoretical knowledge and to process statistical data, which helps to form the basis of information to which other scientific methods can be applied. Synthesis as a methodological principle complements the analysis and allows to explore mutual relationships, respectively interaction and clarify the internal patterns of individual aspects of management systems´ integration. The methods of induction and deduction were used mainly when processing the results of primary research and formulating more specific conclusions concerning the management systems´ integration. In addition to analytical and synthetic methods, other methods, in particular analogy, comparison and concretization, which helped to bring the solution.

The primary survey, which was conducted as a questionnaire, and it has provided information on the importance, benefits of management systems´ integration as one of the conditions for increasing the economic potential and competitive advantages of each business entity. Through interviewing, information about respondents' attitudes, their experience of implementing integrated management systems and how they behave, and motives can be obtained.

To find out the attitudes to the individual benefits and barriers of implementing integrated management systems, the Likert scale was used, with the scoring scale being 1 - I agree to 5 - I disagree. The arithmetic mean of ratings for the benefits and barriers on the Likert scale was calculated for easier understanding and interpretation. Based on the average, we have ranked the importance of individual benefits and barriers.

Comparative methods were used to compare the differences and common features of management systems within an integrated management system. Numerical and relational arguments were evaluated by using mathematical and statistical methods. The individual analyzed outputs were summarized in a table and graphical form.

2 Results and Discussion

The introduction of an integrated management system into the organization is at the discretion of the organization, often lacking the necessary information and support in the form of methodology, guidelines, various tools that sometimes discourage them from implementing management systems. Proper deployment brings increased competitiveness, leads to improved customer and stakeholder satisfaction, efficiency and cost reduction, increased labor productivity, definition of responsibility and authority, and last but not least, to improve the quality of the product and service itself. Implementing and maintaining an integrated management system is the organization's marketing strategy (Chen, 2018) identifying strengths and weaknesses, reducing risks and increasing efficiency and effectiveness (Bernardo et al., 2018). The organization is becoming competitive on the market (Manders et al., 2016).

In accordance with the concept of integrated management systems, it is necessary to ensure the change of the whole production management system and its orientation, to ensure the responsibility of individual workers, to apply effective methods of quality control and management, environment, safety and health at work, to prepare staff training and general awareness. Implementing integrated management systems is an important step towards business prosperity through more effective management of process quality, environmental and security risks. It needs to be evaluated as any long-term investment, because integration requires time and financial resources. Organizations are putting in place an integrated management system for long-term competitiveness.

2.1 The importance of integrating management systems in practice

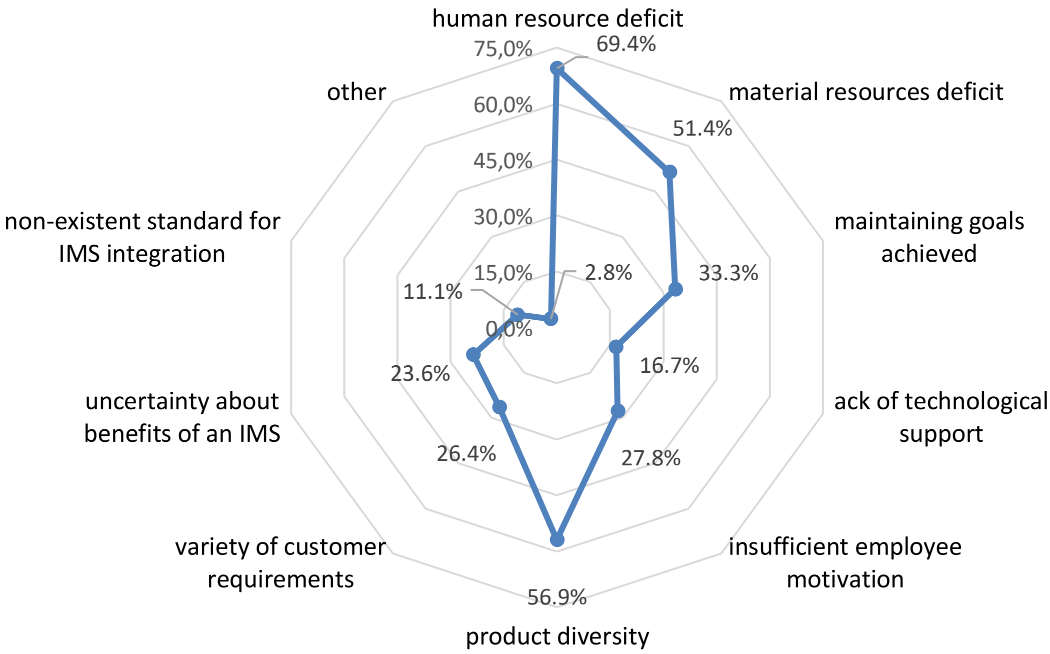
Management systems are perceived by the public as a tool for improving organization efficiency and market eligibility. Organizations that have integrated management systems in place better meet customer requirements, avoid mistakes, motivate and engage employees to improve the efficiency of internal process performance, while quality is the foundation of their business. Implementing management systems in organizations promotes competitiveness across Europe. Studies carried out in different countries have shown that up to a quarter of recent productivity gains in organizations can be attributed to increased interest in implementing management system standards. This not only leads to the successful implementation and certification of management systems and integrated management systems, but also to greater organizational competitiveness.

The survey deals with the analysis of an integrated management system in an organization, its significance, benefits, barriers, and suggestions for improving efficiency as a competitive advantage. Implementing management systems is an important step towards maintaining and improving the organization's market position. Over the past two decades, the number of deployments of different management systems and integrated management systems has increased at national and international levels. In the survey, the questioning method was used by means of a standardized questionnaire, which was distributed electronically and personally in printed form.

The research sample is composed of organizations focusing on various economic activities that operate in the Slovak Republic and consists of 117 business entities from which at least one management system is in place and 72 of these organizations use the integrated management system.

When introducing and subsequently certifying integrated management systems according to relevant standards, there may be some obstacles in the organization that need to be eliminated so that implementation can then be successful and provide benefits from system deployment. In the assessment of the barriers that may occur when implementing the integrated management system, 72 organizations with an integrated management system expressed their opinion, while respondents could choose from several options (Graph 1).

Graph 1 Barriers to the implementation of integrated management system



Source: author's research

When integrating management systems, as with any other activity, barriers may also occur. The success of an integrated management system may be jeopardized if integrated systems are not assessed or complemented. The biggest problems in implementing the integrated management system in organizations are the motivation of human resources, which was reported by 50 respondents (69.4%), product diversity by 56.9% (41 respondents) and material resources deficit by 51.3% (37 respondents). An important aspect that affects the implementation of integrated management systems in organizations is the identification of customer requirements that may have different requirements and that impact 26.4% (19 respondents) on system integration. If the organization has not yet implemented any management system, then the employees do not have enough experience, maybe even the motivation to introduce an integrated management system, which was confirmed in the survey conducted by 27.8% of respondents. The problem that organizations encounter least when implementing an integrated management system is the non-existent international standard for the integration of management systems, as reported by 8 respondents (11.1%). 2 respondents (2.8%) said that they had no problems with implementing the integrated management system.

Management system integration is a time-consuming and costly process that requires the adaptation of corporate culture and workers to new working conditions. This requires, in particular, increased efforts by managers to increase awareness and belief in corporate culture. This is also closely related to the barrier of human resources motivation to implement and maintain an integrated management system. To be successful in integrating management systems, employees must be inclined and willing to introduce and accept changes. Survey organizations report that the barriers associated with the implementation of integrated management systems are not too cumbersome to hinder organizations' decision to deploy them.

Tab. 1 Benefits of implementation of an integrated management system

***Benefits of integrating management systems* [count / %] (n=72)**	**1**	**2**	**3**	**4**	**5**
simplification of documentation and audits	**41** **56.9%**	13 18.1%	10 13.9%	8 11.1%	0 0.0%
reduction of external costs	20 27.8%	10 13.9%	**36** **50.0%**	4 5.6%	2 2.8%
reduction of internal costs	18 25.0%	**30** **41.7%**	21 29.2%	2 2.8%	1 1.4%
more efficient internal communication	22 30.6%	16 22.2%	**25** **34.7%**	3 4.2%	6 8.3%
increase of employee motivation	11 15.3%	9 12.5%	**38** **52.8%**	10 13.9%	4 5.6%
improving product delivery for customers	21 29.2%	20 27.8%	**30** **41.7%**	1 1.4%	0 0.0%
increased customer confidence	**27** **37.5%**	22 30.6%	13 18.1%	10 13.9%	0 0.0%
organization's positive image	**38** **52.8%**	18 25.0%	10 13.9%	6 8.3%	0 0.0%
improving partnerships with suppliers	16 22.2%	**30** **41.7%**	19 26.4%	5 6.9%	2 2.8%
increase of sales volume	17 23.6%	21 29.2%	**24** **33.3%**	10 13.9%	0 0.0%

Source: author's research

Integration has a positive impact on increasing the market value of the organization, reducing the number of complaints and administrative work. Implementing integrated management systems is an important prerequisite for a successful business and brings specific economic effects to the organization. The benefits that organizations have gained after the introduction of an integrated management system are shown in tab. 1. The method of absolute and relative abundance was used. Based on the results of the survey, it can be stated that the simplification of documentation and audits identified by 41 respondents (56.9%) out of a total of 72 are important benefits of integrated management systems. , but also identifying possible ways of improving. Management Systems Audit should result in increased customer confidence, business process improvement, simplification and streamlining of management activities and information flows within the organization.

Auditing is considered the most widespread way in which the level of management system and integrated management systems is reviewed. The second most common advantage is the creation of a positive image of the organization and an increase in employee motivation, as reported by 38 respondents (52.8%). Organizations also noted a reduction in external costs, reported by half of the 50.0% respondents (36 respondents). External costs are costs incurred outside the organization after delivery of the product to the customer. They will show up during the use of the product as a result of poor manufacturer's work. In the context of building, maintaining and improving management systems, all expenses related to quality assurance as well as internal costs should be monitored, which includes all expenses for discrepancies in documentation, extra work for repairs, and re-inspection. 30 organizations (41.7%) showed a reduction in internal costs in the survey. Neither the frequent nor the frequent benefits that organizations have noted are the reduction and improvement of product deliveries to customers, the improvement of partner relationships reported by 30 respondents (41.7%).

At least the most frequent benefits are strengthening customer confidence of 37.5% (27 organizations), more effective internal communication with 25 respondents (34.7%) and the increase in sales volume of 33.3% (24 organizations). The benefits of integrating management systems according to average values are shown in table 2.

Tab. 2 Positive benefits of integrating management systems based on average value

Rank	Positive benefits of an integrated management system	Average
1	organization's positive image	1.78
2	simplification of documentation and audits	1.79
3	increase of customer confidence	2.08
4	reduction of internal costs	2.14
5	improvement of product delivery for customers	2.15
6	improved partnerships with suppliers	2.26
7	more efficient internal communication	2.38
8	increase of sales volume	2.38
9	reduction of external costs	2.42
10	increase of employee motivation	2.82

Source: author’s research

Relationships between individual benefits have been identified and the analysis shows that it is not possible to obtain a competitive advantage if the individual processes in each process area are not sufficiently captured and properly optimized. In addition to internal barriers, barriers from the external environment may affect the organization, some of which may be more relevant or less significant for the organization. The benefits that integrated management systems bring after successful implementation outweigh the implementation barriers and therefore managers should decide to use these opportunities to improve the business environment. Through efficient use of management systems and integrated management systems, there is significant progress in managing organizations and making managers' work more transparent.

The reasons for implementing integrated management systems are key and decisive factors for the organizations. Their position on the market is improving from the society-wide perspective, which enables them to gain new opportunities in domestic and foreign markets, increasing the value and economy of the organization. The introduction of an integrated management system leads to improved customer and stakeholder satisfaction, efficiency and cost reduction, increased labor productivity, definition of responsibility and competences, and, last but not least, improved product and service quality. From an economic point of view, the implementation of integrated management systems has a significant impact on reducing the cost of poor quality, as well as losses due to the violations of the environmental legislation or safety regulations.

Each organization can approach performance and efficiency assessments in different ways. In order to be competitive, the organization should look for efficient production processes, focus on its customers and, in particular, their needs and, last but not least, satisfy all those who are in some way connected to the organization.

Organizations are now making efforts to reach the global market by finding resources and new competitive advantages in order to gain competitiveness and achieve sustainable development. Such an advantage is provided by the integration of management systems in the form of a system approach to the environmental management system, quality management, occupational health and safety, or other management systems.

Conclusion

Organizations implement management systems as a tool to express their investment in improving quality and performance. The effectiveness of implementing management systems and integrated management systems is very important for the organization in the long run. Management systems bring benefits to the internal environment, as well as barriers that can manifest themselves in implementation and subsequent certification, or even in the process. When putting into practice, it is important to analyze the current state of the organization to influence future developments. The benefits of implementing integrated management systems are both in organizational processes, in the micro and macro environment of the organization, in the competitive environment and also in the market position. Market globalization and constant change create a new dimension of competition for organizations in which it is necessary to react flexibly and be prepared for the potential risks and opportunities that these changes can bring. This change also affects organizations that want to implement integrated management systems.

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The Support of Small and Medium-sized Enterprises in Foreign Trade of Slovakia[1]

Elena Kašťáková[2] – Natália Barinková[3]

Abstract

This paper examines the position and importance of small and medium-sized enterprises (SMEs) in foreign trade of Slovakia in the period of ongoing geopolitical changes that actively shape global integration processes in the world economy. At present, SMEs in Slovakia are of great importance for the development of the economy and foreign trade, especially in the area of supporting their internationalization. The research will evaluate the impact of SMEs on the development of Slovakia's foreign trade and their institutional support for export. At the same time, it will point out the problems of SMEs in Slovakia related to internationalization and provide further possibilities to support their exports to foreign markets.

Key words

Export Support, Foreign Trade, Internationalization, SMEs, Slovakia

JEL Classification: F13, F19

Introduction

In recent years, the support for small and medium-sized enterprises (SMEs) has become an integral part of the economic strategy of most states. SMEs are a key source of jobs and their existence also prevents the emergence of monopolies and helps to maintain competition. Among the most important positive aspects of the existence of SMEs belong: high adaptability to changing market conditions, dynamics of development, innovation function, regional support, significant share on GDP, job creation, unemployment reduction and customer satisfaction.

Also, the direct contact of small and medium-sized enterprises with customers and the ability to respond quickly and flexibly to changes in consumer preferences, often associated with the need to change production capacity or trade, is also very important. We can say that these are the biggest advantages of SMEs in comparison to large enterprises that prefer stable markets where they can optimize production conditions and achieve economies of scale. (Strážovská et al., 2016)

Entrepreneurs are closely linked to the specific region they usually live in. They are therefore under public control and revenues remain in the region. (Veber, Srpová, et al., MSP, 2012). They also have a clearer and simpler structure that allows them to directly manage and control their business. In most cases, the entrepreneur has the opportunity to make decisions and some creativity in the business. (Chodasová, Bujnová, 1996).

[1] This work was supported by the scientific grant agency of The Ministry of Education, Science, Research and Sport of the Slovak Republic under Grant VEGA 1/0546/17 Impact of the geopolitical changes on enforcement of the EU strategic foreign trade interests (with implications for the Slovak economy).

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1 Methodology

The aim of this paper is to examine the position of SMEs in foreign trade of Slovakia, to point out the problems of SMEs in Slovakia related to internationalization and to provide further possibilities of supporting their export to foreign markets.

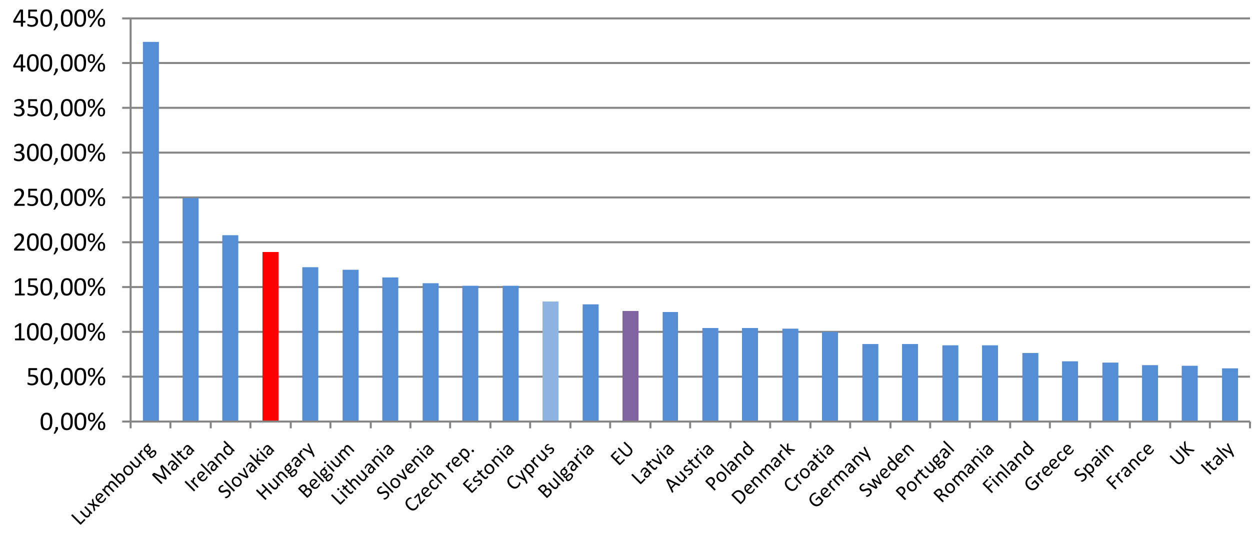
Several general theoretical methods, such as abstraction, analysis, synthesis, deduction and induction, have been used to achieve this goal. At the same time, the article also uses specific methods, especially the method of comparison to compare achieved results of the analysis of foreign trade development in Slovakia and the development of export and import of SMEs in Slovakia. Other special methods were used to make foreign trade data more transparent, especially exact methods or graphic display.

Statistical sources for this research were used from the Statistical Office of the Slovak Republic, the National Bank of Slovakia (NBS) and the OECD, which provided data for analysis of foreign trade of the Slovak Republic and export and import of SMEs in Slovakia. Goods structure of foreign trade of the Slovak Republic and SMEs was classified according to the HS2 nomenclature.

2 Results and Discussion

Slovakia is characterized by a high openness of the economy due to a small market and a lack of own resources and is therefore sufficiently dependent on the development of foreign trade. Within the EU, Slovakia is one of the countries with the highest openness of the economy. (Kittová, et al., 2015) A detailed overview is shown in Graph 1.

Graph 1 Openness of the EU member states economies in 2017 (in %)



Source: processed by authors based on World Bank, 2018

According to the World Bank figures, Slovakia achieved an openess of the economy of 189.1% in 2017 and placed fourth after Luxembourg, Malta and Ireland. On average, EU countries achieved 123% in the same period.

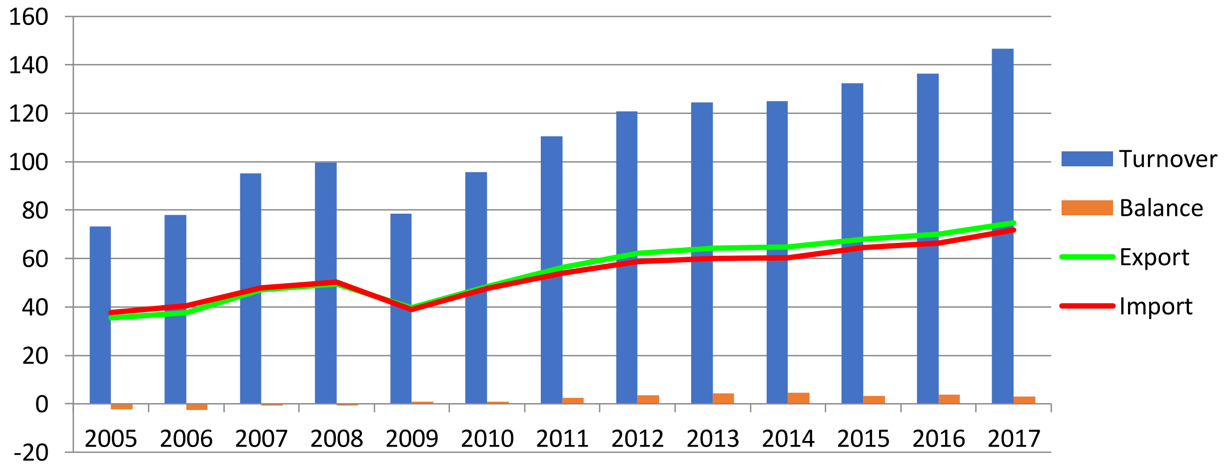
2.1 Foreign Trade Development of the Slovak Republic

Accession of the Slovak Republic to the EU brought with itself several consequences, changes in field of the foreign trade development and in the foreign trade relations of the Slovak Republic. Slovakia has implemented principles of the Common Commercial Policy and Common Agricultural Policy (CAP) of the EU, and within the framework of the European Economic Area (EEA), as well as in relation to the non-member states, enlargement of the free trade area for the Slovak exporters was brought into effect.

Contractual, autonomous and foreign-trade relations of the Slovak Republic were amended to a large extent by the accession to the EU. The imports to the EU from the third countries are subject to the EU tariff rate, whether to the general one, contractual or preferential, in the amount in accordance with the Common Customs Tariff (CCT), available in the Integrated Tariff of the European Community (TARIC) system. General tariffs are the highest ones and applicable to the imports with no reference of origin, or to the imports from the countries that are not subject to any contractual or preferential custom tariffs. Certain imports from the more developed non-European WTO member countries are burdened by the contractual tariffs. (Kašťáková, Ružeková, 2018). Other territories are subject of more favoured custom tariffs. Data related to the foreign trade development of the Slovak Republic since the accession of the Slovak Republic to the EU are displayed specifically in Graph 2.

In the time period ranging from 2004, when Slovakia joined the EU, to 2008, the average foreign trade growth rate was around 13.3%. Considerable and steep decrease of the value of 21.3% (in comparison to the year of 2008) was registered in 2009, that was caused by the global economic depression and by other consequences of the global financial and economic crisis is present, to a lesser extent, even today. Since 2010, the foreign trade of the Slovak Republic has been increasing averagely by 9.23%. Dynamics of the exports of the Slovak Republic in the monitored time period was raised by 10.8% on average, and this percentual value exceeded the growth rate of the goods imported to Slovakia which equalled 8.83% on average. In the year of 2009 downturns were registered in both imports and exports to/from the Slovak Republic. The growth rate of the exports recorded an uphold of 6.8% in 2017 (in comparison to the year of 2016), whereas the growth rate of the imports upturned by 8.2%.

Graph 2 Foreign Trade Development of the Slovak Republic, 2005 – 2017 (in bln. EUR)



Source: processed by authors based on MH SR (2018)

Since the accession of the Slovak Republic to the EU until 2008, the balance of the foreign trade of the Slovak Republic was of a negative character (see Graph 2) The most negative data on the foreign trade balance was registered in 2006 (-2,6 bln. EUR). This was caused by the influence of the investments from South Korea in the field of automotive and electrical engineering industry in the Slovak Republic (mainly investments of KIA and SAMSUNG) and this fact was displayed in the foreign trade balance data which achieved a positive numbers in 2009 and since then it kept the aforementioned character. These facts were influenced by a huge export increase of the goods produced in the electrical engineering and automotive sector in the Slovak Republic.

The commodity structure of the foreign trade displays the changes occurred in the development of production process and in the final consumption of households, and it is dependent on the economic dimension of the economies. In case of the small domestic market of the Slovak Republic, it is inevitable to search for new markets located abroad.

In the year 2017, the nominal value of the goods exported from Slovakia was 74 813.3 mil. EUR. In comparison to the year of 2016, the total export volume increased by 6.8%. Export of the agri-food products listed in the Chapters 1-24 of the Harmonized System achieved the value of 2 836.3 mil. EUR what represents an increase of 0.3%. Commodity structure of the foreign goods exchange of the most important goods is displayed in Tab.1.

Tab. 1 The most important export commodities of the Slovak Republic in 2017 (in mil. EUR)

Custom Tariff Chapter	2017	Share (%)	Index 17/16 (%)
87 – Vehicles, and Parts and Accessories Thereof	19 958.7	26.7	100.3
85 – Electrical Machinery and Equipment and Parts Thereof	15 564.3	20.8	108.1
84 – Nuclear Reactors, Boilers, Machinery and Mechanical Appliances and Parts Thereof	9 094.2	12.2	103.6
72 –Iron and Steel	3 500.6	4.7	127.5
27 – Mineral Fuels, Mineral Oils and Products of Their Distillation	3 387.8	4.5	145.8
39 – Plastics and Articles Thereof	2 316.0	3.1	107.7
40 – Rubber and Articles Thereof	2 188.3	2.9	105.5
73 - Iron or Steel Articles	1 720.5	2.3	106.7
94 – Furniture, Lamps and Lighting Fittings	1 480.0	2.0	103.8
76 – Aluminium and Articles Thereof	1 110.0	1.5	110.9
Total Export Volume from the SR	**74 813.3**	**100.0**	**106.8**

Source: processed by authors based on MH SR (2018)

Taking glance at the Tab.1 showing the export volume from the Slovak Republic, it is obvious that 59.7% of the total export volume is composed of the following three custom tariff chapters (of the HS): Vehicles, and Parts and Accessories Thereof; Electrical Machinery and Equipment and Parts Thereof; Nuclear Reactors, Boilers, Machinery and Mechanical Appliances and Parts Thereof. The share of 80.7% of the total export volume of the Slovak Republic was generated by the 10 most important commodities. This state of affairs in the commodity structure points out on the insufficient diversification of the export of the Slovak Republic and also on the considerably vulnerability of the economy of the Slovak Republic. Therefore, the Government of the Slovak

Republic defines in the document called Strategy of External Economic Relations of the Slovak Republic for the period of 2014-2020 as one of the top priorities the enhancement of the commodity and territorial export diversification.

Import volume to the Slovak Republic in the year of 2017 equalled the value of 71 817.2 mil. EUR that represents an interannual increase of 8.2%. %. Import of the agri-food products of the Chapters 1-24 of the Harmonized System (HS) reached the nominal value of 4 238 mil. EUR, an annual increase of 3.3%. The summary of the most decisive import commodities of the Slovak Republic in the year of 2017 is provided in Tab. 2.

Electrical Machinery and Equipment and Parts Thereof (20.6% of the total import volume), followed by Vehicles, and Parts and Accessories Thereof (14.4%), Nuclear Reactors, Boilers, Machinery and Mechanical Appliances and Parts Thereof (12.1) and Mineral Fuels, Mineral Oils and Products of Their Distillation reaching 8.7% belonged to the most imported commodities in 2017. The mentioned four commodities were responsible for 55.8% of the total import volume to the Slovak Republic, whereas the 10 most important commodities created 73.3% of the total import volume to the Slovak Republic in the year of 2017.

Tab. 2 The most important import commodities of the SR in 2017 (in mil. EUR)

Custom Tariff Chapter	2017	Share (%)	Index 17/16 (%)
85 – Electrical Machinery and Equipment and Parts Thereof	14 778.9	20.6	110.0
87 – Vehicles, and Parts and Accessories Thereof	10 322.4	14.4	102.9
84 – Nuclear Reactors, Boilers, Machinery and Mechanical Appliances and Parts Thereof	8 679.8	12.1	103.5
27 – Mineral Fuels, Mineral Oils and Products of Their Distillation	6 235.1	8.7	140.8
39 – Plastics and Articles Thereof	3 011.9	4.2	102.6
72 – Iron and Steel	2 279.1	3.2	124.7
73 – Iron or Steel Articles	2 030.2	2.8	114.7
90 – Optical and Measuring Instruments and Apparatus	1 934.4	2.7	78.3
30 – Pharmaceutical Products	1 666.5	2.3	94.8
94 – Furniture, Lamps and Lighting Fittings	1 649.5	2.3	104.7
Total Import Volume to the SR	**71 817.2**	**100.0**	**108.2**

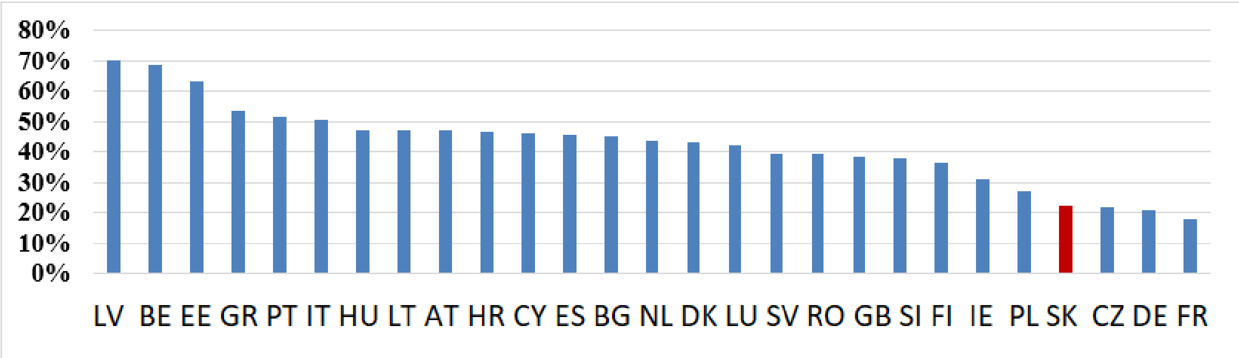
Source: processed by authors based on MH SR (2018)

The Slovak Republic recorded an active foreign trade balance in 2017, in the volume 2 996.1 mil. EUR (lower by 649.8 mil. EUR than the foreign trade balance in 2016). (Ministry of Economy of the Slovak Republic, 2018). Considering the development of the foreign trade of the Slovak Republic, we can arrive at conclusion that the Slovak Republic disposed of an active foreign trade balance with all of the EU member states, whereas its trade balance with the Russian Federation and with the countries located in the South-Eastern Asia, as for instance, the People´s Republic of China, Republic of Korea, Japan, Malaysia, Taiwan and India, were of a passive character.

2.2 The position of SMEs in foreign trade of Slovakia with the focus on export

Despite the strategic position of SMEs on the Slovak market, which represents 99.9%, SMEs have low export potential. According to the latest OECD data, the share of SMEs in Slovak exports in 2016 was 22%, which is very low compared to the rest of the EU countries. Detailed overview of the share of SMEs export in the total export of EU countries in the year. 2016 is shown in detail in Graph 3.

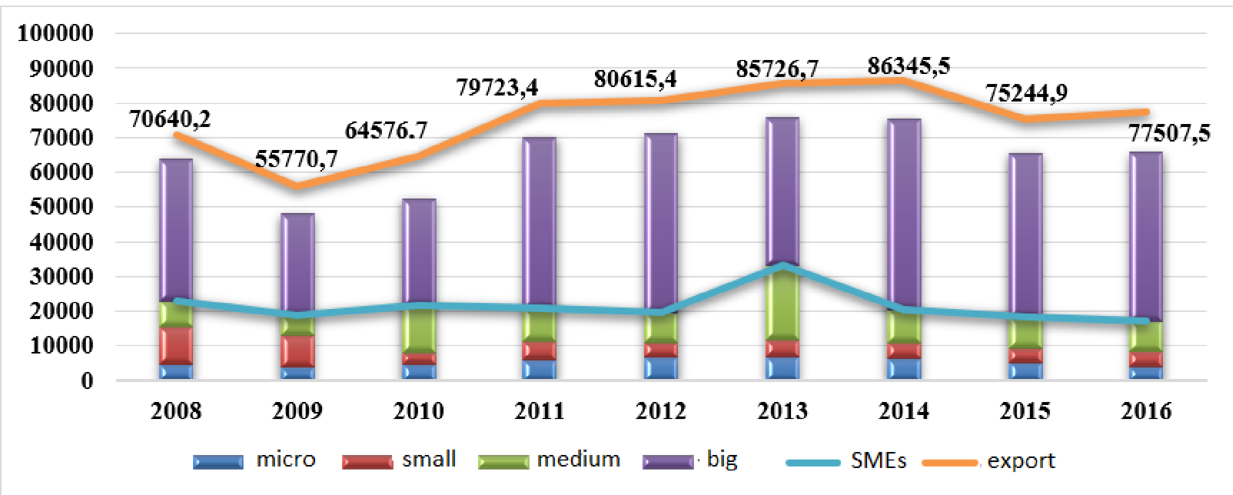
Graph 3 The share of SMEs export on the total export of EU countries in. 2016 (in%)



Source: processed by authors based on OECD, 2019

In 2016, Slovakia was ranked fourth from the end in the share of SME exports in the total export of EU countries. Only the Czech Republic, Germany and France were worse off. More than 50% was achieved by Latvia, Belgium, Estonia, Greece, Portugal and Italy. According to the OECD, only 23 907 enterprises were active in export activities in Slovakia, t. j. 4.3% of SMEs. A detailed overview of the development of the share of SMEs and large enterprises in the total export of Slovakia in 2008 - 2016 is shown in Graph 4.

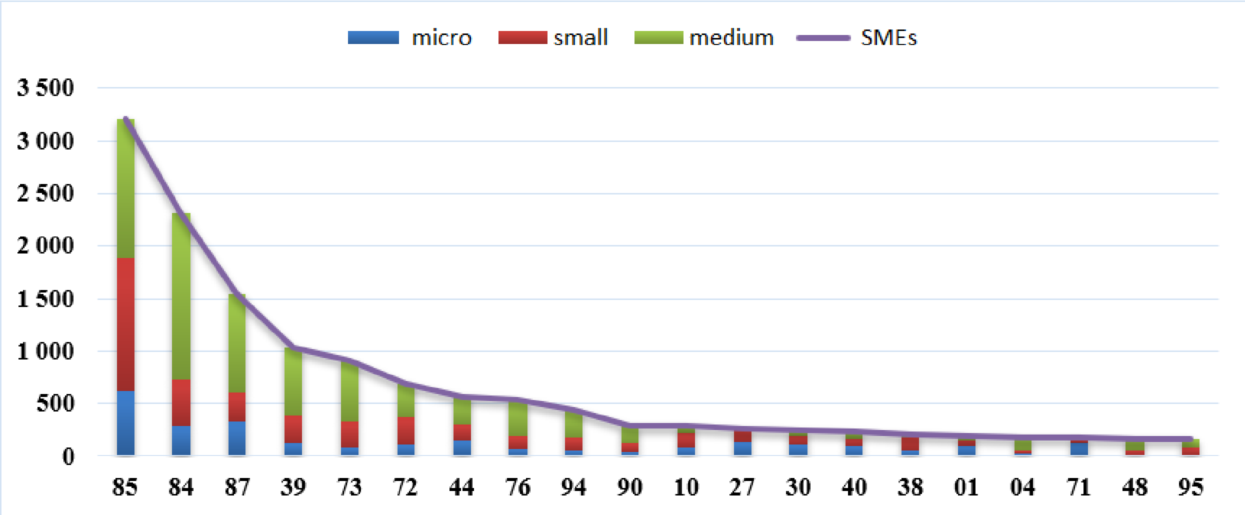
Graph 4 The share of SMEs and large enterprises in total Slovak exports in 2008 - 2016 (in mil. USD)



Source: processed by authors based on OECD, 2019

The export structure of Slovak SMEs remains without significant changes in the long term. In 2017, electronics and electrical engineering (19%), engineering products (13.7%), vehicle (9.2%), plastics and manufactures thereof (6.1%) and iron and steel products (5.4%). A detailed overview of the commodity structure of Slovakia's SME export in 2017 is shown in Graph 5.

Graph 5 Commodity structure of the export of SMEs in Slovakia in 2017 according to HS2 (in bln. EUR)



Source: processed by authors based on ŠÚ SR, 2019

Most of the Slovak export is realized by transnational companies which poses a significant risk to a small and highly open economy. Conversely, SMEs that form the economic framework are only symbolically involved in exports. The main problems that are SMEs facing while exporting is a little knowledge regarding export and export procedures, insufficient financial resources to cover export costs, high export costs, lack of state support in field of export. The problem of SME export development in Slovakia may be solved by the program of internationalization of SMEs with institutional support from the state. For example, SARIO can cover SMEs ´costs related to trade fairs and exhibitions or some costs related to business missions. EXIMBANKA SR can offer better conditions for SMEs when getting the loans or export insurance. It is important to promote these services provided by state organizations, so SMEs have the opportunity to use them.

2.3 Institutional support of SMEs in Slovakia

Institutional support is important in terms of removing existing barriers and adapting legislation concerning SMEs. Another goal is to give SMEs access to capital resources and help them overcome financial difficulties in starting a business. Institutional support for SMEs in Slovakia is provided by ministries, financial institutions and foundations as well as various other specialized agencies.

The most important governmental body is the Ministry of Economy of the Slovak Republic, which acts as a coordinator and guarantor of state aid, support programs, subsidies for the creation of industrial parks or investment aid for regional development. In the long term, support for export activities by SMEs is one of the priorities of the Strategy of External Economic Relations of the Slovak Republic. In the field of implementation of the pro-export policy of the Ministry of Economy of the Slovak Republic, various projects are implemented, in which it cooperates mainly with the Slovak Investment and Trade Development Agency (SARIO), the Export-Import Bank of Slovakia (EXIMBANKA SR), the Slovak Guarantee and Development Bank (SZRB) and also Slovak Business Agency (SBA).

Since September 2017, under the auspices of SARIO, the national project "Internationalization of SMEs" has been running together with the SBA. The project is implemented within the Operational Program Research and Innovation, which is a joint program of the Ministry of Economy of the Slovak Republic and the Ministry of Education, Science, Research and Sport of the Slovak Republic. One of the specific objectives of the Priority 3 program is to broaden the internationalization of SMEs and to use the opportunities offered by the EU single market.

The main objective of this project is to "strengthen the international capability of SMEs in Slovakia, to show their business potential and to increase SME assistance in international cooperation by providing free services". SARIO provides an opportunity for SME presentations at foreign fairs and exhibitions, which creating opportunities for expanding business contacts. The desired result of this activity is the conclusion of contracts and export of goods through Slovak SMEs to a specific foreign market. Another SARIO activities are business missions where Slovak entrepreneurs can learn about business and investment opportunities in the country and have the opportunity to participate in B2B negotiations with foreign companies, which develops cooperation with foreign countries. During these missions, SARIO provides continuous assistance to SMEs if necessary. The national project also includes recruitment measures, interconnection of Slovak SMEs with subcontracting chains of multinational companies. At the same time, they provide training for entrepreneurs and increase knowledge through the "Export Academy", which also takes place in various regions of Slovakia. The main goal is to familiarize SMEs with techniques in international trade by providing educational activities. At the same time, seminars are held with specialists in specific foreign markets that stimulate the further development of SME exports to foreign markets.

Together with SARIO, the SBA is also involved in the implementation of the national project. This agency provide support through existing programs at EU level and improve entrepreneurial online activities of Slovak businessmen. In order to help Slovak exporters, EXIMBANKA SR organizes “Export Clubs”, which increase the education of foreign entrepreneurs in the banking and insurance sector, because a condition for successful export is a valuable practical advice.

2.4 Possibilities of the export support of SMEs in Slovakia

Slovak SMEs face many challenges in internationalization and export support, such as: a large number of support measures are implemented by different institutions - poor coordination and synergy; in the area of support, the 'one size fits all' approach is prevalent, preventing some SMEs from participating in support; various types of support (non-profit organizations, chambers of commerce, EU projects) that are not being used effectively enough, as well as a large lack of financial support, information and advice on foreign trade.

Based on the situation with SMEs and obstacles related to the internationalization of SMEs, the following measures were identified for solving the problems of SMEs in Slovakia with the support of export to foreign markets (EUBA, 2017):

• *Support for SME training in foreign trade*. It is necessary to use the existing instruments of the SARIO agency (Proexport Academy) as well as the project Promoting the Internationalization of SMEs, which is implemented by SARIO Agency. This project should create conditions for systematic education of SMEs in the field of internationalization of business. And at the universities introduce a subject focused on pro-export policy.

• *Setting up specialized institutions to support SMEs*. In order to ensure sufficient information about the target markets, as well as the conditions of foreign trade in these territories, it is necessary to prepare experts - specialists for individual territories who would be able to answer in detail the requirements of entrepreneurs in the given territory. With the same level of specialization, specialists need to be provided to prepare international contracts and negotiate with foreign partners. It is also necessary to create a register of exporters and a register of commodities, respectively. export opportunities. The exporters' register could also serve to address / select SMEs for participation in business missions, respectively SMEs involvement in export promotion programs.

• *Creating associations for the development of foreign trade activities by SMEs*. Based on the successful experience from Spain, the proposed creation of intermediary organizations or so called associations supporting the export of SMEs, which would bring together products of SMEs and create conditions for their marketability in foreign markets, is desired. Associations could be sectoral, commodity or territorial specialized. They may also be SME clusters whose production program is complementary to each other or have cooperation agreements between themselves. Such associations save direct export costs and restrict export risks. These SMEs have a better position in foreign markets, thereby achieving more favourable price ranges and thus increasing their competitiveness.

• *Financing of SME export activities*. In view of the high risk associated with international trade, a specific guarantee product is needed, respectively an insurance product for covering export contracts and SME loans (e.g. state guarantee for critical territories to maintain market position). These products can be created by modifying the existing tools of EXIMBANKA SR, alternatively they can be realized through special intermediaries specialized in SMEs (e.g. SME export associations). In the case of companies using the latest technologies and their commercialization with a focus on export, create a credit facility to provide loans with a long maturity (10 years), with a preferential interest rate and deferred loan repayments (3-5 years after the start of the business). (Pásztorová, 2018). At the same time, it would be necessary to create a capital financing instrument to support start-ups and fast-growing enterprises in their expansion in the global market.

• *SME cooperation with academic institutions*. Innovative products and services need to be available to compete in a competitive international market. Due to the low competitiveness of SMEs and their limited potential for introducing new products and innovations by internal capacities, it is necessary to stimulate their cooperation with academic institutions. The condition for successful cooperation of SMEs with scientific and research institutions and universities is the creation of intermediaries for SMEs - consortia with a particular focus on individual export technologies, products or services. (Škorvagová, Drieniková, 2016). Business associations, which would also be the guarantor of the science and innovation process with science and research institutions, as well as the opportunities for trainees and PhD students in these SME intermediary structures, should play a decisive role.

• *Support for local authorities.* It is necessary to support regional self-governments in order to create favourable conditions for the establishment and growth of export-oriented enterprises. The role of successful companies should be to establish their operations in less developed regions and to employ professionals from these regions, thereby reducing unemployment and dampening the current brain drain in these regions. This will enable the export performance of SMEs operating in these regions to be supported by gradual action. For regional operations, specialists need to be recruited to improve the level of production and service in the environment, thereby increasing the competitiveness of the regions.

• *Supporting the internationalization of SMEs.* In order to change the current dominant orientation of SME business activities to the domestic market and to overcome stereotypes in the perception of foreign markets as inaccessible territories, promotional, information and explanatory activities need to be carried out. For SMEs it is important to cooperate with companies in regions, larger cities, industrial parks with public administration. In cross-border cooperation projects, focus on cooperation in production, innovation, engagement of enterprises in cluster activities is neccessary. Activities should be implemented in co-ordination with regional self-government (VÚC), public administration and active participation of export-oriented institutions (regional offices of SARIO, SOPK, SBA, incubators and relevant universities).

Conclusion

Competitive and successful innovative enterprises are a prerequisite for positive structural changes in the Slovak economy. SMEs are the bearers of the innovative development of the economy as a whole, despite lower R&D costs compared to large companies. As innovations are important for market existence, SME managers are directly involved in the implementation of innovation. Large enterprises often perceive innovation only as additional costs, but SME employees are more versatile.

Innovative SMEs currently show a relatively low level of innovation cooperation with institutional entities (universities or the Slovak Academy of Sciences) not only in Slovakia but also in other countries with developed economies.

SMEs are an important part of the EU economy, with almost two-thirds of their job creation. The position of SMEs in the Slovak economy is even higher, representing more than 70% of jobs and more than 60% of added value. On the other hand, Slovak SMEs show half of their labour productivity compared to the EU and their share in Slovakia's exports is also small (22% in 2016).

It is very important for the commodity and territorial diversification of Slovakia's foreign trade to increase the share of SMEs in the export of Slovakia, to improve legislation in favour of SMEs and to create innovative and innovative clusters. Very important is therefore the help and support from the state and governmental bodies of Slovakia.

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Spatial data of geographic information system – a localization tool of retail units and understanding of new tendencies in consumers' demand[1]

Pavol Kita[2] – Patricia Kollár[3] – Jan Strelinger[4] – Jaroslav Kita[5]

Abstract

The aim of the article is to point out the possibilities of using spatial data of geographic information system as a localization tool of retail units in a concrete territory and understanding of new tendencies in consumers´ demand. The article consists of five parts : introductory part summarizes the intention and research question; methodology is based on secondary research and as well primary research in a selected area. Data of the article were processed and evaluated in the programmes Microsoft Excel 2019, SPSS, ArcGITM (version 9.2), results include application of spatial data in a concrete area, discussion includes possible trends in the development of demand. Conclusion summarizes most important knowledge related to the topic.

Key words

geographic information system, localization, retail unit, consumers´ demand, consumer

JEL Classification: M300, M140, M150

Introduction

Spatial data today forms an important and solid part of key decision – making processes, whether it is a a corporate geographic information system (GIS) of individual businesses, respectively at a national level in the decision – making of territorial authorities and on the localization of retail units. Thanks to them the tendencies in demand are known and a a full picture of consumers is acquired – what motivates them to buy and how they prefer to shop, what are they going to buy the next time and which reasons lead them to visit a concrete retail unit. The aim of the article is to point out the possibility of using spatial data of the geographic information system as a tool for locating retail units in a selected territory, as well as understanding of new tendencies and trends in consumer demands (Kitová Mazalánová, 2019b). To meet the objective of the article the following research question has been formulated: How does spatial data help to create a full Picture of the retail network and customer demand? Its formulation was chosen based on an analysis of theoretical recourses and secondary data concerning geographic information system which according to Ozinec et al. (2010) is understood as a set of technical and programe resources enables to save, demonstrate and analyse geographical information. GIS interconnects these information (on the basis of atributes) with the

[1] The topic of the article follows up on projects APVV 16-0232 consumer society and consumer regions. Stratification of postcomunist society, VEGA 1/0066/18 Model of marketing comunication focused on health- oriented shopping behaviour of consumers, GREG 2016/2020 Future of Europe –tracking European Dynamics. International project of scientific network of Visegrad Group countries. (if the paper is output of research project)

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aim to process them and arrange them in the form of maps and results which ease their visualisation and its interpretation. It is a tool to support decisions of managers of territorial authorities and businesses.

Spatial data form a primary element of geographic information system. With the help of them are acquired information about examined objects, their qualities and location. As in other spheres of information systems also in geographic information system data are processed, saved with the help of database systems. Data information are inserted into a database, processed with the help of technologies GIS. Data processing is generated by new information which are recorded in the form of data. Major part of current data of businesses and institutions has unused geographic potential. With the use of cartography techniques and localization of customers is possible to analyze geographical distribution of customers (Štefko et al. 2012). It is better to understand purchasing behaviour of customers, to show competitors´positions, visualise zones with strong purchasing potential and choose suitable marketing activities. Programmes of geomarketing (Kita, 2013, Kitová Mazalánová, 2019a) can be used by businesses themselves,territorial authorities, respectively specialized consultancy institutions. Constant development of informatics and methods of analysis of data cause that conditions of use of data about customers and sales units as well as trends of development of retail network have been improving and lead to a better localization of retail units and also new methods of sale. Linking data databases, geography and geographic information systems bring more and more precise answers to these questions:

- Where to locate retail units? How to organize trade network on the given territory?
- What is the catchment area of the store and how to obtain consumers´interest?
- Where potential customers can be found?
- Where food deserts can be found? Etc.

We distinguish two principal types of data in GIS:

- spatial (graphic) data – linked with geographical location, informing about geographical location,
- non-spatial (attribute, non-graphic) data provide information about quality.

Geographic information system is organized to enable to acquire information to more users as: Ministry of Economy of the Slovak Republic, public, business environment, public administrative units.

1 Methodology

An article is based on the secondary data dealing with characteristics and significance of big data and geographical information systems in decision making. Other parts of the article are focused on the research and reached results on the basis of using databases characterizing development of retail network in Bratislava. Geographic information were combined with specific locations on the territory of the capital city of Bratislava. Data were processed and evaluated in the programmes Microsoft Excel 2010, SPSS, ArcGISTM (version 9.2).

Spatial data are based on databases of the research which involve information about customers in 17 urban parts of the capital of Slovakia Bratislava divided into 263 urban districts. This database includes:

- demographic data about customers (gender, number of members of the household, age, income, education, type of economic activity),

- identification of territorial area, address of the respondent with the aim to to make analysis of moving with respect to transport network in the city of Bratislava and identification of time dedicated to moving of retail unit in the same or other territorial area where the store is located,
- realization of the purchase: location of the store where respondent did shopping, popular days for shopping, frequency of shopping, time spent in the store,
- choice of the format of the store: conditions of shopping and accessibility of the store, the way of coming to the store and the time necessary for coming to the store, opinions on the store in which respondent regularly do the shopping and on other stores which he visits.

Based on this data it was possible to develop maps of spatial localization of retail network on the territory of the city and create a database of retail chains. At the same time databases of further research also enabled to update acquired results and expand new knowledge in purchase of food in alternative distribution channels. Evaluation of the format of the store, respectively alternative distribution channel was made according to Likert scale which enables respondent to express the level of importance attributed to a given store and use this qualitative information in quantitative analysis with the help of multidimensional scaling. Scale has 5 levels within the range 1 – the best to 5 – the worst.

Output of multidimensional scaling is described in a multidimensional map which enables to compare positions of studied objects and name dimensions in a way to show most clearly the differences between them.

Retail chain mapping has enabled the identification of a wider type of a large-format of grocery stores – a supermarket. Data of a further database enabled to extend reached results and new knowledge linked with purchase of food in alternative distribution channels.

2 Results and Discussion

Retail can be considered to be a fast changing sector of economy. Sustainable development, globalization, customers´ behaviour, changes in society, competitiveness, technology, extending of the activities of trade companies and erosion of boundaries of trade systems cause the changes of retail units on the territory and necessity of evaluation of the trends in retail sphere from the time and spatial aspect. The goal is to direct localization of retail units on the territory in order of accessibility of the food stores.

2.1 Use of spatial data of geographical information system in studying the trends of development of retail units in sortiment of food in a considered area

Choice of the city Bratislava as a research territory is related to the fact that Bratislava is economically the strongest region in Slovakia what contributes to the development of retail sphere. Location of Bratislava together with its function as the capital contributed to strengthening of its position as the gate for foreign investors and innovation after the year 1989. Economic reforms (Kitová-Mazalánová et al., 2015), privatization, direct foreign investments, stabilization of the political scene, entry of the European Union and eliminating of state border as a barrier (thanks to entering Shengen) contributed to increasing of attractiveness of the region Bratislava for extensive transregional business chains (Šveda & Križan, 2012).

The number of supermarkets in Bratislava has risen dramatically in recent years. This result can be estimated as a business success of format of a store in the situation when occur changes in consumption due to sustainable development. Within this context we focus on the concentration of supermarkets as the most spread format of a store and as well we evaluate the spatial distribution of supermarkets as the most widespread format of store and evaluate spacial layout of supermarkets in Bratislava in the years 2011 and 2016 with the help of the method of relative entropy. Based on the results is possible to state that all circuits in Bratislava are sufficiently covered with supermarkets even though during the monitored period occured changes in the distribution of supermarkets. There have been shifts from the centre to the suburbs. These changes will continue and will reflect changes in demand for healthy food, changes in settlements and creating of new urban areas.

Based on available data it is obvious that supermarkets with the highest number of stores are supermarkets Billa and Tesco. Some changes happened also in other supermarket chains. Supermarket chains Albert, Prima Zdroj belonged to the supermarket chains only in the year 2011. Chain Yeme on the contrary existed only in the year 2016. Other chains of supermarkets overlapped in both time periods.

Table 1 and 2 illustrate calculation of the relative entropy in the year 2011 and 2016 due to competitive chains of supermarkets which existed in Bratislava in above mentioned years. Calculations are made on the basis of five Bratislava circuits.

Tab. 1 Calculating the relative entropy in the year 2011 for all competitive chains of supermarkets in Bratislava

Urban district	Fi	log fi	fi log fi	E	k	log k	RE
Bratislava 1	0,12121212	-0,91645394	-0,11108532	0,6782364	5	0,6989	0,97033
Bratislava 2	0,29292929	-0,53323719	-0,15620079				
Bratislava 3	0,15151515	-0,81954393	-0,12417332				
Bratislava 4	0,19191919	-0,71688159	-0,13758333				
Bratislava 5	0,24242424	-0,61542395	-0,14919368				

Source: P. Kita et al. 2017, pp. 68-72

Values fi and fi log fi were calculated for each chain. The lowest values of relative entropy on the level 0 from all chains reached in the year 2011 chains Terno, Prima Zdroj, Jednota, Albert due to imperfect territorial coverage in Bratislava. In the year 2016 with zero territorial coverage was the chain KON-RAD. On the contrary the highest level of relative entropy in the year 2011 reached company Billa and in the year 2016 company Tesco.

Tab. 2 Calculation of relative entropy in the year 2016 for all competitive chains of supermarkets in Bratislava

Urban district	fi	log fi	fi log fi	E	k	log k	RE
Bratislava 1	0,16806722	-0,77451696	-0,13017091	0,687224	5	0,69897	0,983195102
Bratislava 2	0,26890756	-0,57039698	-0,15338406				
Bratislava 3	0,16806722	-0,77451696	-0,13017091				
Bratislava 4	0,15126050	-0,82027445	-0,12407512				
Bratislava 5	0,24369747	-0,61314896	-0,14942285				

Source: P. Kita et al. 2017, pp. 68-72

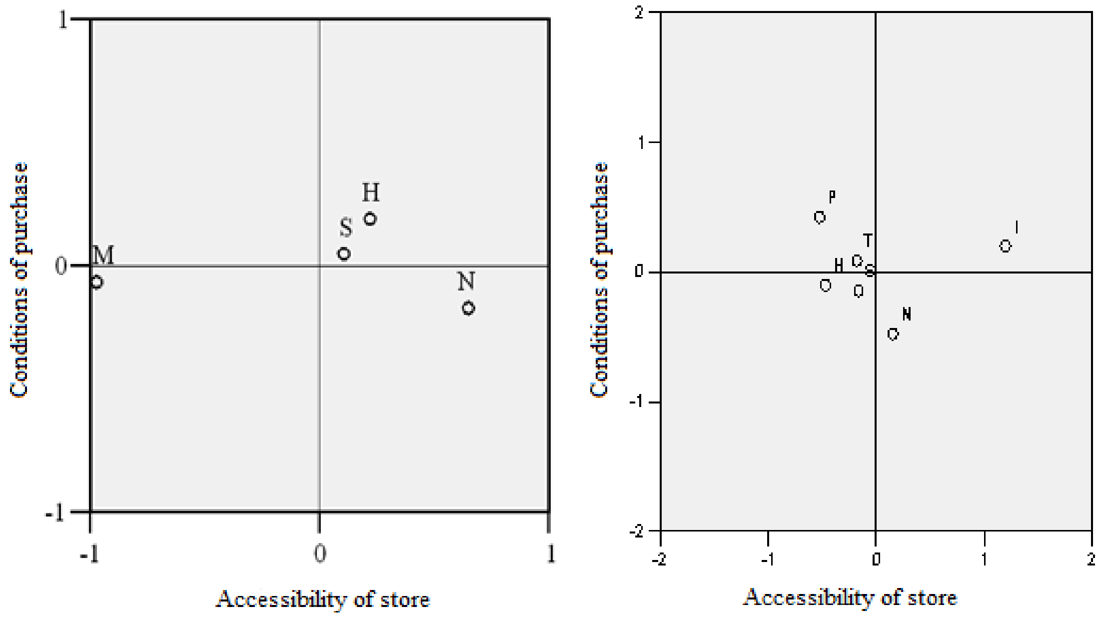
Company Tesco has a representation of its outlets in all circuits of Bratislava. In the circuit of Bratislava 2 in the year 2016 Tesco had 7 stores and reached frequency fi 0,269230769 and value for fi log fi – 0, 153427968. In the circuit Bratislava 1 had Tesco 3 stores and frequency fi 0, 115384615 and value fi log fi - 0, 108213703. For supermarket Tesco the value of entropy E= 0,680623155 and relative entropy RE = 0,973752. As far as this fact a relative entropy reaches the values from 0 to 1, that means that if we take into consideration chain of Tesco stores it covers almost all territory of Bratislava. We can state then that territorial coverage of Tesco stores in Bratislava is at an excellent level.

At the same time we can state that all circuits in Bratislava are at present sufficiently covered with supermarkets. This fact was confirmed with the results from above mentioned calculations, as relative entropy in both monitored time-periods reached level 0, 970337 in the year 2011 and 0,983195102 in the year 2016. But there are the circuits in which there is a lower quantity of supermarkets when following calculations per capita. There are circuits: Bratislava 4, Bratislava 5 in the year 2011 and in the year 2016: Bratislava 4 and Bratislava 5.

In the year 2011 supermarkets were more oriented on the centre of the city. The centre was more densely covered with supermarkets and on the contrary suburbs were much less covered. This change happened due to combination of construction of new residential areas in the suburbs and more expensive rent in the centre.

The basic and easiest identification element of differentiation of stores from the point of view of the customers is how a considered format of retail unit secure providing of value offer to the customers based on availability and purchasing conditions of the customer. Research found out that customers prefer shopping in concrete retail units more than in other ones. From this reason the choice of the format of the sale is a strategic choice. The way the customers understand retail unit is closely linked with what is sold and how it is sold. (graph 1).

Graph 1 Comparing of understanding of format by the consumers in the years 2011-2016



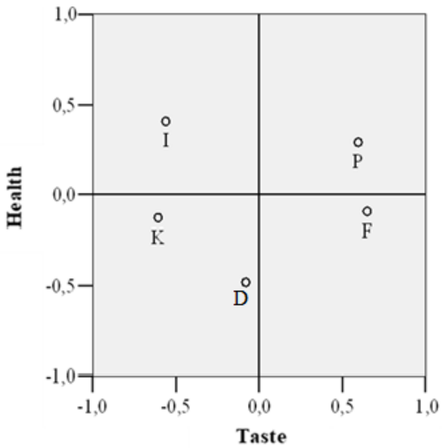
Source: P. Kita & P. Kollar, 2018, p.107

Explanatory notes: (2011) M: small-scale shop, S: supermarket, H: hypermarket, N : no format preferred. (2016) P: small shop, S: supermarket, H: hypermarket, N: neither of these formats preferred, T: market, I: internet shop.

The analysis of databases shows that there is a shift in rating of supermarkets and hypermarkets towards their new competitor, small-scale farm shops and marketplaces selling fresh food and in which the customers can buy a healthy and fresh goods all the day. These changes in the value menu are related to the important challenge of today – sustainable development. From the researches carried out is clear that the citizens of Bratislava most often buy fresh food on the farmers´markets (category includes also farmers´shops), that is 55,26% respondents. In the future the role of internet in the sphere of distribution of fresh food will increase being able to provide the offer of the local production of food and non-food goods and its distribution to the customers. The customers buy at least via box sales system (2,10%). Box sales and community garden play a complementary role and exapand the form of direct sales. The future can bring the growth of its popularity.

The rising demand for healthy, fresh and high-quality home - made food represents for many small farmers a real challenge. Bratislava citizens understand health and taste as individual forms of alternative distribution differently (graph 2).

Graph 2 Map of perception of alternative food distribution channels



Source: P. Kita & P. Kollar, 2018, p.118

Explanatory notes: D: box-sales system: F: farmers´market, K: community garden, I: internet shops, P: sale from the yard

2.2 Discusion

Healthy foods should contain nutrients ensuring development and maintenance of a balanced relations of all structures and functions of organism. The concept of healthy food includes:

- functional foods - represents an innovative category of food which favourably and positively affects human health and reduces and prevents diseases (Bryla, 2016),
- biofood / organic foods / any food which is produced according to the rules of ecological agriculture without use of any chemicals. Products can be labeled as BIO or ECO, based on the certificate which is issued by a concrete certification institute (labelling of bioproducts and biofoods, 2019).

After the boom for function foods starts a BIO and ECO food. In the European Union has already started this trend and is obvious. In the western countries, organic food expenditure is amnog the highest. Consumers in these countries annually spend more than 100 euros on biofoods. The highest consumption per person has Switzerland (117 euro) followed by Denmark (162 euro), Luxembourg (134 euro), Austria (127 euro), Lichtenstein (100euro). The smallest share of organic food consumption is in the countries of Central and Eastern Europe. The highest sale of ecological products is in the USA – 47% of the value of the world sale. The European Union represents 36% share (Hermaniak, 2018). In the recent years the European Union invested 3,3 billion euros on the policy of safe foods, budget for the years 2014-2020 represents 2,2 billion euros.

In the sphere of retail with food these tendencies are being pursued by dual way:

a. response of retail chains to emerging trends in consumption by gradual expanding the range of community-responsible products with the goal of attracting customers and getting profit;
b. by alternative distribution channels in the sphere of food representing supplementary form of distrbution in relation to existing distribution systems which are not able to provide healthy and fresh food.

As the result of these tendencies is the fact that the offer in large-format retail units gradually converges to the offer of ecological products. Width of the offer, price, atmosphere and image of the store also determine preferences and frequency of visit (Hauser & Koppelman, 1979, Donovan et al. 1982). Future pays to big shopping-centres which is also confirmed by the study of Brengman et al. (2005) according to which consumers prefer shopping centres even to more modern and revolutionary internet shopping what indicates that experienced ´touching´purchase shouldn´t be underestimated. Besides that large-format stores and shopping-centres also influence development of surrounding urban areas. Territorial division of large-format retail units will reflect the changes in population settlement and creation of new urban and residential areas.

Another trend is a cross-border shopping that can be linked with economic situation of the residents. In the context of saturation of the citizens with long-lasting uniformity offer of retail chains is obvious that customers want the change of the sortiment. Consumers have been for a long time perceiving the differences in the product compositions from the point of view of the quality and price .which are sold under one brand in Austrian and Slovak market (Lessassy, 2015). It can be assumed that Slovak consumers expect from shopping in Austria higher added-value that is why they have a more critical access to the offer in retail units in Slovakia (Križan et al., 2017).

Economic power of the consumers represents a hope for new alternative channels offering healthy and fresh food. Innovative trade models of new types of retail units oriented on value offer for market slits, which several years ago didn´t seem to be economically interesting, they can expect the growth of sale and of profit from the long-time perspective (Christensen & Bower, 1996). A significant ability of a trade model is forming of innovation of a value offer and commercialization approach which can influence consumer and find a possibility of the growth of the sale .

Conclusion

By comparing acquired data can be stated that the Slovak retail is significantly influenced by globalization processes which form consumers preferences and a lifestyle of the consumers. These processes at the same time brought significant changes as building the chains of supermarkets, hypermarkets and discount stores as well as large-scale outlets which to a great extend influence retail chain of the city. Sustainable development causes extensive changes in a value offer (Kita, 2014) and in the development of retail chain towards healthy food. There are the changes of the model of consumption of customers which lead to the new formats of stores with a new value offer.

In analysis were used geographical information systems. With the help of them can be evaluated mainly spacial domension of the problem. Application of the techniques of geographical information systems in the research of retail showed as suitable not only cartographical but also an analytical tool with a wide range of applicability.

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Health awareness in Consumer Behaviour of Chosen Generations[1]

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Abstract

The article deals with the consumer behaviour of chosen generations. The aim of the paper is to explore the current consumer behaviour of Slovaks mainly in the area of eating habits, health care and the purchase of food and pharmaceutical products, based on the authors´ primary research results. The article shows the differences in approach to health care and health prevention among the generation of seniors and the X and Y generations, demonstrating that in some cases the age group really matters.

Key words

Consumer Behaviour, Generations, Health prevention, Lifestyle

JEL Classification: P46, I19, M39

Introduction

Currently the healthy lifestyle has growing tendency in the whole society. Healthy foods are coming to the fore, people are trying to do sports, keep regular sleep and simply live healthy. These facts are important not only for the well-being of the individual but also for the health of whole society which is endangered by various civilization diseases. New trend to live healthy and use bio products in the foods industry came already a few years ago. Apart from food the bio concept also appeared in number of other products. Among consumers marking such as organic products, bio products, functional foods, healthy foods, traditional foods and many others is becoming popular. In consumers view it represents healthy lifestyle. The topic of eating, buying food and pharmaceuticals is closely linked with adhering to a healthy lifestyle. Consumers interest into environment and its protection, the structure of food products and their packaging, the method of production of foods and everything related to them is currently increasing.

The aim of the article is to study current behaviour of selected generations of Slovaks, especially related to food consumption, care about health and purchasing of foods and pharmaceutical products.

1 Methodology

The present article presents the partial results of a research study aimed at identifying the current consumer behaviour of selected generations - seniors, Generation X and Generation Y in the field of nutrition and health care. We wondered if there were differences between generations,

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especially in the area of health care and related shopping behaviour when buying food, organic food and pharmaceutical products.

Data, which formed the basis for the analysis, were gathered in 2019. The hybrid research, whose partial results are reported, used method of semi-structured interviews that were conducted with 765 respondents of seniors (61+), Generation X (41 – 60) and Generation Y (20 – 40) from all region of Slovakia. From the generation of seniors were 237 respondents, from Generation X 242 respondents and from Generation Y 286 respondents. 62% of respondents from the city and 38% from the countryside participated in the research study. More than half of them had secondary education, 42% of respondents were with university education and 4% of respondents with primary education.

The interview was based on a scenario where participants had the opportunity to respond to questions aimed at determining shopping habits when buying food, organic food and pharmaceutical products. Above all, we were interested in what criteria are used when buying food, pharmaceutical products. What leads them to buy organic food. We were also interested in where they get information about organic food, pharmaceutical products and health. How they care about their health and which bad habits they have.

Interviews were conducted face to face - one researcher one party - usually in their home environment. The descriptions were first processed individually (a set of selected "representative" interviews were analyzed using qualitative analysis - code generation using the GTM method), then all interviews (n = 765) were again analyzed and structured to provide comparable results.

The aim of the research was to answer the following research questions:

1. Are there statistically significant differences between generations in buying habits when buying food, organic food and pharmaceutical products?
2. We were wondering if there are differences between generations in consumer health care.
3. Are there generational differences in the perception of the type of advertising for pharmaceutical products?

2 Results and Discussion

A healthy lifestyle is very popular topic to talk about these days. The image of healthy lifestyle differs from person to person. Many definitions about healthy lifestyles and many guidelines on how to maintain a healthy lifestyle is known. Lifestyle is the main factor with direct influence on our health. Consumer behaviour and consumer habits itself directly affect the quality of our lives. The issue of food safety is considered very sensitive by consumers and this area belongs to one of the riskiest areas of consumers protection. Especially in recent period, food safety has been endangered and weakened by various scandals and animal diseases. The right to food safety and positive health effect of foods is one of the fundamental human rights that was declared in the legislation of the European Union. Every consumer has the right to obtain quality foods and related health benefits.

Model of consumer behaviour on the foods market is based on a general consumer model however contains some specific features. The most recognized model in this field is the model of R. Shepherd (1994) according to which consumer behaviour is influenced by the quality and character of food (physiological effects, sensory perceptions), personal factors (biological, psychological, socio-demographic) and environmental factors (cultural, economic and marketing related).

In the early 1990s, K. G. Grunert (1996) developed a food-oriented lifestyle model. The most important factors of the model include:

- shopping method - the importance of product information on the packaging, access to advertising, popularity of shopping itself, specialized stores, price factor, food list
- quality factor – healthy products, price versus quality relationship, news, ecological products
- way of preparing food - interest in cooking, searching for new ways of food preparation, quick and easy cooking, family, spontaneity, role and status of a housewife
- shopping reasons - self-realization, satisfying the needs, sociable and social functions.

Based on this model, consumers were split into the following groups:

1. A food consumer without and interest into food, whose behaviour is changing quite often, consumer is characterized by low stability, weak loyalty and brand awareness, low ability to choose among the products, low sensitivity to product differences.

2. The inattentive and unorganized consumer is characterized by high sensitivity to new foods but has a little interest in the positive impact of new healthy foods, foods taste and freshness. He only accepts new products if they do not require a new way of preparation. Food is not of great importance to him. Also brand and store loyalty is not on first place for this type of consumer.

3. A food consumer with light interest does not prefer a food brand, this type of consumer is focused on consumption of basic foods and is interested in food news only from time to time.

4. A rational consumer is sensitive to food quality and functionality (i.e. health effects, freshness, natural character), is demanding regarding quality and reliable product information. Quality versus price ratio is important to him.

5. Conservative consumer shows large interest in buying foods. This type of consumer is unwilling to accept changes and has strong loyalty to brands and stores.

6. The hedonistic consumer is interested in food for personal and prestigious reasons. Based on social status and social class of this consumer, consumption of branded products and certain types of food with focus on local food is preferred. Eating out in restaurants is often preferred.

7. An adventurous consumer is highly sensitive to the creative and functional features of the products. The most important motivating factors include social affiliation and the presentation of one's own personality. This type of consumer also prefers the exotic foods.

These models indicate that information - their perception, processing and overall work with them are extremely important to the consumer. In order to handle large quantity of information and ability to understand them it is important to keep a constant need to educate and keep influencing consumer behaviour. Consumer behaviour starts to form from the childhood and different generations have different preferences in consumer behaviour and decision-making process. For example, intercultural studies show that more advanced age customers place more emphasis on the traditions and importance of their culture. The X and Y generations differ in their behaviour in many subjects, in attitudes, in life values and in consumer behaviour too.

Generation X - Sometimes referred to as the "lost" generation, this was the first generation of "latchkey" kids, exposed to lots of daycare and divorce. Known as the generation with the lowest voting participation rate of any generation. Generation X were quoted by Newsweek as "the generation that dropped out without ever turning on the news or tuning in to the social issues around them."

This generation is often characterized by high levels of scepticism, *"what's in it for me"* attitudes and a reputation for some of the worst music to ever gain popularity.

Generation X is the best educated generation and its members with that education and a growing maturity are starting to form families with a higher level of caution and pragmatism than their parents demonstrated. Concerns run high over avoiding broken homes, kids growing up without a parent around and financial planning.

During purchasing they are more cautious and they are aware of the price and value of the products. What is important is low price and usefulness of products. They are able to respect the value of the product. For this type of consumers the barrier exists related to opinion change in case of consumer behaviour. Change of behaviour rarely comes under the influence of another person or the media. The own experience with product is the main attribute in the decision-making process. Generation X is very social and is also thinking of others in terms of teamwork.

In this generation Vysekalová (2011) defines three main segments:

- People on the move – people, who like to travel, to get to know new things and having many friends. From various brands they prefer the brands that are individual and independent. Their goal is to lead free life and to avoid the commitments.
- Settled - home-oriented people who have a smaller circle of friends. They lead a more settled life. They prefer their own lifestyle and usually live in cities.
- Super Parents - At the centre of their attention is the child and his needs. They are bio and ecological oriented. They lead a "green" way of life.

According to the study from greyhealth group (Lynn O´Connor, 2017), it is five ways to connect with GenX:

1. Family first. Recognize that their family´s multigenerational needs dominate their lives. Make caring for loved ones easier. They may need caregiving support and resources.
2. Be lovable. GenXers bond strongly to brands and loyally resist change. Make your brands the ones they love.
3. Give them stability. Provide with consistency and security through communications that are more transparent and have immediate relevance; maintain continuity, and don´t take them for granted.
4. Give evidence-based advice. Be a beacon of fact in an ocean of online half-truths. Provide credible resources generation, help them get the authentic information they or their scepticism.
5. Meet them where they go. GenXers use all kinds of social media to stay in touch with friends and families, as well as to reach out for information and support when times get tough. Yet, they still love their favorite TV shows, read their "snail mail" and pick up a newspaper from time to time. Multichannel communication is best.

Generation Y - the largest cohort since the Baby Boomers, their high numbers reflect their births as that of their parent generation. The last of the Boomer I s and most of the Boomer II s. Gen Y kids are known as incredibly sophisticated, technology wise, immune to most traditional marketing and sales pitches…as they not only grew up with it all, they've seen it all and been exposed to it all since early childhood. Gen Y members are much more racially and ethnically diverse and they are much more segmented as an audience aided by the rapid expansion in Cable TV channels, satellite radio, the Internet, e-zines, etc. Gen Y are less brand loyal and the speed of the Internet has led the cohort to be similarly flexible and changing in its fashion, style consciousness and where and how it is communicated with.

Gen Y kids often raised in dual income or single parent families have been more involved in family purchases everything from groceries to new cars. One in nine Gen Yers has a credit card co-signed by a parent. Generation Y (also known as Millennials) was born in the developing world of technology. They grew up in a huge area of smartphones, laptops, tablets and other devices. In terms of health, this generation is eating smarter, less smoking and more moving than previous generations, utilizing various sports and exercise applications (Sachs, G. 2015).

According to the BBDO European study mentioned above, young people are less concerned about their health. 59% of European 18-24 old says they are at ease with themselves when it comes to food. Youngsters are somehow being slacker, not able to judge the importance of leading a healthy life (yet). 46% of youngsters often skip meals compared to 39% of the total European sample. 89% of youngsters eat fast food, 10% more than the European 18+ sample. Health is clearly not top of mind for youngsters. Only 27% of 18-24 have regular health checks, 54% amongst the 18+ Europeans. Since they experience less health problems at their age, they are also less interested in everything that has to do with health. Only 27% of 18-24 have regular health checks, 54% amongst the 18+ Europeans. Since they experience less health problems at their age, they are also less interested in everything that has to do with health (Verhaegen, B. 2011).

The results of Nielsen's global research (2015) have shown that from generation to generation, Generation Y puts the greatest emphasis on purchasing when deciding to buy. At the same time, the willingness to pay a higher price for "healthier" products with age has been shown to decline. Members of Generation Y are willing to pay a higher price for functional products that reduce any risk or are healthy or are socially / environmentally responsible. Technology is motivated in this area (Johnson, M., 2016).

This generation takes into account the environment and sustainability when it comes to health. They often avoid certain foods because they are unhealthy but also harmful to the environment. They prefer products from farms and businesses that use sustainable environmental practices such as clean energy and recycled packaging. They can prefer local products and food because of a perceived lesser environmental impact. They turn to nature when they are sick, looking for ways to prevent disease. They are open to alternative diseases in the treatment of diseases. They are more likely to use acupuncture, herbal remedies and other prescription drug alternatives. They search for information from multiple sources, not just online and social networks. They often use apps. They want to be in good shape. But they are the biggest stress generation. Most Y generation members live in a world of chronic and disproportionate anxiety. According to the American Psychological Association, these people are experiencing more stress than any other generation. Most of them suffer most from high school students who seem increasingly stressed every year (Chamberts, B., 2016).

According to the reported European study, up to 53% of young people often feel stressed compared to 29% of X generation respondents (Verhaegen, B. 2011).

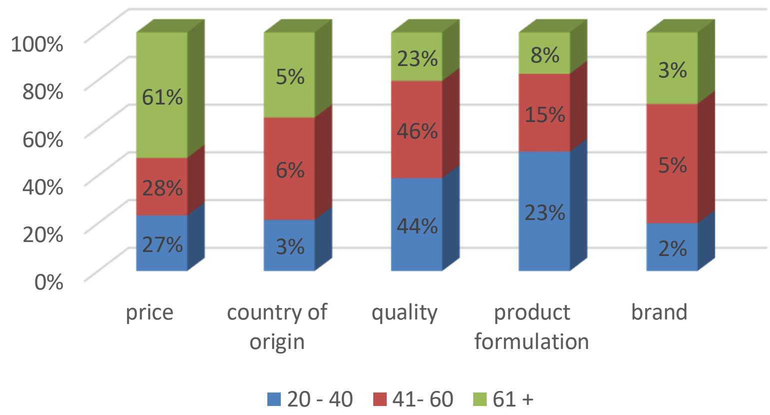
2.1 Overview of research results

The partial aim of the research study was to find out what diet choices the selected generations prefer and what buying habits are when buying food. The survey showed that there are statistically significant differences in diet among the generations studied. Although a common diet style is unrestricted, 79% of Generation Y, 74% of Generation X and 62% of seniors prefer it. Significant differences were found in dietary diet due to disease. This diet style is preferred by 33% of seniors, 13% by Generation X and only 7% by Generation Y. Especially 14% of Generation Y and 12% of Generation X and only 4% of seniors prefer a special diet.

We were interested in what attributes they make when buying food. From Figure 1 we can see that there are indeed statistically significant differences in decision-making because the price is the most important for 61% of seniors when buying food. For 46% of Generation X and for 44% of Generation Y, food quality is crucial. For 23% of Generation Y respondents, food composition is also critical to food purchases.

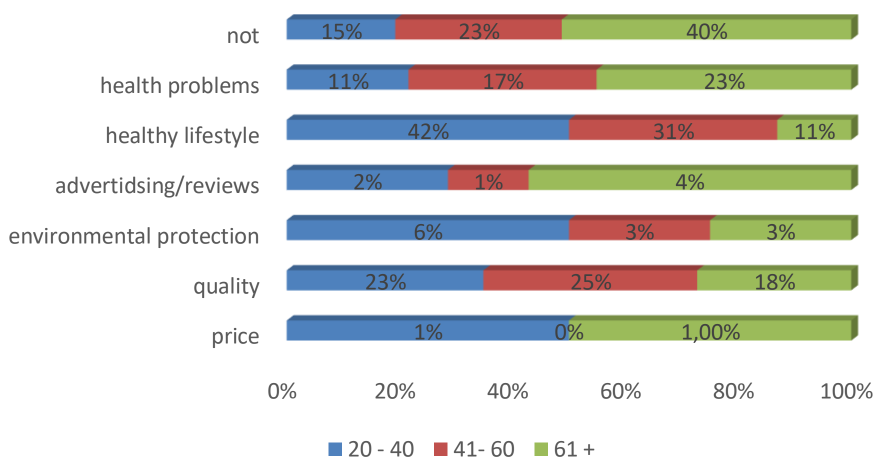
Furthermore, we wanted to know what reasons lead the generations to buy organic food. In Figure 2 we can see, that 42% of Generation Y purchases organic food mainly because of their own will to a healthy lifestyle, as well as 31% of Generation X. Significant differences were found in 23% of seniors who buy organic food mainly because of health problems, but 40% seniors do nothing at all to buy just organic food. The statistically significant differences were confirmed by the chi-square test of good match where p = 0.00.

Fig. 1 The decisive criteria when buying food



Source: own research (n= 765)

Fig. 2 Reasons for organic food preference

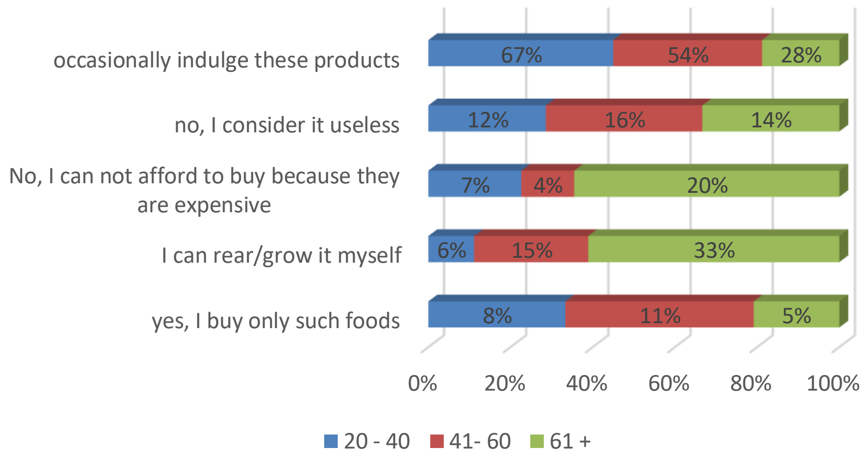


Source: own research (n= 765)

We were interested in which of the generations is most willing to pay for quality food from organic farms or from domestic breeders. It can be seen that 67% of Generation Y and 54% of Generation X sometimes enjoy such high quality food. Of the seniors, it was only 28%. Only 11% of Generation X buys food from organic farms on a regular basis. These foods are not bought by 33% of seniors because they say they can grow and preserve them. Quality food from organic farms cannot afford to buy 20% of seniors.

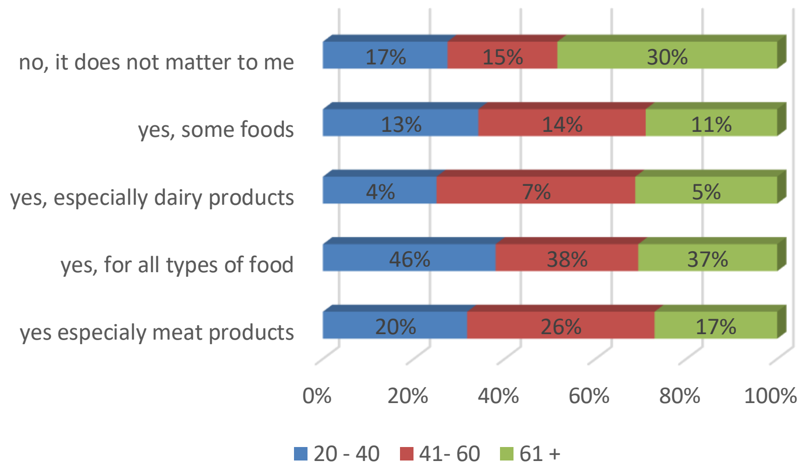
We also investigated whether younger generations prefer food of Slovak origin even in the case of higher prices, when compared to older generations. The survey showed as shown in Figure 4, that 46% of Generation Y is willing to give preference to Slovak foods at higher prices only for some types of food, and 38% of Generation X, as well as 37% of seniors, had such an opinion. More than 26% of Generation X respondents and 20% of Generation Y respondents are willing to pay for Slovak meat products. In reverse, 30% of seniors do not matter the origin of food.

Fig. 3 Willingness to pay for food from the organic farm



Source: own research (n= 765)

Fig. 4 Preference of Slovak food, even if higher prices



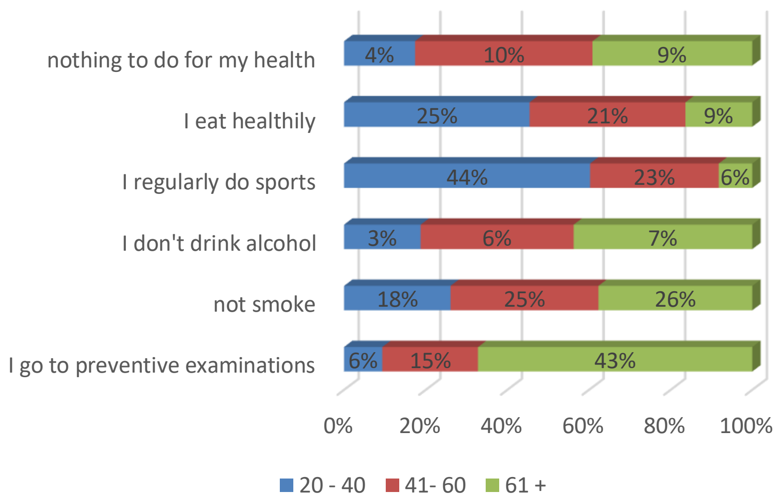
Source: own research (n= 765)

In the second part of the interviews, we investigated how the generations surveyed care about their health, what are their most common bad habits that harm health. Which pharmaceutical products they use on a regular basis and what influences their decision making when purchasing pharmaceutical products. We were also interested in what kind of advertising for pharmaceutical products would interest their most.

Significant differences showed how the generations surveyed care for their health. In Figure 5 we can see that 43% of seniors take care of their health by going regularly for preventive health check-ups. Generation X tries not to smoke, to play sports regularly and to eat healthily. Almost half of Generation Y sports regularly and eats healthy. What is surprising is that only 6% of young people pay attention to preventive examinations.

We asked our respondents about their bad habits / way of life that do not benefit their health. In Generation Y, it was mainly nervousness and stress that 26% of young people said, then 16% said little exercise and 15% smoking. In Generation X, 24% reported nervousness and stress, 19% smoking, and 18% less exercise. For seniors, 34% said they were low and 16% said they had any bad habits.

Fig. 5 Health care

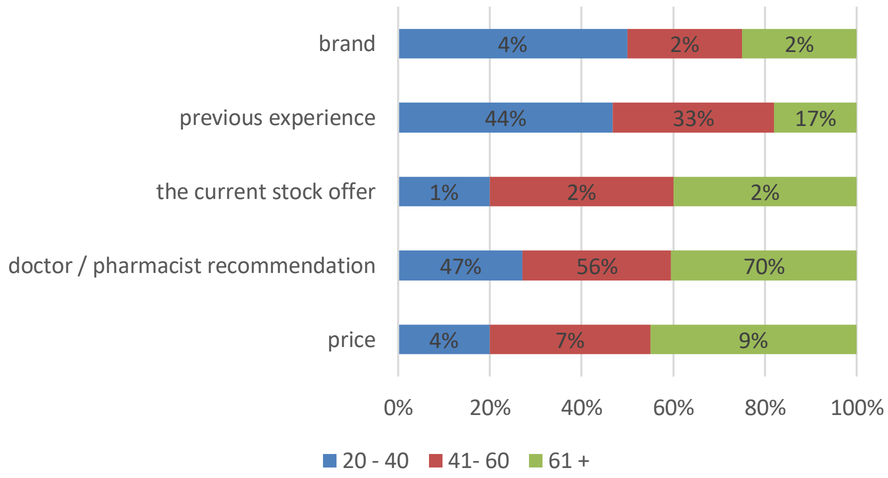


Source: own research (n= 765)

We also wondered what pharmaceutical products they use regularly. We found statistically significant differences between generations, up to 75% of seniors use prescription drugs regularly compared to 26% of Generation X and 16% of Generation Y. Vitamins and nutritional supplements are regularly used by 43% of Generation Y respondents and 31% of Generation X. 14% of Generation Y regularly takes allergy medications compared to Generation X, where these drugs use 11% and seniors only 5%. Over-the-counter medicines use regularly by 21% of seniors.

When purchasing pharmaceutical products as shown in Figure 6, 70% of seniors make decisions on the basis of a doctor / pharmacist's recommendation, 44% of Generation Y decides on the basis of previous experience, and Generation X takes into account the expert's opinion as well as their own experience with the pharmaceutical product.

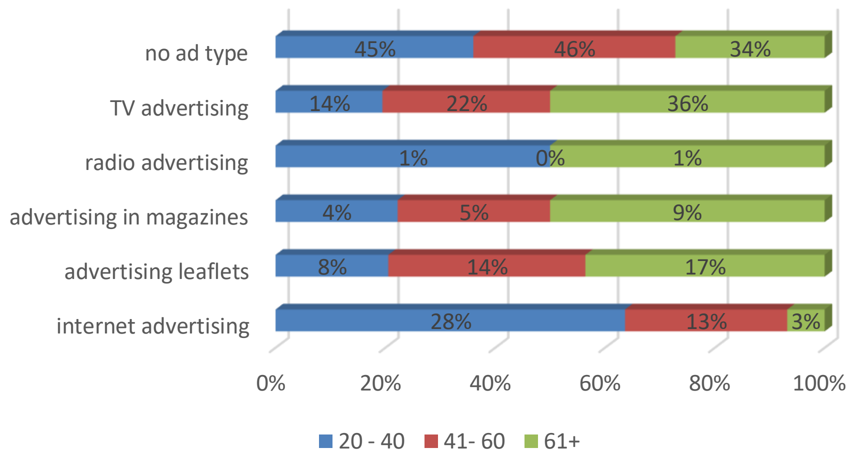
Fig. 6 Purchase of pharmaceutical products



Source: own research (n= 765)

Answers to the question of what kind of advertisement for pharmaceutical products is most interesting to them shows Figure 7. 45% of Generation Y, 46% Generation X and 34% senior citizens take any type of advertising. TV advertising attracts 36% of seniors and 22% of Generation X. Internet advertising attracts 28% of Generation Y respondents.

Fig. 7 Types of advertising for pharmaceutical products



Source: own research (n= 765)

In conclusion, consumer health care behaviour is influenced by the age cohort. Statistically significant differences have been confirmed between generations in all areas studied.

Conclusion

This article dealt with the area of health care and healthy lifestyle and related consumer behaviour. The aim of the paper was to point out the current behaviour of selected generations of Slovaks, especially in the area of catering, health care and related shopping behaviour when buying food and pharmaceutical products. The aim of the survey was to find out whether there are statistically significant differences in the generations under investigation in the decision-making process of purchasing food and pharmaceutical products that have a factor in their decision making. And also whether there are differences in the way health care works to develop a healthy lifestyle.

The results of the research study showed that there are indeed statistically significant differences between Slovak consumers, which we compared in terms of generations. It turned out that seniors are still very sensitive at price when buying food. They don't care about the origin of food and they also have no reason to buy organic food, because they can still grow or preserve them themselves. As far as health care is concerned, there is only one generation that recently goes to preventive check-ups. However, it also dependent to take medicines of the regular prescription. Their most common habit is little movement.

Generation X is a generation that seeks to care for its health. When buying food, the quality is crucial. The reason why they would buy organic food is the effort to lead a healthy lifestyle and eat healthy. This generation is trying to buy quality Slovak food from farmers and is willing to pay extra for some types of food for quality Slovak food. Above all, they take care of their health through healthy eating, do not smoke and do sports. They regularly take vitamins and nutritional supplements. The most common habit is nervousness / stress, smoking and little exercise. They will not be affected by any advertisement, they may be partially affected by TV advertising.

The Y generation is the generation for which food quality and food composition are crucial. The decisive reason for buying organic food is their own will to live a healthy lifestyle and eat healthy. They occasionally treat themselves with food from organic farms. In some foods they prefer Slovak despite the higher price. Above all, they do regular sports and healthy eating in health care. The most commonly reported habit / lifestyle is nervousness and stress. They regularly use vitamins and nutritional supplements and allergy medications. The purchase of pharmaceutical products is mainly based on previous experience. No type of ad can attract them, and if any, then only internet advertising.

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Consumer Attitudes to Fashion and to Sustainability[1]

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Abstract

The apparel industry is regarded as the second largest polluter after the oil industry. Production plants are often located in emerging countries. The aim of the paper is to identify consumer attitudes to fashion and to sustainability, shopping criteria, shopping habits and consumer awareness of environmental influence of apparel industry. To gain the primary data we used consumer survey with structured questionnaire distributed online via social media. 433 respondents from Slovakia participated in the survey. The data were processed using SPSS. The results of the survey point out that 93% of respondents claim to be aware of the negative impact of the clothing industry on the environment but only 57% consider this in their purchasing decisions. 27% of respondents sometimes bought goods from a local Slovak designer and 32% never shopped in second hand. Based on the results we specify consumer attitudes to fast fashion and slow fashion.

Key words

consumer attitudes, fast fashion, slow fashion, shopping behavior, sustainability

JEL Classification: D90, M30

Introduction

Consumers' need for new items has a big impact on many industries, one of them being the apparel industry. As Ritch and Schroder (2012) showed, consumers need for novelty leads to increased rate of purchase frequency of apparel industry products, and the use of apparel over a shorter period of time. These trends have resulted in an increased use of fast fashion model, that is providing affordable apparel, but one that has a shorter life cycle. That behavior it is promoting faster consumption, as fashion trends can be accounted for more readily.

The desire for novelty, drives consumers to buy more affordable apparel items, but with a higher frequency. Because of that, a few levels / classes of fashion products were created. They are distinguished by the quality of materials, level of originality, designer, etc. In general, we distinguish four levels of fashion products (Christensen, 2012):

1. *Haute couture* - fashion houses run by world-renowned and famous designers. (Prada, Chanel, Dior, Alexander McQueen, etc.) They represent luxury designs by fashion designers at the highest level. The most important marketing channel are fashion shows organized in January and July, where they can present to the public dozens of original designs. Why rich or famous people are willing to pay tens of thousands to hundreds of thousands of dollars for these creations is a feeling of uniqueness from wearing this special garment. Haute

[1] The paper is an output of a grant project VEGA 1/0543/18 „The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic"

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couture clothes push fashion boundaries. They express more art than a real wearing piece of clothing.

2. *Prêt-à-porter* - although these garments still have high prices, they are produced in larger quantities compared to the previous category under strict quality control. They can be purchased at designer stores, independent stores, or in some of the more exclusive stores. Customers who buy this category require luxury for everyday wear, they are luxurious clothes that are more affordable. Designers with limited-volume collections allow them to purchase their stylish, high-quality creations to the wider public. (Armani, Jacobs, etc.)
3. *Prêt-à-porter-boutique* - represents a moderately high price level of garments manufactured in larger quantities than the prêt-à-porter collection. A team of designers will design creations that are presented in retail. These brands (Calvin Klein, Pietro Filipi, Guess, etc.) can be found in all fashion centers.
4. *Confection* - it is a mass production affordable for ordinary consumers. Still trying to copy fashion trends, it uses cheaper materials, easier cuts and more versatile coloring. In this category, the fast-fashion principle is applied by creating a response to the latest fashion trends of catwalks at the present time. It is made of cheap materials with low durability, leading to environmental damage due to the difficult degradability of synthetic waste. (H&M, Zara, Bershka, Forever 21)

Now the preference of fast fashion in apparel industry represents the trend of current society, which is sensitive to fashion, rather than quality and product's life duration. Repetition of production and consumption has led to resource waste of apparel industry and clothing wastes became a social issue.

In the literature several terms are used to describe basically the same concept of sustainable fashion – terms like green fashion or ethical fashion. They are frequently used interchangeably (Newholm & Shaw, 2007). Sustainable consumption and production are important elements in preserving limited natural resources and avoiding climate change. Sustainable consumption will require consumers to buy less, use products longer and produce less waste (Tilikidou & Delistavrou, 2004).

The apparel industry, like many others, must consider sustainability as well as environmental impact of their production. Especially considering the facts, that apparel industry is the second biggest polluter in the world, just behind the oil industry (Chalmer, C. & co., 2018), as well as that over 3% of yearly household waste is clothing (Fletcher, 2008). In order to maximize sustainability in the clothing industry, the changing behavior of producers, consumers and households are now important. Although many studies narrowly view sustainability by limiting it only on environmental issues, sustainability encompasses the entire area of society and culture. It must consider the sustainability in economic, social and cultural areas of the world, while trying to recognize and minimize the impact of uncontrolled human behavior on environment (Na, 2011).

Various studies are being carried out on the topic of sustainability, however, most of these studies are focused on the producers (Chi, 2015; Dahlbo et al., 2017). There are fewer studies focusing on consumer behavior (for example EC report Flash Eurobarometer367, 2013).

The main problem with sustainable consumption in apparel industry is the mental obsolescence of clothing that comes with fashion changes and different styles of clothing not only for each season, but with their yearly change (Ertekin & Atik, 2015). To be able to approach sustainable levels of apparel industry production, it will take a change in behavior of not only consumers, but profit oriented companies, that set fashion trends as well. As it is doubtful, that profit oriented companies will change their behavior without external pressure, it will have to come from either consumers, or the state. Or more likely from both.

Consumers will have to reduce the levels of their consumption and at the same time modify the way they consume fashion products. Fast fashion is based on the prêt-à-porter collections of established fashion brands and uses cheap materials and cheap labor to produce its products, ensuring their availability to the general public. According to a survey involving 1,500 women over the age of 16, 33% of respondents consider clothing to be old after just three wears (Muthu, 2018). Sustainable apparel usage may include behaviors such as reducing laundry frequency, wearing old clothing in new ways or swapping clothes (Mont 2004). Based on these aspects, a new movement was created as a response to the fast fashion - *slow fashion*. Instead of mass production and constantly changing fashion trends, it is precisely for the high quality of the individual pieces. This alternative promotes fair trade and local production.

Consumer attitudes and behavior

Consumers' environmental or ethical concerns do not always translate into their purchasing behavior, as seen in previous studies by Henninger and Singh (2017). Consumers' purchasing decisions are irrational and not always well connected with their values. One of the determining factors in purchase decisions of apparel products is price. Harris et al. (2016) in their study determined, that sustainability is a low priority element when making purchasing decisions. It alone will not suffice to make the necessary changes in consumer's purchases, because of 3 factors:

- clothing sustainability is too complex,
- consumers are too diverse in their ethical concerns,
- clothing is not an altruistic purchase.

Joy et al. (2012) found out that for young consumers, sustainable fashion is not a priority, and that they separate fashion from sustainability even if they support the idea of it. Also, consumers do not pay much attention to ethical issues either; most consumers are more interested in their own personal fashion needs than the needs of others involved in the clothing supply chain.

Chi (2015) found out that the price and quality of a garment are significant factors in purchasing decision making while social and emotional values are considered important but supplementary. Hartmann and Apaolaza-Ibáñez (2012) pointed out that also psychological brand benefits, like experiential and symbolic benefits, are required in addition to utilitarian benefits, like sustainable pricing, quality, brand image and sustainable labelling.

Health and environmental impacts of apparel industry

A significant problem is the content of hazardous substances found in the garments produced. Up to 23% of all chemicals worldwide are used in the fashion industry. Some of these substances remain in them for several months and some of them may be carcinogenic. The enormous amounts of contaminated products are imported and purchased daily and later accumulated in landfills where they devastate the environment. (Chalmer et al., 2018)

The global fashion industry generates greenhouse gases as a result of the energy used to make, produce and transport millions of clothes purchased each year. Synthetic fibers (polyester, acrylic, nylon, etc.) used in most of our garments are made from fossil fuels, making production much more energy-intensive than natural fibers. The fashion industry plays a major role in degrading soil in a variety of ways: excessive grazing of cashmere goats and wool sheep; soil degradation due to massive use of cotton-growing chemicals; deforestation caused by wood-based fibers such as silk. 70 million trees are beheaded every year to make our clothes (European Parliament, 2019)

1 Methodology

Studies of consumer attitudes and behavior by Henninger and Singh (2017), Harris et al. (2016), Joy et al. (2012), Chi (2015), Hartmann and Apaolaza-Ibáñez (2012), Chalmer et al. (2018) served as basis for investigation. The aim of the paper is to identify consumer attitudes to fashion and to sustainability, shopping criteria, shopping habits and consumer awareness of environmental influence of apparel industry.

Following the aim of the study, following research questions were laid out:

RQ1: What is the consumer awareness of sustainable development?

RQ2: What are consumers' shopping criteria when purchasing products of apparel industry?

RQ3: Are consumers' shopping habits, when purchasing products of apparel industry, influenced by sustainability and environmental influence of their production?

To be able to give answers to the research questions, interviews were carried out using a questionnaire developed as an investigative tool, in order to identify consumer attitudes, shopping criteria, shopping habits and consumer awareness when purchasing products of apparel industry.

Sample and data collection:

A simple random sampling approach was utilized, the data were collected through a survey targeting Slovak residents during the months of November and December 2018. Out of 451 responses, a sample of 433 usable responses was created.

- The questionnaire was structured along three different perspectives:
- What is consumer's attitude toward fashion and sustainability? In this part of the questionnaire we wanted to understand if consumers are familiar with the concepts of fashion, sustainability and impact of apparel industry on environment.
- Examination of shopping criteria and shopping behavior. In this part we looked at the behavior of apparel industry customers – why they shop, where, how often, etc. and the criteria that they use when deciding on a purchase (price, quality, sustainability of production, environmental effects of production etc.)
- Personal data. This section enabled the gathering of demographic information like: gender, age, education level, income level, employment status and residence.

The sample size is 433, out of witch 363 (84%) are women and 70 (16%) are men. Such a large proportion of females in the sample is substantiated by O'Cass (2004) and others that have shown, that female consumers are generally more involved in purchases of fashion products. As shown in tab. 1, the sample covers all the relevant age groups. The abnormally large size of the 21-30 group was attributed to the method of gathering the questionnaires, through both online and offline methods. Most of the online filled questionnaires were from the 21-30 age group. As for education level, most of the participants, 53% had tertiary education, 45% had secondary education and only 2% had only primary education.

Tab. 1 Sample characteristics - age

Age group	Frequency	Percent
15-20	53	12,2

21-30	218	50,3
31-40	59	13,6
41-50	48	11,1
51-60	32	7,4
61 and more	23	5,3

Source: author's research

Statistical methods were used for analyzing the collected data. Data were processed using SPSS. Chi-squared test and p-value were used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories.

The authors are aware, that the sample created with a methodology as stated above can not give results, that can be applied on the whole population. This article covers only first stage of the research that was conducted to find the flaws in the research hypotheses, methodology and to uncover options how to increase the potential of the study.

2 Results and Discussion

The aim of the research was to find out the level of awareness of Slovak consumers about sustainable development and environmental aspects related to the fashion industry. We looked at which attributes influence the respondents most when shopping and what percentage of Slovaks support the concept of slow fashion.

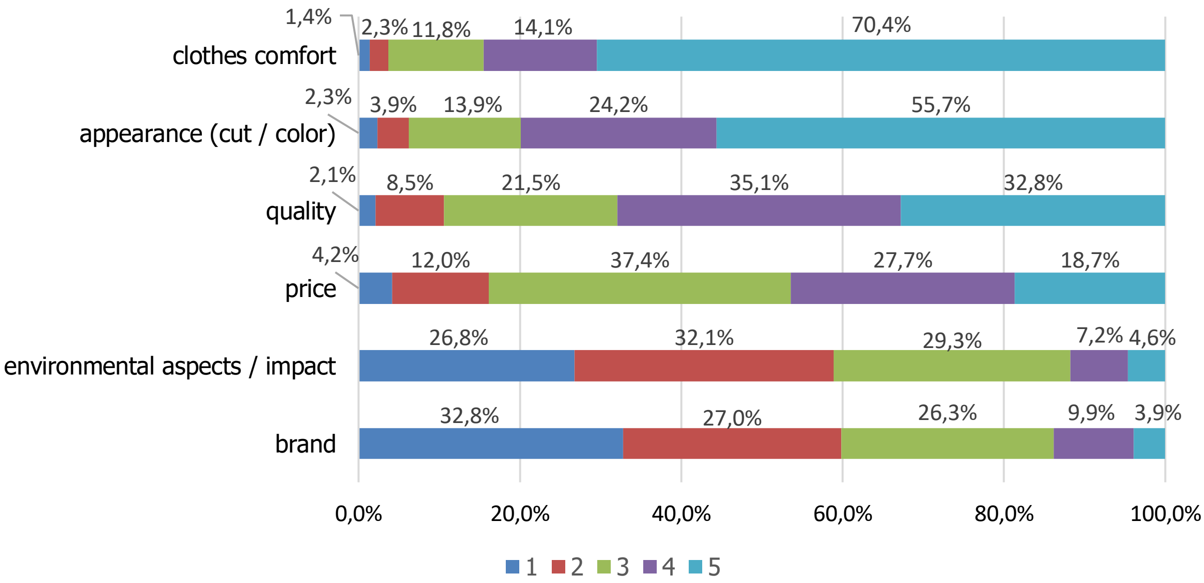
The survey shows that more than half of the respondents, specifically 263 (63%), are familiar with the concept of sustainable development. Nevertheless, high number of respondents, namely 160 (37%) are not aware of the concept of sustainable development. The concept of fast fashion is familiar to 242 (56%) of respondents but the concept of slow fashion is familiar only to 173 (40%).

2.1 Shopping criteria when purchasing apparel products

When examining shopping criteria of participants in the study, we examined multitude of factors that could have an impact on the purchase decision. The factors selected, that we looked at, were chosen in accordance to factors researched by authors of similar studies made in different countries, so that it would allow comparison with those studies. The main factors selected were: price, quality, brand, appearance (cut/color), clothes comfort, and environmental aspects/environmental impact.

As seen in graph 1, there are 2 factors, that are most affecting purchasing decisions in clothing of Slovak consumers – clothes comfort (70,4%) and their appearance (cut / color) (55,7%). Quality, as a factor most likely to affect purchase was selected by 32,8% of responders, and price by only 18,7%. The two most unlikely factors to affect purchasing decisions in clothing were environmental aspects of production with 4,6% and brand with 3,9%. Some of these findings are in stark contrast to shopping criteria affecting purchase decisions made by other authors in other countries, especially the preference of clothes comfort and their appearance. In most studies that we reviewed, price and quality are the factors that are affecting the purchase decision the most, with brand and appearance straggling behind of those two factors. One of the reasons for the non-prominence of quality and price could be the locations where Slovak customers shop for clothes.

Graph 1 Shopping criteria of Slovak consumers when buying apparel



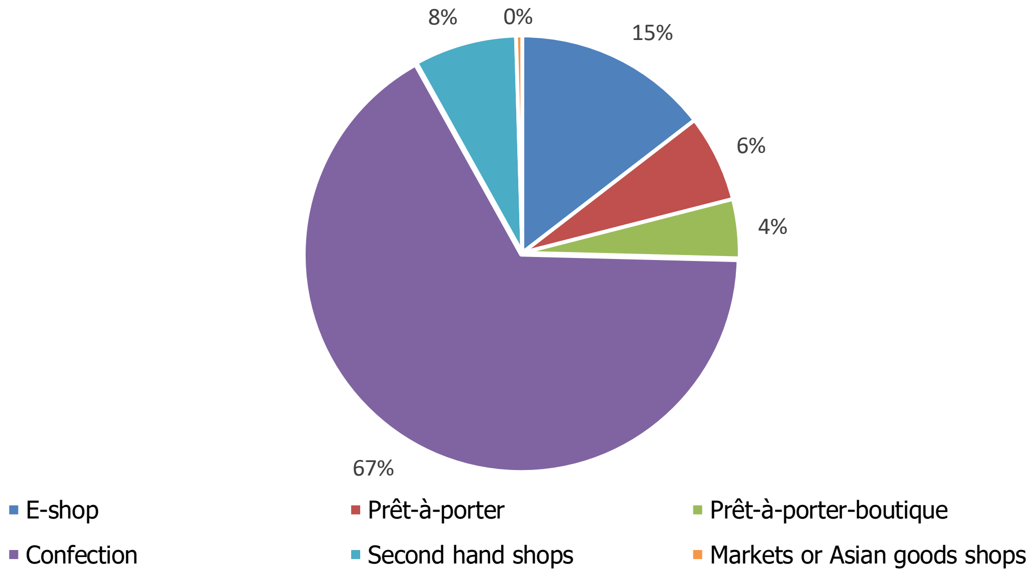
Scale used: 1- least likely to affect purchase, 5- most likely to affect purchase.

Source: author's research

As seen in graph 2,67% of customers shop for confection in relatively low priced, mass produced shops like H&M, Zara, etc. Unlike in western European countries, Slovak customers perceive H&M, Zara and other similar retailers as providers of high fashionable outfits and are certainly not perceived as cheap. That could be also a reason that brand does not play such a significant role as in other countries, as quality – brand – price are usually associated with each other.

With the abnormally high representation of 21-30 age group, it was expected, that that could be a factor for the anomalous results, and so the same factors were looked at for the different age groups. After examination of all factors, we concluded, that the representation of the 21-30 age group had minimal effect on the results. The results in all age groups were relatively uniform, with a maximum deviation of 29,6%, and average deviation of 6,6% between all age groups and all factors. Highest deviation was found in the 61+ age group, as was expected from previous studies. That age group was only 5,3% of our sample, so its relative weight was very low. The reason for the low representation of this age group in the sample even in future studies could be substantiated by the relatively low purchasing power of most members of this age group, as well as with the fact, that 91,3% of members of this group stated, that they sped less the 200 euros in a year on apparel products.

Graph 2 Shopping points of Slovak consumers



Source: author's research

Very low impact of environmental aspects in purchase decisions was observed. With 58,9% of responds claiming that environmental aspects are least likely to impact their decision or have low effect (1 or 2 on the scale). On the other side only 11,8% of responds claimed high or most impact of environmental aspects on their decision (4 or 5 on the scale). What surprised the research team was, that out of the total of 51 responses claiming that environmental aspects have high or most impact on their purchasing decision, a total of 9 responses (39,1% of this age group) were from participants in the 61+ age group, which was the most from any age group. This was also the highest deviation from average for all factors. A correlation was found between shopping criteria of quality and price, which are significant at a level of 0,05.

2.2 Impact of sustainability and environmental influence

While respondents declare, that they are aware of the environmental problems and problems with sustainability created by apparel industry (57% are highly concerned), and they declare that that information is affecting their purchasing decision (tab 2), those replies do not correspond to actual behavior that we observed in previously mentioned shopping criteria.

With 59,8% of females declaring that their shopping behavior is impacted by the awareness of negative impacts, as well as most age group declaring the same at significant levels, we should see more effect in previously mentioned shopping criteria used by respondents.

There are basically only 2 explanations to this disparity that make sense – either the respondents want to virtue signal their concern for the environment either at a conscious or subconscious level, or they think that they take environment and sustainability into account, but they don't. Future look into this topic is warranted, and we will expand the research accordingly.

Tab. 2 Influence of awareness of negative impacts on environment and on sustainability to shopping behavior

		no	yes
Sex	Female	40,2%	**59,8%**
	male	**57,1%**	42,9%
Age group	15-20	**58,5%**	41,5%
	21-30	50,0%	**50,0%**
	31-40	18,6%	**81,4%**
	41-50	39,6%	**60,4%**
	51-60	21,9%	**78,1%**
	61 and more	39,1%	**60,9%**
Education	ZŠ	**60,0%**	40,0%
	SŠ	**51,3%**	48,7%
	VŠ	35,2%	**64,8%**

Source: author's research

Another aspect of shopping behavior that affects environment in an indirect manner is the frequency of clothes purchases. As clothes production has a significant impact on environment, one of the ways of lowering that impact could be less frequent clothes purchases.

Tab. 3 Frequency of clothes purchases

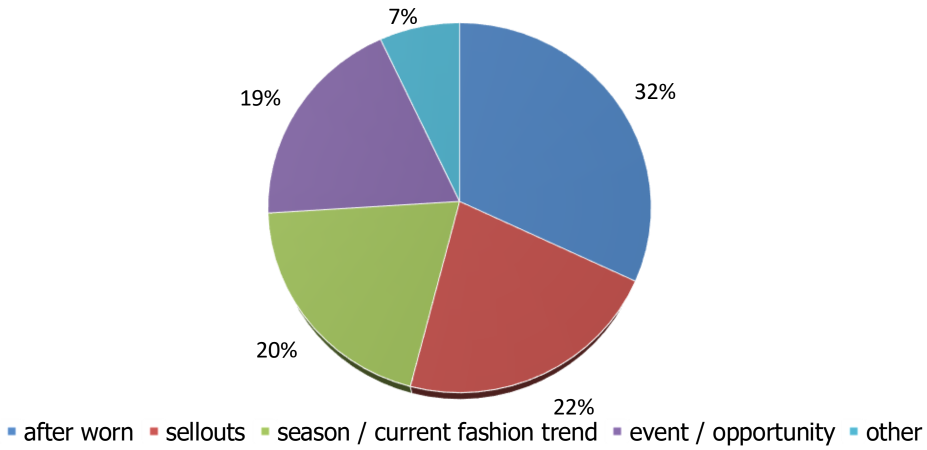
		1 or more times per week	1-3 times per month	1-3 times per year	Once in a few years
Sex	Female	2,2%	**59,2%**	38,3%	0,3%
	male	0,0%	25,7%	**71,4%**	2,9%
Age group	15-20	1,9%	**60,4%**	37,7%	0,0%
	21-30	2,3%	**55,0%**	41,7%	0,9%
	31-40	1,7%	**59,3%**	39,0%	0,0%
	41-50	0,0%	45,8%	**52,1%**	2,1%
	51-60	3,1%	**53,1%**	43,8%	0,0%
	61 and more	0,0%	30,4%	**69,6%**	0,0%
Education	ZŠ	0,0%	**50,0%**	**50,0%**	0,0%
	SŠ	1,0%	**57,0%**	41,5%	0,5%
	VŠ	2,6%	**51,3%**	45,2%	0,9%

Source: author's research

As shown in table 3, more than half of the respondents 53.8% of Slovak consumers make clothes purchases 1-3 times in a month (59.2% of females). This frequency of purchases is also prevalent in most age groups (with only groups 41-50 and 61+ making less frequent purchases), as well as at most education levels, with only respondents with basic education having the same frequency in 1-3 times a month and 1-3 times a year answer.

As for the reason for purchase of new clothes (graph 3), 137 (32%) of the respondents mentioned the wearing out and destruction of the piece as the main reason, 97 (22%) of the respondents mentioned sale, 88 (20%) mentioned the current fashion trend and 81 (19%) mentioned attendance of an event or other opportunities. The remaining 30 (7%) responded to "other" and the most common responses were: mood/desire to shop, body change (weight, pregnancy, child growth), joy/ pleasure/relaxation, and desire to shop. Shopping based on sales and current fashion trend is particularly the case for girls aged 15-20 or young women aged 21-30, which is also reflected in their annual expenditure, as they tend to spend more than EUR 500 on clothing, even some more than EUR 800 per year.

Graph 3 Reasons for purchase of new clothes



Source: author's research

Conclusion

Before conducting the survey, we posed several research questions. By evaluating individual answers, we managed to create a view of the current state of consumer behavior when buying clothes in Slovakia. The survey shows that 63% of respondents are aware of the concept of sustainable development (RQ1). 56% of respondents say they are aware of the concept of fast fashion, but the awareness of the concept of slow fashion is 16% lower. These figures clearly show that most apparel shoppers in Slovakia do not come into contact with sustainable fashion. More focus should be attributed to building awareness of the impact of fast fashion to sustainability and to reasons for favoring slow fashion.

There are 2 factors, that are most affecting purchasing decisions in clothing of Slovak consumers (RQ2) – clothes comfort (70,4%) and their appearance (cut/color) (55,7%). Quality, as a factor most likely to affect purchase was selected by 32,8% of responders, and price by only 18,7%. Environmental aspects of production preference and brand were the criteria most likely to affect purchase with 4,6% and 3,9% of respondents. Some of these findings are in stark contrast to shopping criteria affecting purchase decisions made by other authors in other countries e.g. Chi (2015), especially the preference of clothes comfort and their appearance. In most studies that we reviewed, price and quality are the factors that affect the purchase decision the most.

Although up to 93% of respondents are aware of the negative impact of the fashion industry on the environment, only about half of them will consider this information in future purchasing decisions (RQ3). The information on negative impact of fashion will affect especially women 20+, mostly with a university degree, whether it be an employee or a housewife. Men, students and young people will not adapt their shopping behavior to this information. We believe that they do not consider the problems of the fashion industry as serious as they really are. Our findings are in consent with Joy et al. (2012) who found out that for young consumers, sustainable fashion is not a priority, and that they separate fashion from sustainability even if they support the idea of it. The survey statistics also show us the high consumption of clothing.

The current rapid consumption and the usual shopping behavior of fast fashion can be compared to addiction. The creation of a circular economy is a key idea on the path to change for the fashion industry.

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Comparing opinions and values between Arabic and Slovak cultures[1]

Ľubica Knošková[2] – Dana Vokounová[3]

Abstract

Values are one of the key factors determining the cultural character of individual countries and nations. Understanding values is important precondition in intercultural management. The aim of this paper is to present the results of a survey aimed at comparing two different cultural segments (Arabic and Slovak) in terms of values, opinions and attitudes. Generating value questions was based on Schwartz's Portrait Values Questionnaire. We acquired research sample of 103 respondents. The results of the survey show that Slovaks and Arabs have a different rank of values. Arabs are much keener on respecting customs and respecting traditional opinions of their culture. Both cultures equally respect work, family, friends and acquaintances as important for them. Leisure time is, however, more important for Slovaks, and politics and religion are more important to Arabs. Slovaks are less trusting, but they have a greater sense of freedom to decide and direct their lives.

Key words

Values, opinions, cultural differences, Slovaks, Arabs

JEL Classification: Z10, J10, D90

Introduction

Values shape our attitudes, motivations, and life goals. From childhood, we are brought up with respect to the life values which are further developed. Some values may change in time due to the working or living environment. Values are also shaped by cultural factors that determine the differences and otherness. Recently, the issue of different cultures and their different living values has resonated in Europe as a result of the refugee crisis. Changes in value orientations can be followed by important social changes in society. We have therefore decided to compare two different cultural segments, namely the European one, represented by Slovak culture and Arabic culture in terms of opinions, attitudes and acknowledged values.

Value as such does not occur alone but it is determined by other values and it determines other values (Ištvániková & Čižmárik, 2007). Therefore, it is necessary to perceive the values as a set of interrelated opinions. Values act as specific positive or negative goals of human endeavor, reflecting the socio-economic conditions of his/her life and projected as certain regulators into his/her behavior (Szarková, 2009). Values are one of the key factors determining the cultural character of individual countries and peoples. Changes in value orientations can be followed by important social changes in society, which was also one of the reasons why continual international research has begun to focus on values (Anýžová, 2014).

[1] The paper is an output of a grant project VEGA 1/0543/18 *„The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic"*

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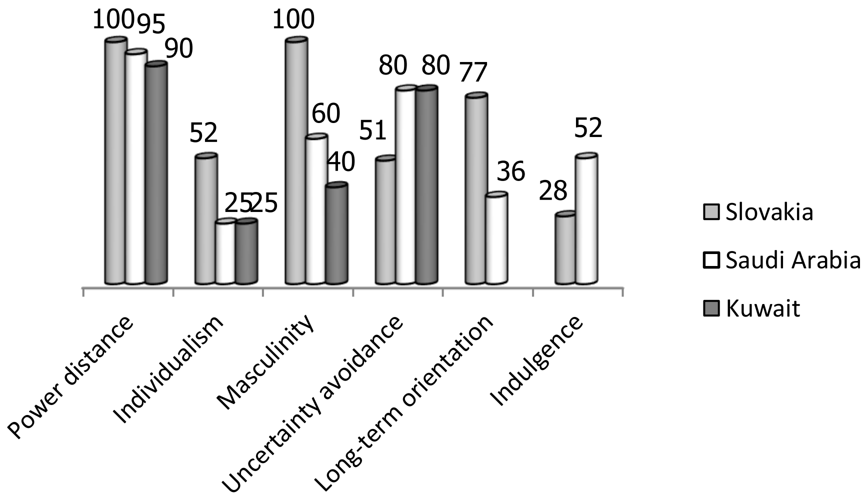
Shalom Schwartz has developed an approach of measuring value orientations, which is now used primarily for intercultural comparison and is globally recognized. The Schwartz Values Theory adopts a concept of values that defines their six main functions (Schwartz, 2005; Schwartz 2012): (1) *Values are opinions, convictions. When the values are activated, they give people certain emotions, feelings.* (2) *Values are related to the desired objectives that motivate the action.* (3) *Values are beyond the specific actions and situation.* (4) *Values serve as standards or criteria.* (5) *Values are ranked according to their importance in relation to each other.* (6) *The mutual importance of several values influences acting.*

Ronald Inglehart have contributed to the continuous international exploration of values. He helped to set up Eurobarometer surveys and conducts World Values Survey (WVS) – executed in 97 countries to explore changes in beliefs and opinions in society and their impact on social and political change (University of Michigan, 2017). From WVS (World Values Survey, 2017) data analysis, Inglehart concluded that there are two basic value dimensions in the world, namely (1) *Traditional Values vs. Secular/rational* and (2) *Values of Survival vs. Self-expression.*

Geert Hofstede established a major research tradition in cross-cultural psychology and communication. He developed four dimensions model along which cultural values could be analyzed. Later research led him to add two other dimensions so Hofstede´s model of national culture consists of the following six dimensions (1) *power distance*, (2) *Individualism vs. collectivism*, (3) *Masculinity vs. femininity*, (4) *Uncertainty avoidance*, (5) *Long-term vs. short-term normative orientation* and (6) *Indulgence vs. restraint* (Hofstede Insights)

Hofstede´s six-dimension model, putting together national scores from 1 to 120, allows comparison between cultures. In Fig. 1, we show the comparison of Slovakia with Saudi Arabia and Kuwait.

Fig. 1 Hofstede´s Six-dimension Model for Slovakia, Saudi Arabia and Kuwait



Source: Hofstede Insights

The comparison indicates that the Arab countries represent more tightly-knit framework in society (Collectivism), Slovakia is more success oriented where status is very important and people want to be the best (Masculinity), Arabic countries more rely on stiff codes of behavior (Uncertainty avoidance), they are more normative and prefer maintaining traditions (Short-term orientation) and Slovakia is more restrained society with tendency to cynicism and pessimism (Restraint).

Max Haller in his work (Haller 2003) gives sociological perspective on socio-cultural differences and investigates mutual interpretations and misinterpretations between Europe and the Arab-Islamic world. It is shown that—despite a lack of fundamental differences in value orientations—significant misperceptions exist, particularly of the Arab-Islamic culture and societies in Europe. They are related to colonial history, religious-cultural differences, and inequalities in levels of development. He sees further reasons for the misperceptions and perspectives for their correction after the terrorist attack in New York in 2001.

Hofstede’s cultural model was used by Bader Yousef Obeidat et al. to shed more light into organizational culture and the managerial problems existing in Arabian organizations. They found out that significant aspects of these problems are related to cultural issues. The religious and heritage have a profound impact on the organizational environment by governing the behavior of the employees in these organizations. Accordingly, they recommend different managerial theories and practices be applied to these organizations though these organizations still tend to apply the Western communities theories without adapting such theories to fit the norms and traditions popular in Arab countries. (Obeidat et al., 2012).

Ihab Sawalha & Julia Meaton (2012) contribute with their research to the understanding of the significance of culture in the adoption and development of business continuity management for organizations operating in Jordan and in the Arab world more generally. Organizational culture could be either dynamic in a way that evolves with the evolution of the organization or rigid and resistive to change, such as the Arab culture. A cultural change and development process in Arab companies does not necessarily require the adoption of all aspects of the Western or American cultures, but rather some that fit within an Arab context and which do not contradict the main belief system, values and religious foundation of Arab society.

1 Methodology

The studies by Hofstede, Haller (2003) and Obeidat (2012), Schwartz (2012) and Sawalha and Meaton (2012) served as starting point for our study. As the main objective, we have determined the identification and comparison of opinions, attitudes and a list of values for Slovaks and Arabs. For this purpose we analyzed the data acquired from a quantitative survey. As we focused on two different cultural segments, we used two versions of questionnaires. One version was in Slovak and the other one in English and Arabic. We sent the Slovak questionnaire to the Slovak respondents whom we contacted via email and social networks. The English-Arabic questionnaire was targeted only at Arab respondents whom we contacted on the basis of work contacts via social networks and emails. Part of the responses was from Arab respondents who are in the refugee integration program in Austria. We received 42 responses from Arabic respondents. Not to have a very unbalanced sample, we reached the sample of 61 Slovak respondents.

When analyzing the results, we created two age categories, up to 30 years and more than 30 years old. In our sample, the younger age group accounted for 45.9% of Slovaks and 35.7% of Arabs, males accounted for 23% of Slovaks and 81% of Arabs. In the Arab questionnaire, we also asked about faith. Most Arab respondents reported Islam as their religion, up to 95%. Only 3% did not report any religion, and 2% were Christians.

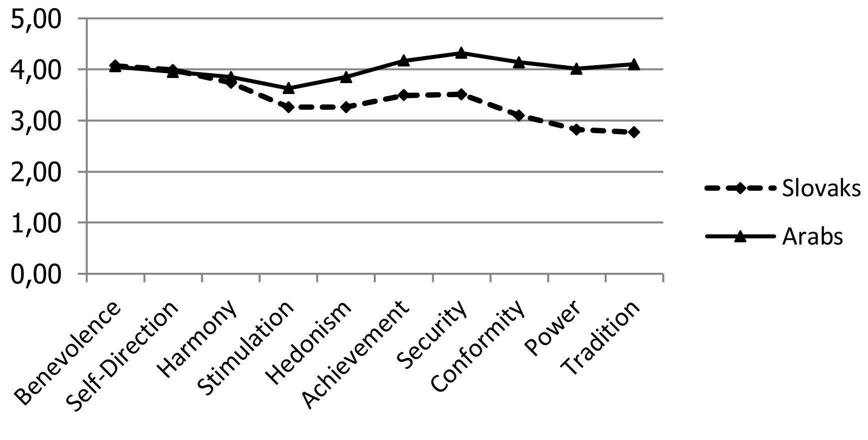
Generating value questions was based on Schwartz's Portrait Values Questionnaire (Schwartz), which consists of 40 descriptions of person, and the role of the respondents is to express the extent to which he/she resembles that person. Since several authors (Fraß 2016, Rammstedt et al. 2009, Tevrüz, Turgut and Çinko 2015) and Schwartz himself (Schwartz 2005) use a reduced number of the descriptions (usually 21 to 23), we also used a smaller number of 23 descriptions. The role of the respondents was to determine the similarity with the person described on the scale 1 to 5, and that 5 = very much like me, 4 = like me, 3 = some-like me, 2 = not like me, 1 = not like me at all.

In the questionnaire, we used different scales where the higher value represented the higher intensity of the phenomenon examined, higher satisfaction, importance, feeling of happiness, etc.

2 Results and Discussion

To determine the extent to which the value being investigated is important, we calculated the mean of the 5-step scale used (Figure 2).

Fig. 2 Average importance of values for Slovaks and Arabs



Source: research data

Benevolence should be considered as a tendency to be kind, protect and improve social contact with those whom we are often in touch with. Slovaks and Arabs consider the kindness to other people to be equally important.

Self Direction represents autonomy in thought, action and choice. For Slovaks and Arabs, this value did not show any significant difference for both cultures.

Harmony is connected with understanding, recognition, and tolerance. People for whom this value is a priority have a sense of protection for the well-being of all people and for nature. Both cultures consider this value almost equally important.

Stimulation is associated with the importance of everything new to people in life and constantly looking for challenges. Interestingly, from the research it is evident that Arabs are little more inclined to stimulation than Slovaks, but this is not a significant difference.

Hedonism means that people who value hedonism enjoy life and prefer all activities related to joy and sensuality in their lives. It emerged that Arabs value hedonism more than Slovaks and prefer to live their lives.

Achievement is an opportunity to show your abilities to others and to achieve your goals within the framework of social criteria. Arabs are more ambitious than Slovaks in this respect. Most often stated responses were "is like me". Slovaks value achievement less, the answers were in the middle between "is a bit like me" and "is like me".

Security is important for people who need protection, harmony, a stable society, and prefer secure relationships. Arabs value security more than Slovaks.

Compliance means the extent to which people are impeded by activities or impulses that could be overturned or could harm others or lead to failure to meet social expectations and standards. From the results of the survey we saw a significant difference between Slovaks and Arabs. Arabs tend to be more compliant than Slovaks.

Power is associated with the recognition of social status and prestige. People for whom this value is important in life enjoy control and dominance over people or resources. We have found a significant difference. Slovaks do not consider the sense of power as important, while Arabs have achieved high values in their recognition of power.

Tradition is related to respect and observance of the traditions and beliefs of traditional culture. From the measured average we found the most striking difference between Slovaks and Arabs, where Arabs dedicate a significant value for the tradition. For Slovaks, tradition does not represent a significant value it obtained the lowest measured average of all ten values.

In Table 1, we present the resulting list of values according to their importance for Slovak and Arabic cultures. As can be seen from the set of values, for Slovaks, the values of benevolence, self-direction, harmony and security are the most important. For Arabs the values of security, achievement, conformity and tradition are the most important. Tradition achieved the biggest difference in placement of up to 6 levels. The difference of five levels was achieved in case of self-direction, harmony and conformity. The smallest difference was identified in importance of hedonism, represented by 2 levels.

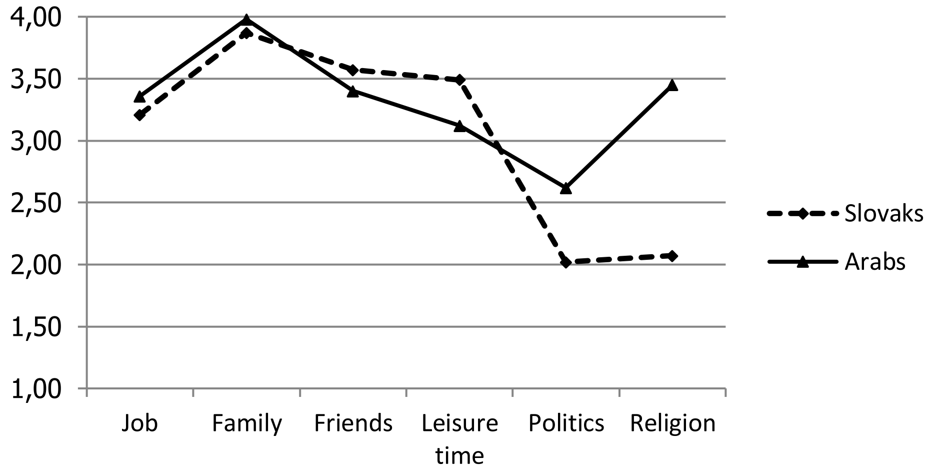
Tab. 1 Ranking of values

Ranking	Values Slovaks	average		Ranking	Values Arabs	average
1	Benevolence	4.07		1	Security	4.32
2	Self-Direction	3.99		2	Achievement	4.17
3	Harmony	3.74		3	Conformity	4.14
4	Security	3.51		4	Tradition	4.10
5	Achievement	3.49		5	Benevolence	4.06
6	Stimulation	3.26		6	Power	4.01
7	Hedonism	3.26		7	Self-Direction	3.95
8	Conformity	3.10		8	Harmony	3.85
9	Power	2.82		9	Hedonism	3.85
10	Tradition	2.77		10	Stimulation	3.63

Source: research data

We were investigating how important for the two cultures studied is: work, family, friends and acquaintances, and religion (4 = very important, 3 = rather important, 2 = not very important, 1 = not at all important) (Figure 3).

Fig. 3 Areas of importance



Source: research data

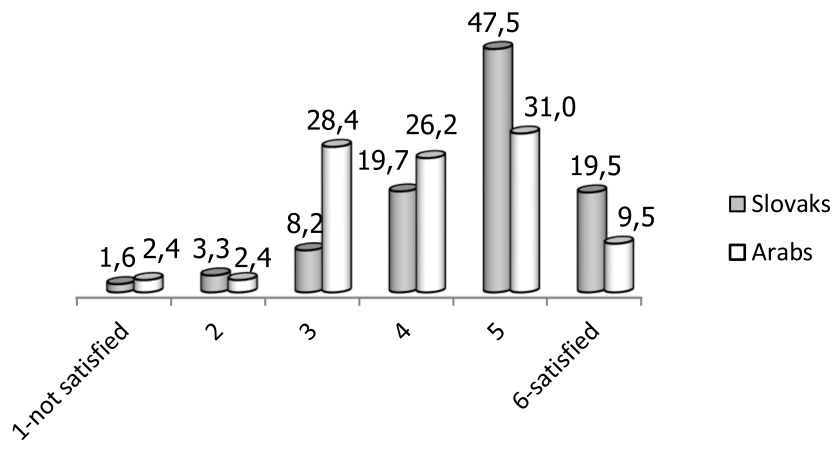
The results of the Kruskal-Wallis test have shown that work, family, friends and acquaintances are equally important for both cultures. Statistically significant differences ($p = 0.05$) were recorded in the area of religion, politics and leisure. Free time is more important for Slovaks, politics and religion are more important for Arabs. Religion achieved the most distinctive difference from all chosen topics. Slovaks regard religion as not very important, while Arabs regard religion as rather important or very important.

In the next question, respondents were asked to express their feelings of happiness if they assess all the circumstances in their lives. Most respondents, more than half, both Slovaks (54.7%) and Arabs (54,8%) said they feel quite happy. A similar proportion of respondents feel very happy, 36.1% of Slovaks and 31% of Arabs. The answer not very happy was chosen by 4.9% of Slovaks and 14% Arabs. The answer not happy at all was chosen by no Arab respondent, and by 1.6% of Slovak respondents. According to the World Happiness Report 2017, Slovaks ranked on 40th position in the ranking of happiness and some Arabic countries achieved similar position (Quatar ranked on the 35th, Saudi Arabia on 37th and Kuwait on 39thposition). From the data of our survey, we calculated averages and their values are not significantly different between the Slovaks (3.17) and the Arabs (3.28). Feeling happy is closely related to life satisfaction. We asked respondents if they are currently satisfied with their lives when considering all the circumstances. Level of satisfaction or discontent could be marked on a 6-degree scale where 1 = not satisfied and 6 = satisfied (Figure 4).

For Slovaks, the satisfaction level 5 dominated, but levels 4 and 6 were strong too. For Arabs, levels 3 to 5 were relatively evenly reported. Slovaks achieved average satisfaction 4.67, and Arabs 4.1. The Kruskal-Wallis test confirmed a significant difference between the two cultures ($p = 0.05$) and we can claim that the Slovaks are more satisfied with their lives than the Arabs.

As mentioned in literature review, Arabic countries are more reliant on stiff codes of behavior, they are more normative and prefer to maintain traditions. So we asked the respondents how and to what extend (1 = no, 6 = great) can they decide freely and direct their lives. None of the respondents feel that they have no chance to decide freely about their lives. More than two-thirds of Slovaks declared the highest degrees of freedom (level 5 and 6), and almost two-thirds of Arabs chose middle degrees (level 3 and 4). We can claim that Slovaks have a significantly stronger sense of freedom in decision-making than Arabs (Kruskal-Wallis test, $p = 0.00$).

Fig. 4 Life satisfaction



Source: research data

We focused on the education/upbringing in the family and responsibilities of generations in the family. First, we were looking for what features or values should parents educate their children to (Table 2).

Tab. 2 Features and values that parents should guide their children to

	Slovaks (%)	Arabs (%)	p-value
Religious faith	9,8	71,4	0,00
Independence	73,8	40,5	0,00
Hard work	42,6	69,0	0,01
Obedience	8,2	28,6	0,01
Determination, perseverance	44,3	21,4	0,02
Imagination	31,1	11,9	0,02
Feeling of responsibility	60,7	76,2	0,10
Tolerance and respect for others	73,8	57,1	0,10
Unselfishness	34,4	21,4	
Good manners	75,4	66,7	
Economizing, saving money	39,3	40,5	

Source: research data

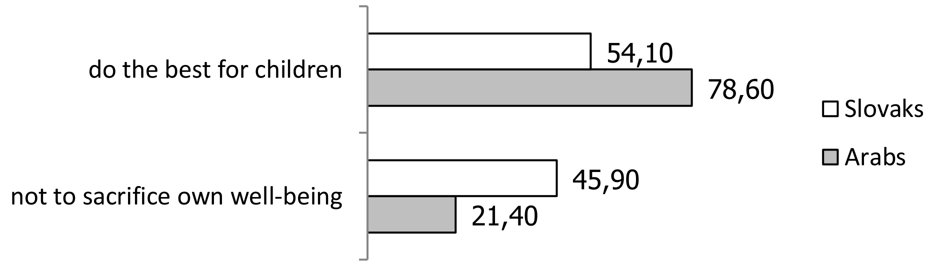
The majority of Slovaks said that parents should guide their children to good manners, independence, tolerance and feeling of responsibility. Arabs considered for most important the feeling of responsibility, religious faith, hard work, good manners, and tolerance for others. Based on the results of the Chi-Square Goodness of Fit Test, we can declare that there are the following significant differences between Slovaks and Arabs: Arabs are more inclined to educate children on religious faith, hard work and obedience, and Slovaks emphasize the independence, perseverance and imagination.

The other two questions concerned the respondents' views on parental responsibilities towards their children and on the contrary, the obligations of children towards their parents. The role of the respondents was to choose from two statements, which best describes their view:

Parents´ duty is to do their best for their children even at the expense of their own well-being.

Parents have a life of their own and should not be asked to sacrifice their own well-being for the sake of their children.

Fig. 5 The role of parents towards children



Source: research data

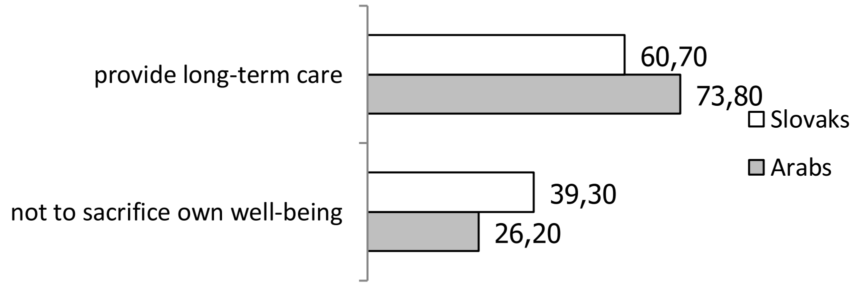
Although the majority of the two cultures tended to make parental responsibility to do the best for their children even at the expense of their own well-being (Figure 5) we can assert ($p = 0.01$) based on Chi-Square Goodness of Fit Test that Arabs have a significantly more intense view on this issue, and are therefore more willing to sacrifice for their children than Slovaks.

We also looked at the role of children to their parents so that the role of the respondents was to choose one of the claims which best describes their view:

Adult children have the duty to provide long-term care for their parents even at the expense of their own well-being.

Adult children have a life of their own and should not be asked to sacrifice their own well-being for the sake of their parents.

Fig. 6 The duty of children to their parents



Source: research data

Most Slovaks and Arabs believe that the role of children is to take care of their parents, even at the expense of their own well-being (Figure 6). We can say that respondents from both cultures perceive taking care of their parents as their duty, while Arabs have more intense view on this issue as Slovaks.

Conclusion

The results of the survey show that Slovaks and Arabs have a different rank of values. The biggest difference we saw in tradition. This confirms the comparison between the two cultures as well as the placement within the values list. Arabs are more committed to respect traditions and customs of their culture. On the contrary, Slovaks do not attribute such importance to the observance of traditional customs, and even traced their traditions as least important or insignificant, which is in line with findings of Haller (2003) and Obeidat (2012) and Sawalha and Meaton (2012).

Survey results may at first glance lead to some conflicting conclusions. We can illustrate this on the value of harmony, which has a small difference in comparing the average for individual cultures, which leads to the conclusion that the two cultures recognize it equally. But within the ranks of values, the harmony placed quite differently. Slovaks positioned harmony on the 3rd place and Arabs on the 8th place, which again leads to the conclusion that the harmony is more important for Slovaks than for Arabs. In interpreting the results of the survey, it is necessary to take into account that for Arabs all values under the investigation were more important than for Slovaks. The results for Arabs are then shifted to the right, so comparing the averages between Arabs and Slovaks can lead to differences, even if they may not be visible in the rankings.

Areas like work, family, friends and acquaintances are equally important for both cultures, but free time is more important for Slovaks, and politics and religion are more important to Arabs. Slovaks have a greater sense of freedom to decide and direct their lives. We also found differences in the views what values parents should guide their children to. Slovaks prefer a certain freedom and Arabs prefer religion and traditions. However, respondents agree on family care, and according to them, it is the role of parents to do everything for the good of their children, even at the expense of their well-being and, vice versa, the role of the children is to take care of their parents even at the expense of their own well-being.

Both Slovaks and Arabs do not differ significantly in the sense of happiness, but when comparing their satisfaction with life, Slovaks are more satisfied than Arabs. This discrepancy proves that although the feeling of happiness and the satisfaction with life are closely related, they still reflect different concepts or content.

Since it was not our goal to ensure the representativeness of the sample, this study and its results needs to be understood as a pilot study.

Suggestions arising from our survey are in area of better understanding between two cultures. Providing deeper and more precise information about the other region, the cultural and educational, scientific and technical elites and outcomes, in schoolbooks, as well as by university teachers and researchers and by politicians.

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Challenges of future trade relations between the EU and UK after brexit

Andrea Krajčíková [1]

Abstract

The aim of the article is to describe and analyze the importance of international exchange of goods and services between United Kingdom (UK) and the European Union (EU27) taking into consideration various scenarios of brexit. The challenges of future trade relations will be significant and depending on way of brexit there are more possibilities how to set up new cooperation in trade exchange. The theoretical part describes the position of UK in European integration, referendum on the UK's membership of the EU, the timeline of the most important brexit events. The practical part describes the quantitative analysis of international trade of goods of UK, trade relations between UK and Slovak republic, the implications of hard brexit on UK's economy and UK's competitiveness after brexit. Relevant scientific methods reflecting the title and aim of the article are used. The main conclusion is to suggest different types of concrete ways how to organize future trade relations.

Key words

Brexit, EU, Competitiveness, Trade relations, FTA

JEL Classification: F13, F15

Introduction

The issue of the United Kingdom´s (UK) withdrawal from the European Union (EU) is one of the most discussed topics in Europe. The question of the organization of future relations between the UK and the EU remains unresolved despite the two years since the activation of Article 50 of the Lisbon Treaty. Article 50 of the Lisbon Treaty was activated on March 29 2017 in response to the referendum on the UK's withdrawal from the EU on June 2016. The UK's withdrawal from the EU affects not only the UK economy itself but also the remaining 27 Member States of the EU as well as the economies of third countries. For both partners EU and UK the trade relations are very significant. In this article we try to deal with possible theoretical constitutions of mutual trade relations and to describe the process from referendum to negotiation talks.

The progress made in the first stage of the negotiations was sufficient to enter the second stage concerning the transition process and the framework for future relations. During the second-stage negotiations addressing the transitional arrangements as well as the overall concept of the framework for future relations the guidelines of the European Council of 29 April 2017 continued to be applied and respected. On 29 January 2018, the Council meeting in EU27 format adopted additional directives to the brexit negotiations, which set out in detail the EU27 position regarding the transitional period. On the basis of these directives the Commission as the EU negotiator was given a mandate to open negotiations with the United Kingdom on this subject. The transitional provisions must be clearly defined and precisely limited in time. The negotiating directives refer to 31 December 2020 as the proposed deadline for the transitional period. During this transitional period, the entire EU acquis would continue to apply in the UK as if the UK remained an EU Member State. The changes to the acquis adopted by the EU institutions, bodies, offices and agencies during this period would also apply in the UK. All existing EU instruments and structures in the areas of

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regulation, budget, supervision, justice and enforcement, including the jurisdiction of the Court of Justice of the European Union, will continue to apply. The UK will have to continue to respect EU trade policy, apply EU tariffs and continue to ensure that all border checks are carried out in the collection of EU duties. The UK will also not accept commitments resulting from international agreements concluded separately in areas of EU law jurisdiction during this period unless the EU has given its consent. As a third country, the UK will not participate in the work of the institutions or in the EU decision-making process. The agreement between the UK and the EU on the transitional period took place on 19 March 2018 at the Brussels summit. Both sides agreed on a 21-month transitional well, to start on the day of Brexit itself, on 29 March 2019. British Brexit Minister David Davis negotiated this agreement at a meeting in the European Commission in Brussels with EU Chief Negotiator Michel Barnier. At the press conference David Davis also confirmed that this transition period will end on 31 December 2020.

After 17 months of continuous negotiations, the European Council on 25 November 2018 took a decisive step in the Brexit negotiations by endorsing the Agreement on the withdrawal of the UK's controlled withdrawal from the EU and endorsing the political statement establishing the framework for future EU relations and the UK. The political statement sets out the parameters of an ambitious and deep partnership in the field of economy and security. It covers more areas than any existing EU partnerships with other third countries. These areas include: goods, services, digital technologies, mobility, transport, energy, homeland security, foreign policy, security, defense and many others.

1 Methodology

We worked with secondary data when processing the article. Most important were book publications and websites in particular those of the institutions of the European Union, the European Economic Area, the UK Government and Parliament and the prestigious world universities. The most important part of the result part consists of tables and graphs, which were made on the basis of statistical data. Most of the statistics come from the UK's largest database of statistics, the Office for National Statistics, but also from the European Union's Eurostat database. It was necessary to use a suitable combination of different methods of investigation. The principle of objectivity, which we have achieved by examining a number of sources and problems dealing with the issue, became the basis. From the theoretical general methods the methods of synthesis and analysis, induction and deduction were used.

2 Results and Discussion

The main possible options for organizing future relations include in particular the possibility of withdrawing the UK from the EU without an agreement, establishing a free trade area, creating a customs union and entering the UK into the European Economic Area. This part is devoted to the various theoretical possibilities of organizing future trade relations between the UK and the EU and their application to trade between them. To realize the importance of future trade relations organization the author included some relevant statistic. Some macroeconomic analysis of the impact of the given possibility of ordering on the UK economy are included. Author presents main findings, results and discussion based on other authors´ findings in the field of interest.

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2.1 Scenarios of future trade relations

Option 1- Introduction of WTO rules in case of severe Brexit

In the case of harsh Brexit, the UK would revert to WTO rules which would significantly undermine the UK's current relations with the EU and imply the introduction of tariff and non-tariff barriers to trade. In this case, the UK would lose access to the EU single market, while at the same time not benefiting from the EU's free trade zones with third countries. The EU currently has more than 35 trade agreements with third countries, covering more than 60 countries. These trade agreements account for 11% of total UK trade. This does not include trade with Turkey, San Marino and Andorra, which are part of the EU custom union. At the same time, trade with Japan is not included, as the Economic Partnership Agreement entered into force only on 1 February 2019.

At the end of February 2019, the UK signed several trade agreements, the most important of which are the mutual recognition agreements it signed with the United States, Australia and New Zealand. However each applies to different products. These agreements will enter into force if the UK withdraws from the EU without agreement, or after a transitional period for managed Brexit. As the EU and the UK are members of the WTO, the rules of this organization would be applied in their trade. The WTO multilateral trading system is based on international trade agreements, which are based on commonly accepted principles. According to the Confederation of British Industry (CBI), if WTO rules were to be implemented, British importers of goods originating in EU countries would face average tariffs of 5.7%. In the case of UK exports to EU countries, exporters of goods would face average customs duties of 4.3%. Neither party would reduce tariffs on imports or exports of agricultural products or motor vehicles without doing so for all other WTO countries. However, the Brexit supporters argue that in such a case, tariff tariffs can be reduced to almost zero. However, this possibility is very unlikely on the part of the British Government, as domestic industry could be damaged.

Option 2- Free trade zone

Macroeconomic integration at the FTA level is a type of integration where countries agree to remove tariffs and quantitative restrictions on trade in goods, but retain their own tariffs vis-à-vis non-member countries. Each member expects to benefit from its comparative advantages. Goods and services are imported in areas where the country has comparative disadvantages. In the case of a future FTA-based EU-UK trade arrangement, the UK would conclude a zero-FTA with the EU but would bear average non-tariff costs that take into account standard FTAs. These non-tariff costs would stem from the termination of customs union, customs and regulatory barriers and other costs. According to Deloitte's analysis, non-tariff costs would be 5-11% for trade in goods and 3-14% for trade in services. There are currently 3 potential models for concluding such agreements. These models include:

- Model of bilateral agreements based on bilateral agreements between the EU and Switzerland.
- Comprehensive Economic and Trade Agreement (CETA), based on the EU Agreement with Canada.
- Deep and comprehensive Free Trade Area Agreement (DCFTA), based on the EU-Ukraine Agreement.

Option 3: Custom Union

The custom union is a quantitatively higher form of macroeconomic integration than the free trade area. In the case of the custom Union, barriers to trade are dismantled in two phases. In the first phase barriers to trade in the internal markets are eliminated. This phase is also referred to as the negative phase of the integration process, due to the gradual abolition of mechanisms and instruments that have been in place until co-operation at customs union level. During the second phase also known as the positive phase of the integration process, common commercial policies towards third countries are being developed. Arranging trade relations between the EU and the UK at the level of the custom union would mean for the UK to withdraw from the EU single market and the EU customs union and create a new customs union with the EU. A new custom union between the UK and the EU would provide duty-free access to trade in goods, subject to the application of a common tariff for trade with third countries.

Option 4: European Economic Area

The European Free Trade Association (EFTA) was established by the signature of the Stockholm Convention in 1960. At that time, the founding states included Austria, Denmark, Norway, Portugal, Sweden, Switzerland and the United Kingdom. Prof. C. Baudenbacher, who served as President of the EFTA Court until 2018, characterizes the current relationship between the EU and the EFTA as the fifth phase of their mutual integration, which began with the entry into force of the Treaty on the European Economic Area on 1 January 1994. The EU and three EFTA countries, Iceland, Liechtenstein and Norway. The Agreement on the European Economic Area (EEA) represents the closest level of integration with the EU single market. The main objective of the EEA Agreement is to ensure trade and economic relations between the Member States, while exploiting the free movement of goods, services, persons and capital, while respecting competition rules. The EEA covers almost the entire EU internal market, with the exception of the Common Customs Tariffs, the Common Trade Policy and the Common Agricultural and Fisheries Policy, the Common Foreign and Security Policy, and also does not regulate monetary union issues. EU internal market legislation is integrated into the EEA Agreement. EEA membership also requires financial contributions from Member States. Based on the analysis carried out by the UK Government, for the same UK contribution to the EEA budget as for Norway, this contribution would be £ 3 billion for 2018/2019. In percentage terms, it would represent 0.15% of UK GDP. At the same time, this potential contribution would not take into account the UK contributions due to participation in EU programs.

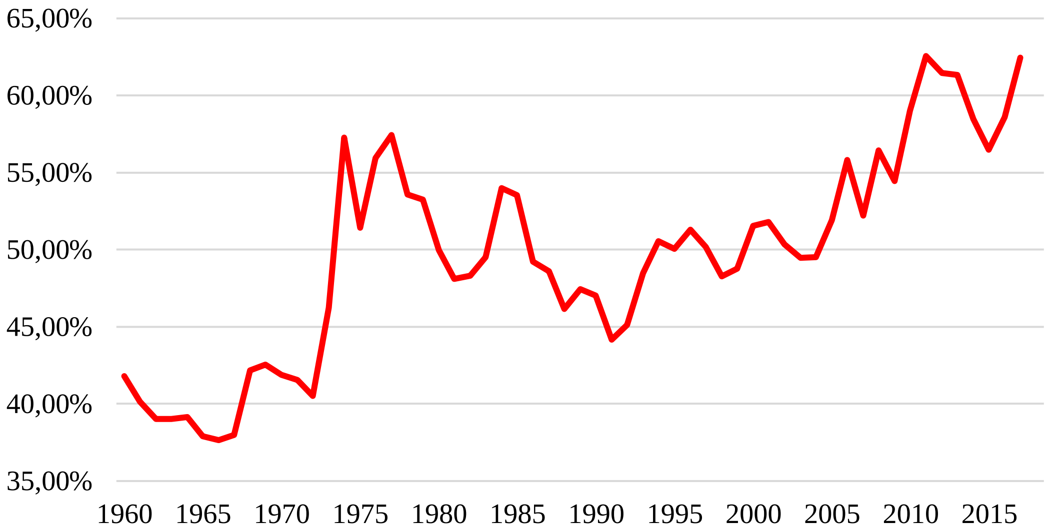
Despite the harmonization of legislation and regulations, there are still some differences between the EEA Single Market and the EU Internal Market. The EEA, unlike the EU, is not a custom union and therefore individual EFTA countries maintain autonomous tariff tariffs and trade policies vis-à-vis third countries. The control of goods and persons at the border is also a very important difference, trying to prevent illicit drug trafficking, terrorism and other factors that may endanger the citizens of the Member States. In the case of Brexit, the choice of the arrangement of relations under the EEA model is a better option since it also includes the freedom to provide services which is not included in the case of the arrangement of relations under the FTA agreement. As the share of services in the UK's total GDP is around 80%, the freedom to provide services is a very positive factor in the future arrangement of relations. Another important factor is the fact that the EEA does not constitute a customs union and that is why countries maintain their own trade policy vis-à-vis non-member countries. On the other hand, EEA membership would entail a large number of commitments for the UK resulting from free access to the EU market. In the case of the EEA, the EFTA countries do not have the right to decide on the negotiation of these commitments; EEA membership also requires financial contributions from Member States. Based on the analysis carried out by the UK Government, for the same UK contribution to the EEA budget as for Norway, this contribution would be £ 3 billion for 2018 and 2019. In percentage terms, it would represent 0.15% of UK

GDP. At the same time, this potential contribution would not take into account the UK contributions due to participation in EU programs.

2.2 Quantitative analysis of the UK's international trade

Foreign trade is an important factor in the functioning of the UK economy. Already in 1960, the share of trade in the country's total GDP was 41.80%. A very significant increase of 11.02% is evident between 1973 and 1974. This is mainly due to the fact that on 1 January 1973 the UK withdrew from EFTA and joined the European Community, now known as the European Union. Another major milestone in the development was the combination of a gradual slowdown in the growth of developed economies with the market economy as a whole since 1988, and at the same time, widening performance gaps between major world economies, ultimately resulting in a sharp economic slowdown in 1991. were also reflected in the total trade of the UK, whose share in the country's GDP fell by an average of 4.47% between 1987 and 1991. Other significant slumps are observed between 2007 and 2009, which are mainly attributed to the global financial crisis. The last significant slump is visible between 2011 and 2015, when in 2015 the share of total trade in GDP fell by almost 6.09%. Since 2015 we have seen a steady increase. In 2017, the share of total trade in UK GDP was 62.46%. Chart 1 shows the development of the share of total British trade in the GDP of Great Britain.

Graph 1 Development of the share of total British trade in GDP of the UK



Source: own based on data.worldbank.org, 2019

Table 1 and table 2 shows the share of exports and imports UK foreign trade. In exports besides USA the biggest trading partners are Germany, France, Netherlands and Ireland. Seven out of ten top export trading partners are from EU. In imports Germany and Netherlads are biggest trading partners for UK. Eight out of ten import trading partners are EU member states.

Table 1 UK Export trading partners

Rank	2017 Country	2017 Export	2017 % Share	2018 Country	2018 Export	2018 % Share	Change 2017/ 2018
1	USA	51 388 mil. £	15,17%	USA	54 908 mil. £	15,66%	6,85%
2	Germany	37 182 mil. £	10,98%	Germany	36 517 mil. £	10,41%	-1,79%
3	France	24 214 mil. £	7,15%	Netherlands	26 487 mil. £	7,55%	20,02%
4	Netherlands	22 032 mil. £	6,50%	France	24 483 mil. £	6,98%	1,11%
5	Ireland	20 429 mil. £	6,03%	Ireland	22 211 mil. £	6,33%	8,72%
6	China	17 958 mil. £	5,30%	China	18 511 mil. £	5,28%	3,08%
7	Belgium	14 032 mil. £	4,14%	Belgium	14 539 mil. £	4,15%	3,49%
8	Italy	10 360 mil. £	3,06%	Italy	10 700 mil. £	3,05%	3,61%
9	Spain	10 349 mil. £	3,06%	Spain	10 388 mil. £	2,96%	0,38%
10	Hong Kong	7 908 mil. £	2,33%	Hong Kong	8 334 mil. £	2,38%	5,39%

Source: own based on ons.gov.uk, 2019

Table 2 UK Import trading partners

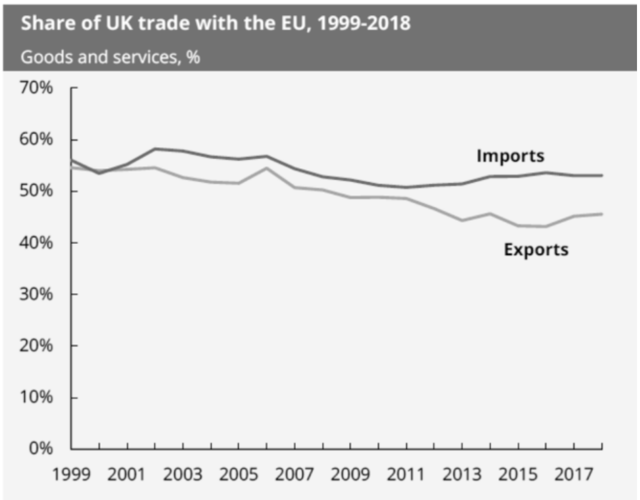
Rank	2017 Country	2017 Import	2017 % Share	2018 Country	2018 Import	2018 % share	change 2017/ 2018
1	Germany	68 845 mil. £	14,47%	Germany	67 985 mil. £	13,91%	-1,25%
2	China	43 377 mil. £	9,12%	China	43 973 mil. £	9,00%	1,37%
3	Netherlands	40 482 mil. £	8,51%	Netherladns	42 175 mil. £	8,63%	4,18%
4	USA	39 748 mil. £	8,35%	USA	41 937 mil. £	8,58%	5,51%
5	France	27 408 mil. £	5,76%	France	28 189 mil. £	5,77%	2,85%
6	Belgium	25 435 mil. £	5,35%	Belgium	26 665 mil. £	5,46%	4,84%
7	Norway	19 560 mil. £	4,11%	Norway	20 168 mil. £	4,13%	3,01%
8	Italy	18 496 mil. £	3,89%	Italy	19 172 mil. £	3,92%	3,11%
9	Spain	16 417 mil. £	3,45%	Spain	16 613 mil. £	3,40%	1,19%
10	Ireland	14 476 mil. £	3,04%	Ireland	14 115 mil. £	2,89%	-2,49%

Source: own based on ons.gov.uk, 2019

Analysis of the commodity structure of export and import for 2018 shows that the largest share in the UK import has nuclear reactors, boilers and machines, which account for 12.70% of the total import. These are followed by motor vehicles with a share of 10.93%, mineral fuels 9.85%, electrical equipment 9.33% and imports of precious metals, gems and pearls in a percentage of 8.92% concludes the first 5 most imported types of goods. Nuclear reactors, boilers and machinery account for the largest share of the UK's exports, accounting for almost 17% of total exports. Other major export commodities are motor vehicles, which account for 10.99% of total exports, mineral fuels 8.82%, electrical equipment 6.80% and pharmaceutical products 6.25%.

Despite its important position within the EU, the share of UK´s exports and imports within the European Union market has been steadily decreasing in recent years. UK´s share of total EU exports in the EU internal market was only 5.5% in 2018. With this share, the UK became the seventh most important exporter in the EU in 2018. In terms of its share of total EU imports, UK ranked third with 8.7% share.

Graph 2 Share of UK trade with the EU



Source: Department for international trade, UK

The share of UK exports going to the EU has declined gradually in recent years. In 2006, the EU accounted for 55% of all UK exports. By 2016, this had fallen to 43%, before rising to 46% in 2018. The graph 2 on imports is slightly less clear. In 2002, 58% of UK imports were from the EU. By 2010, this had fallen to 51% but has increased slightly more recently, reaching 54% in 2016. The proportion of UK goods imports being sourced from the EU has remainded fairly consistent since 1999. Overall, the UK has had a trade deficit with the EU in every year since 1999. The data for 2018 point to the fact that the total value of UK´s international trade with EU countries was € 437.8 billion £. This volume declares the importance with which to set up future business relationships.

Conclusion

In general, after examining the issue of the UK´s international trade with the EU and third countries, it can be argued that the importance of the United Kingdom's international trade with the EU and third countries is approximately the same for the UK. Both partners will have an interest in keeping trade relations as intense as possible. The protectionist measures of the US administration against global players only reinforces the need for good bilateral trade relations. All potential scenarios for future EU UK trade relations need to be weighed for political acceptability, short- and long-run economic impact, and depend on the willingness of the EU-27 to agree a deal on this sort of basis with the UK. Some may also form the basis for a transitional arrangement while the UK and EU negotiate a long-term deal or while the UK implements the systems to manage its new relationship with the EU.

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Design License Agreement[1]

Marián Kropaj[2]

Abstract

The author pays attention to the importance of design for business and commerce. He highlights the most important design developments of 14 January 2019 and considers their potential impact on the wider socio-economic environment. The Industrial Property Office of the Slovak Republic submitted a draft amendment with the ambition to influence the business environment positively. He formulates recommendations de lege ferenda for the Slovak legislator, which are based on the analysis of European law governing the design license agreement and Czech legislation.

Key words

design, intellectual property, business, commerce

JEL Classification: K20, K23

Introduction

Designs (in earlier specialised terminology "industrial designs") in the system of intellectual property law are classified to industrial rights, that are the outcome of intellectual creative work.[3] They are of utmost importance for the market economy and commerce. Design means appearance of a product or its part consisting in characteristics such as lines, contours, colours, shape, structure or material of the product itself or its decorations.[4] Design visually distinguishes one product from another. In the synonym dictionary we can found words such as appearance, aspect, expression, treatment, form, shape or exterior (Pisárčiková, 2004). These definitions refer in particular to the exterior of a product, but design is not only about appearance – it also constitutes the means of communication. Design also takes into account e.g. psychology that it uses to influence the purchase conduct, while following the recent trends. The importance of the design consists in the effort to attract or address large groups of consumers (Knošková, 2014).

The term "license" in Slovak law occurs in different meanings and depending on the context it may have a fully different legal meaning.[5] The license agreement in the area of industrial property,[6] but also in copyright law, can be understood as a private law contract by which a holder of the exclusive right to certain intellectual property grants, as part of his absolute right, to another person a time-limited license for the use of the protected property (ideal object) under agreed conditions. The approval to exploitation of the design (design license) is granted by a written agreement in accordance with Article 24 paragraph 1 of the Act no. 444/2002 Coll. on designs, as amended

[1] KEGA, no. 020EU-4/2019 - Publishing of a new textbook from the subject Basics of Law in English for international students and Slovak students studying in English.

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[3] To the system of intellectual property law with reference to Švidroň, more recently see KROPAJ, M. et al. The basics of intellectual property law for economists. Bratislava: Wolters Kluwer, 2017, pp. 89 – 91.

[4] Article 2 subparagraph a) of the Act no. 444/2002 Coll. on designs, as amended.

[5] In general to the term "license" see e.g. ŠVIDROŇ, J. Intellectual property law. In LAZAR, J. et al. Substantive civil law. Third supplemented and revised edition. Bratislava: Iura Edition, 2006, pp. 518 – 519.

[6] To the subject and terminological meaning of the term "industrial property" see ŠVIDROŇ, J. The basics of intellectual property law. Bratislava: Juga, 2000, pp. 168 – 169.

(hereinafter “AoD”). A written form is strictly required because the agreement needs to be entered into the register kept by the Industrial Property Office of SR.

The agreement takes effects with regard to third parties from the date of entry into the register. The Office registers the license on the basis of the application for registration of the license, which may be lodged by any party to the license agreement. The Office will reject the application for registration of the license if the applicant fails to enclose to the application documents demonstrating the license. Before deciding on rejection of the application for registration of the license the Office will give the applicant an opportunity of expressing its views on the stated reasons for which the application for registration of the license should be rejected (24 paragraph 2 of AoD).

The recent amendment to AoD, which was prepared and submitted for legislative process by the Industrial Property Office of SR, should be understood in the context of the rules applicable to the design license agreement. Some other acts in the area of industrial property law (trademarks, patents, utility models) were amended as well, but in view of the limited scope of this article we will not cover them in detail herein.

The Decree of the Industrial Property Office of SR no. 629/2002 Coll., implementing the Act no. 444/2002 Coll. on designs (hereinafter “Decree”), was substantially amended in relation to legislative changes adopted with effect from 14 January 2019.

1 Methodology

The aim of this article is to point out to the importance of the design license agreement in business and trade. The author applies traditional methods of scientific work, in particular the method of analysis, method of synthesis and comparative method.

2 Results and Discussion

The issue of the industrial property license agreement, generally regulated in Sections 508 to 515 of the Act no. 513/1991 Coll. Commercial Code, as amended (hereinafter “Commercial Code”), is one of traditional subjects. Commercial-law aspects and intellectual property law[7] intertwin therein. The design license agreement is specifically regulated in Article 24 et seq. of AoD. The license agreement as a named contract type is not classified to so-called “absolutely commerces” and hence it is not governed by Part Three of the Civil Code, which regulates contractual obligations among entrepreneurs, regardless of whether a party to such legal relationship is or is not an entrepreneur. The industrial property license agreement involves a relative commerce, which can be used in cases where the conditions laid down by Section 261 paragraph 1 and paragraph 2 of the Commercial Code are fulfilled. Of course, according to Section 262 of the Commercial Code the parties may agree that a relationship not falling under relations set out in Section 261 shall also be governed by the Commercial Code. In the absence of such agreement between the parties the license agreement would be governed by the Civil Code. However, as the Civil Code does not regulate the specific type of license agreement, it would be an innominate agreement within the

[7] More recently, see ŠKREKO, A. Industrial rights in an information and knowledge-oriented society. In ŠVIDROŇ, J., ADAMOVÁ, Z., NÁVRAT, M., ŠKREKO, A. (Ed. Švidroň, J.) Intellectual property law in an information society and in the system of law. Bratislava: VEDA, 2009, pp. 625 – 628.

meaning of Section 51 of the Civil Code.[8] But it is also necessary to take into account the provisions on consumer contracts set out in Section 52 et seq. of the Civil Code. Marek reflects on the correctness of the classification of the industrial property license agreement to relatively commerces. In his opinion in case of additional changes in commercial law it would be appropriate to ask the question whether the license agreement should not be classified to absolutely commerces and whether the mandatory rules should not be reinforced in this type of agreements (Marek, 2008). The section "license agreement" in Article 65 et seq. of the Copyright Act no. 185/2015 has been designated incorrectly for a long time. The mere designation "license agreement" could namely lead to misinterpretation that the license agreement, as regulated by copyright law, is a general contract type, and not only a specialized contract type for the area of use of subjects of exclusive rights according to copyright law. In this context Švidroň proposed in the process of recodification of private law to generally regulate the license agreement in the Civil Code, because, as he correctly points out, its use exceeds commercial law relations only (Švidroň, 2006). In the context of development of other general legal theoretical and legal scientific reflections on the issue of license agreements, and in particular license agreements in copyright law, additional scientific and specialised literature can be recommended.[9]

The substance of the license agreement is that it does not involve the transfer of the licensed property or right. If the substance of the agreement should consist in the transfer, then the agreement on transfer according to individual special legislation regulating industrial property would be concluded. In case of the license agreement the subject of license is not alienated and remains property of the licensor. By granting the license the licensee acquires the right of disposal of proprietary nature within the scope of the granted license. The scope is usually determined by the economic purpose, whereby the reasons may, of course, also be of a non-commercial nature. According to the legal definition contained in Section 508 of the Civil Code by the industrial property license agreement the licensor authorizes the licensee for the exercise of industrial property rights within the agreed scope and territory and the licensee undertakes to provide certain payment or another asset. The purpose of the agreement is to grant the authorization for economic use of the licensed property for consideration. The essential elements of the license agreement are designation of the parties, scope and subject-matter of the agreement, territorial scope and agreement on remuneration. With reference to Vojčík and Vyparina addressing the specific type of license for use of invention, each design license agreement should contain the introductory provisions, definitions of terms, subject-matter of the agreement and the scope of rights, documentation, improvements, guarantees and liability, technical support, payments, taxes and charges, information and reporting, confidentiality, protection of the granted right, advertising, settlement of disputes, force majeure, term of the agreement and its termination, final provisions,

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[8] Compare VOJČÍK, P. – VYPARINA, S. License for use of invention and transfer of patent. In Duševné vlastníctvo, 1997, no. 4, p. 6. More recently see e.g. LAZÍKOVÁ, J. The basics of intellectual property law. Bratislava: Iura edition, 2012, p. 162.

[9] See the footnote no. 152 in ŠVIDROŇ, J. The basics of intellectual property law. Bratislava: Juga, 2000, p. 171, GREGUŠOVÁ, D., CHLÍPALA, M. License agreement as basic contract type for the area of intellectual property. In Duševné vlastníctvo, 2005, no. 2, pp. 24 – 29; inspired by the Czech environment TELEC, I. License agreement according to copyright law I. In Duševné vlastníctvo, 2001, no. 3, pp. 7 – 12, TELEC, I. License agreement according to copyright law II. In Duševné vlastníctvo, 2001, no. 4, pp. 13 – 18. More general articles to the issue of license agreements were published also during the impressive one-hundred-year history of the magazine *Právny obzor*. NÁVRAT, M. License agreements according to the new copyright law. In Právny obzor, 2003, no. 6, pp. 558 – 564; ZÁMOŽÍK, J. Some legal aspects of license agreements for shareware and freeware and their contracting under Slovak law. In Právny obzor, 2005, pp. 248 – 254; TELEC, I. Approval, or license obligation? In Právny obzor, 2013, no. 5, pp. 435 – 446; GREGUŠOVÁ, D. – CHLÍPALA, M. Free software and software with free code (License conditions for free software). In Právny obzor, 2013, no. 5, pp. 447 – 458.

annexes etc.[10] The license agreement is usually concluded after registration of the design, although conclusion of the license agreement after submission of the application for design registration before its registration is not excluded. In this way the license agreement with a suspensive condition may be concluded, where one of the parties will be the applicant for design registration. In general, the parties concluding the license agreement are designated as the "licensor" (owner or co-owner) and the "licensee" (natural/legal persons, usually entrepreneurs).

The scope of license can be determined differently, as needed. For example, in terms of rights linked to the respective design to all rights or to selected rights; in terms of the quantity of products that the licensee is authorized to adjust by the design, to use, to offer, to place into market, etc. The territorial scope determines the territory of a state or states, where the license may be used, also taking into account the principle of territoriality of industrial rights (Škreko, 2009). Specifically for designs, it is necessary to bear in mind the provisions on the use of design in Article 17 of AoD. The use of a design means in particular production, offer, placement into market, import, export or use of a product in which the registered design is incorporated or exploited, or storage of this product for these purposes. Provisions of Section 509 paragraph 1 of the Civil Code is mandatory within the meaning of Section 263 of the Civil Code. The other provisions of the license agreement (other than the basic defining provision of the license agreement) are of optional nature. The Commercial Code further provides that if duration of a right depends on its exercise the licensee is obliged to exercise this right. This provision applies in particular to designs that their owner as well as the licensee are not only authorized, but also obliged to use. As the period of protection of individual industrial rights is time-limited, the design owner according to Section 510 of the Civil Code is obliged to secure the acquired right for the licensee, where the nature of the right requires it, i.e. especially to pay the fees to the Industrial Property Office of SR according to the pricelist.[11] According to Section 511 of the Civil Code the licensor remains authorized for the exercise of the right, which is the subject of the agreement, and for provision of its exercise to other persons, unless the licensor granted an exclusive license. The licensee is not authorized for granting a sublicense – to transfer the exercise of the right to other persons, unless the parties agreed otherwise in license agreement. According to Article 24 paragraph 3 of AoD the design owner may grant by the license agreement an exclusive or non-exclusive license. Unless the parties agree otherwise in the license agreement, a non-exclusive license is granted. In case of granting an exclusive license, the owner must not grant the license to a third party and is obliged to refrain from using the design himself, unless the parties agree otherwise in the license agreement. A license agreement, by which the design owner has granted a license to a third party, is fully invalid when an exclusive license had been granted previously and the licensee of the previously granted exclusive license had not given its prior written approval to conclusion of later license agreement (Article 24 paragraph 6 of AoD). Additional optional provision regulates the transfer and assignment of the right of the licensee. It is only possible as part of the transfer or assignment of business or its part, in which the registered design is used on the basis of the license.

Protection of the licensee is regulated by Article 24 paragraph 8 of AoD differently depending on whether an exclusive or a non-exclusive license is granted.

If a non-exclusive license had been granted in case of an unauthorized intervention into the exclusive rights according to Article 8 the licensee has the right in his own name and on his account

[10] VOJČÍK, P. – VYPARINA, S. License for use of invention and transfer of patent. In Duševné vlastníctvo, 1997, no. 4, p. 8. For basic terms from the area of licenses and content of license agreements see e.g. VYPARINA, S. License agreement according to the Commercial Code. In Justičná revue, 1994, no. 11-12, pp. 30 – 36. More recently, see VOJČÍK, P. et al. Intellectual property law. Plzeň: Vydavatelství and nakladatelství Aleš Čeněk, s.r.o., 2012, pp. 354 – 359.
[11] Items 229 to 232 of the Act no. 145/1995 Coll. on administrative charges, as amended.

to make claims according to Article 8a using the cause of action according to the Code of Civil Litigation Procedure or by means of a motion according to the Act no. 307/2016 Coll. on dunning procedure and on amendments to certain acts only with approval of the registered design owner.

If an exclusive license had been granted the licensee is entitled to make claims using the cause of action, unless the design owner does so within a reasonable period after receiving the written notice. This provision does not affect the rights and obligations of the registered design owner and the licensee according to the Commercial Code, or the right of the licensee to enter into the proceedings initiated by the design owner as an intervener.

Provisions on the license agreement contained in AoD will also apply to a license agreement, by which the applicant for registration grants the design license which is the subject of the application. The registration of the license for the application remains unaffected by the registration of the design and will be regarded as registration of the license, unless the parties agree otherwise in the license agreement. The registration of the license for the application remains unaffected by the change of designation, by the reduction of the list of goods or services or by division of the collective application (Section 34 paragraph 4); in case of division of the collective application (Section 34 paragraph 4) the Office will enter into the register the license as well as the excluded application for registration (Section 24 paragraph 9 of AoD).

According to Section 512 Civil Code the licensor is obliged without undue delay (i.e. within the shortest possible term) after conclusion of the agreement to provide to the licensee all documents and information required for the exercise of the right according to the agreement. Again, more detailed regulation directly by the license agreement is envisaged. These documents and information are usually indicated in appendices to the license agreement, of which they are integral part. The provision of documents and information of technical, economic, production or other nature usually is the prerequisite for the exercise of the right of the licensee, therefore the Act also determines the period for fulfilment of this obligation by the licensor.

According to Section 513 of the Civil Code the licensee is obliged to conceal provided documents and information from third parties, unless it is clear from the agreement or the nature of provided documents and information that the licensor is not interested in their concealment. Persons who participate in business of the entrepreneur and whom the entrepreneur sworn to secrecy are not to be regarded as third parties. After the termination of the agreement the licensee is obliged to return the provided documents and to further conceal provided information until the moment when it becomes generally known. This provision gives rise to the liability of the licensee to the licensor for damage caused by violation of the confidentiality obligation of the persons participating in business of the licensee. The licensee could later make claims for damages against them. The violation of the confidentiality obligation constitutes a violation of the license agreement and may give rise to the obligation to pay compensation (Section 373 et seq. of the Civil Code, compare Article 27 paragraph 2 of AoD). A violation of the confidentiality obligation may constitute an act of unfair competition – breach of a trade secret (Article 17 et seq., Article 44 et seq. Article 51 et seq., Article 55a et seq.).

The mandatory provision of Section 271 of the Civil Code applies to negotiation of the license agreement.

The information (notification) obligation of the licensee and measures for protection implemented by the licensor are regulated by Section 514 of the Civil Code.

The termination of the agreement is regulated by Section 515 of the Civil Code. If the agreement has not been concluded for a definite period of time, it can be terminated. Unless the license agreement provides otherwise, the termination takes effect one year after the end of the calendar month in which the notice of termination was delivered to the other party.

With effect from 14 January 2019 the respective procedural provisions of special legislation regulating the registration of industrial property license agreements were supplemented. They concern not only designs, but also trademarks, patents and utility models. The provisions of the design license agreement were substantially changed against the previous legal regulation.

3 Results and Discussion

In the ongoing process of recodification of private law, it is possible to consider a regulation of the license agreement in the Civil Code. The source of inspiration could be the provisions of the license agreement, as regulated by in the Czech Act no. 89/2012 Coll. Civil Code. General regulation of the license agreement is contained in Section 2358 et seq., followed by special legal regulation of the license agreement to property protected by copyright law (Section 2371 et seq.). Special legal regulation of the license is contained in Article 32 of the Act no. 207/2000 Coll. on protection of industrial designs and on amendment of the Act no. 527/1990 Coll. on inventions and rationalisation proposals, as amended. The article then analyses in greater depth legal regulation of the design license agreement in the context of recent legislative changes adopted with effect from 14 January 2019. In relation to the adopted recent amendment to AoD it can be stated that the Industrial Property Office of SR submitted the draft amendment with the ambition to positively influence the business environment. In the explanatory memorandum and in the provision on impacts it is recognised that the draft Act has negative impact on public finance, but also pointed out that it will have positive effects on the business environment, building of information society, services of public administration for a citizen as well as positive social impacts. The adopted changes will not affect the environment.[12]

Conclusion

The article focuses on the new industrial law regulation contained in legislation regulating designs. Partially and incidentally, to the extent necessary, it also addresses the extra-judicial context.

The effort to further stimulate the creation and to support the business environment can be welcomed as well. Special provisions regulating the license agreement, especially in relation to the administrative proceedings of the Office, were completed. In view of the short life of the new legislation it would be too early to take categorical judgments to the new legislation in terms of its values. Only the long-term application of the new industrial law regulation will show whether the changes contributed to achievement of the declared (envisaged) objectives. In the future it will be necessary to strive for the stabilisation of the legal environment. Too frequent amendments of legislation are bad for business and commerce. The ambition of the legislator should be a robust legislation. Only necessary, logically justifiable and well-advised legislative changes should be

[12] General and special explanatory memorandum to the amendment published in the Collection of Laws under no. 291/2018 Coll., amending AoD and certain acts, tlač_0983. Available on the Internet: https://www.nrsr.sk/web/Page.aspx?sid=zakony/zakon&ZakZborID=13&CisObdobia=7&CPT=983

implemented. When evaluating the new industrial law regulation, it is necessary to take a cautious approach and wait for reactions of the business practice and all stakeholders.

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Favourable business environment as a factor of business development[1]

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Abstract

A good business environment means good conditions for free enterprise and private initiative. It is the high-quality business environment that greatly influences the performance of the business sector and at the same time creates space for the country's dynamic development and competitiveness. The aim of the paper is to evaluate the current state and quality of business environment in Slovakia with a special focus on comparison with the Czech Republic in the context of the world ranking Doing business. The business environment in the countries concerned has similar features in most of the evaluated parameters. Areas that are based on a number of positive measures by the governments of the selected economies to start or simplify business, which are also attractive to foreign investors, have been positively evaluated. Demanding enforcement of contracts, protection of investor rights and demanding procedures for equipping building permits were negatively assessed in both observed countries. Introducing positive changes such as eradicating corruption, clientelism, reducing administrative burdens, and increasing law enforcement can greatly accelerate business development in both economies.

Key words

Doing Business, business environment, business competitiveness

JEL Classification: L25, L26, M13

Introduction

The basic precondition for increasing the country's competitiveness on the international scale and the growth of the market economy is a quality business environment. Competitiveness can be seen as a set of institutions, policies, external factors that determine the level of productivity of a country and affect the internal environment of businesses. The term business environment is all that influences and constitutes the country's economy, and one of the basic parameters of the business environment can be: unlimited private ownership, freedom of enterprise, including freedom to enter into contractual relations and effective enforcement of law. We can measure and compare the business environment and its quality using several national and international indices. The evaluation results serve countries to eliminate weaknesses and minimize the risks of negative impacts. They provide detailed information on several aspects of competitiveness from the point of view of the country's

[1] The paper has been prepared within the project No: 7427/2019/08 "Business incubator as a tool of cooperation of academic environment with real practice in the Czech Republic and abroad" supported by the Specific University Research Funds of research organization University of Finance and Administration, Prague, Czech Republic. Project period: 2019 –2021.

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attractiveness for foreign investment and at the same time provide internationally comparable results as a way of multi-criteria assessment of the country's competitiveness.

1 Methodology

The article compares the quality of the Slovak and Czech business environment (evaluation of both similar and different features) and identifies the position and competitiveness of the countries concerned in the world on the basis of quantitative indicators of the World Bank's Doing Business Index. We selected the economies in question for comparison purposes because Czechoslovakia existed until December 1992 and on 1 January 1993 the Czech Republic and Slovakia separated into two separate states. Since May 2004, both countries have been member states of the European Union. Slovakia adopted Euro in 2009 and the Czech Republic is still using Czech Crown. The achievement of the objective is achieved through scientific methods of analysis of secondary data and subsequent synthesis into relevant findings. Secondary research was based on the study and processing of domestic and foreign theoretical and statistical sources from ProQuest, Ebsco Host, Scopus, OECD and World Bank databases. The method of comparison was used in the final evaluation of common features of positive and negative assessments of the quality of the business environment of selected economies. By systematizing, we have created a comprehensive data base to prove the competitiveness of the Slovak and Czech business environment in the world under the foreign index in question and to identify weaknesses by omitting which these countries could achieve more positive assessments within the index under review.

2 Literature review

SMEs (small and medium-sized enterprises) are inseparable part of every prosperous market economy (Benešová et al., 2018; Chong et al., 2019; Robu 2013; Machová et al., 2016). They are responsible for large contributions to value added and employment (EBRD, 2016). In the OECD area, SMEs are the predominant form of enterprise, accounting for approximately 99% of all firms. They provide the main source of employment (Reeg, 2015), accounting for about 70% of jobs on average, and are major contributors to value creation, generating between 50% and 60% of value added on average (OECD, 2016; OECD, 2017). These enterprises are more flexible when it comes to adapting to the market changes; they constantly produce and innovate in order to survive in the strong competition battle (Krošláková et al, 2015). Petrů et al. (2019) state that a competitive SMEs sector is an important precondition for the full integration of any economy into the world economic space. To be an entrepreneur within the current decade is to be inundated with challenges associated with an ever changing business environment (Ahmad et al., 2019). The business environment is closely linked to the market economy and creates the conditions for the formation and existence of SMEs (Kotaskova & Rozsa, 2018). The possibility of free decision-making process is a precondition for business, which is at the same time one of the most important attributes of the market economy (Juríčková, 2006). Any intervention or restriction of the freedom of enterprise means a deterioration of the business environment (Chren, 2012). A high-quality business environment has multiplier effects that influence the strength of the economy and achieve economic growth (Korcsmáros et al., 2017; Kuzmišin, 2009) and is a precondition for business development and also for increasing the country's competitiveness on an international scale (Strčík & Meheš, 2012; Hamplová & Provazníková 2014). The environment in which the business is located is called the external or external environment (Surbhi, 2015). All external relations and processes are the basis for potential options and opportunities – Opportunities, but this environment can also be a source of danger and risks – Threats (Eliášová et. Al., 2017). The external environment consists of two spheres, the macro-environment, which, according to Buno et al. (2015) consists of economic, demographic, economic, natural, political-legal and scientific-technical environment, and micro-environment, so-called sectoral environment, which is formed by entities directly influencing the business activity. The micro environment or task environment encompasses those forces in the close surrounding area of an organization that influence it's functioning (Kattookaran, 2015). Factors that directly affect the business and create the following success are Customers, Employees, Competitors, Media, Shareholders and Suppliers. These are components of the external environment that are directly related to the company's activity (Learnmarketing, 2016). The competitiveness of enterprises also depends on the understanding of business connections and opportunities (Kozubík, Kozubíková, & Polák, 2019).

3 Results and Discussion

The quality assessment of the business environment is also part of several foreign indices and reports. Based on their findings, it is then possible to improve the conditions for the establishment and existence of small and medium-sized enterprises, to support start-ups, business incubators, to initiate effective cooperation between the academic environment and business practice, to support science, research and innovation while attracting foreign investors. Doing Business is one of the assessments of business environment quality at international level. The assessment is carried out by the World Bank, which for in 2018 evaluated 190 countries. Overall, it examines 11 parameters, which can be used to rate regulation and bureaucracy throughout the lifecycle of small and medium-sized enterprises in order to provide objective assessments of the legal environment, its business rules and their enforcement across 190 economies and selected locations at national and regional level, with each indicator it has the same weight. Every economy is given a business simplicity index, so-called. "Index Ease of Doing Business" in the order ranking of 1 to 190, which is the current number of participating countries. More than 15,000 specialists from all of the countries surveyed participate in the evaluation process. The World Bank's Doing Business Assessment parameters are detailed in the following table.

Tab. 1 Sub-indices and quantitative indicators of Doing Business

Starting a business – measures the difficulty of starting a business, the required procedures before starting a business, the time and cost of doing business
Dealing with construction permits – records the procedures, time and costs of the entrepreneur to obtain a construction permit
Getting electricity – evaluates how difficult it is to obtain the necessary electricity supply for entrepreneurs to secure the business
Registering property – it finds out how costly and time-consuming it is to transfer the property to the name of the entrepreneur
Getting credit – detects what information a start-up entrepreneur can get about credit opportunities
Protecting minority investors – determines how the rules of the Board of Directors are adhered to in order not to misuse the strength of the company's assets for its personal benefit
Paying taxes – based on studies, it checks for compulsory annual tax contributions, or the administrative burden of paying taxes and levy obligations

	Trading across borders – procedural requirements for import and export (the number of official procedures and documents needed), also focusing on the possible emergence of additional costs due to excessive requirements for documents needed for the transport of goods or customs procedures, measuring time and costs
	Enforcing contracts – assesses the effectiveness of the legal system and the reliability of the judiciary to investigate business disputes, based on the arithmetic average of the percentage of indicators, such as the number of actions, time and costs
	Resolving insolvency, i.e. liquidation of an undertaking or settlement of insolvency – it examines the functioning of the solvency system and access to rescue companies in the market if necessary
	Labour market regulation – Flexibility in employment regulation and aspects of job quality.

Source: Author's own elaboration based on *Doing Business, 2018*

For the purpose of this article, we will focus in detail on Ease of Doing Business. All countries are assigned so-called "Ease of Doing Business 2018 Index", based on data from Doing Business 2016 and 2017. Data is quantified as the overall ranking of each country among 190 ranked economies – the lower the order number the better the country has placed.

Tab.2 Ranking of countries v Ease of Doing Business Ranking 2018

Country	Ranking	Value
New Zealand	1	86,55
Singapore	2	84,57
Denmark	3	84,06
Korea, Rep.	4	83,92
Hong Kong SAR, China	5	85
United States	6	84
United Kingdom	7	84
Norway	8	82
Georgia	9	82
Sweden	10	82
…	…	…
Czech Republic	30	76,27
Slovak Republic	39	74,90

Source: Author's own elaboration based on *Doing Business 2018*

New Zealand, with the highest DTF score of 86.55, placed first among all 190 countries evaluated. It is followed by Singapore in the second place and Denmark in the third place. The conditions for doing business in the countries concerned are above average and these economies can be ranked among the most globalized economies in the world. They have high economic freedom with minimal state interference, very liberal conditions for business, built infrastructure, low taxation and extraordinary business efficiency. Per capita, these countries are among the most attractive countries for foreign investors. A functioning legal system helps to create a dynamic economic environment in these countries. Denmark ranked first in the EU ranking, which is also the third best in worldwide measurement. It is followed by the United Kingdom of Great Britain and Northern Ireland and Norway, which is the third country among the EU countries. Among the observed countries, the Czech Republic ranked the 30th and the Slovak Republic ranked 39th.

Tab. 3 Doing Business 2018 Ranking (Czech Republic and Slovak Republic) rank a Distance To Frontier (DTF) score

Parameters / Country	the Czech Republic		the Slovak Republic	
	rank	DTF score	rank	DTF score
Starting a business	81	87,44	83	86,95
Dealing with construction permits	127	62,77	91	67,82
Getting electricity	15	90,33	57	80,31
Registering property	32	79,68	7	91
Getting credit	42	70	55	65
Protecting minority investors	62	58,33	89	53,33
Paying taxes	53	79,26	49	79,88
Trading across borders	1	100	1	100
Enforcing contracts	91	58,21	84	58,63
Resolving insolvency	25	76,69	42	66,08

Source: Author's own elaboration based on *Doing Business 2018*

Note: Rank is ranking of a country, where 1 is the best score. DTF score – the closer to 100, the better the score, i.e. higher scores indicate a better, simpler and more transparent regulatory environment for businesses and protection of property rights. The green areas are the areas that are the strengths of each country and provide a competitive advantage to the selected country. On the contrary, areas in which the landscape's potential is significantly lower are marked in red. There are 10 parameters included in the Distance To Frontier (DTF) score and Ease Of Doing Business ranking. Doing Business also measures features of Labour market regulation, which is not included in these two measures.

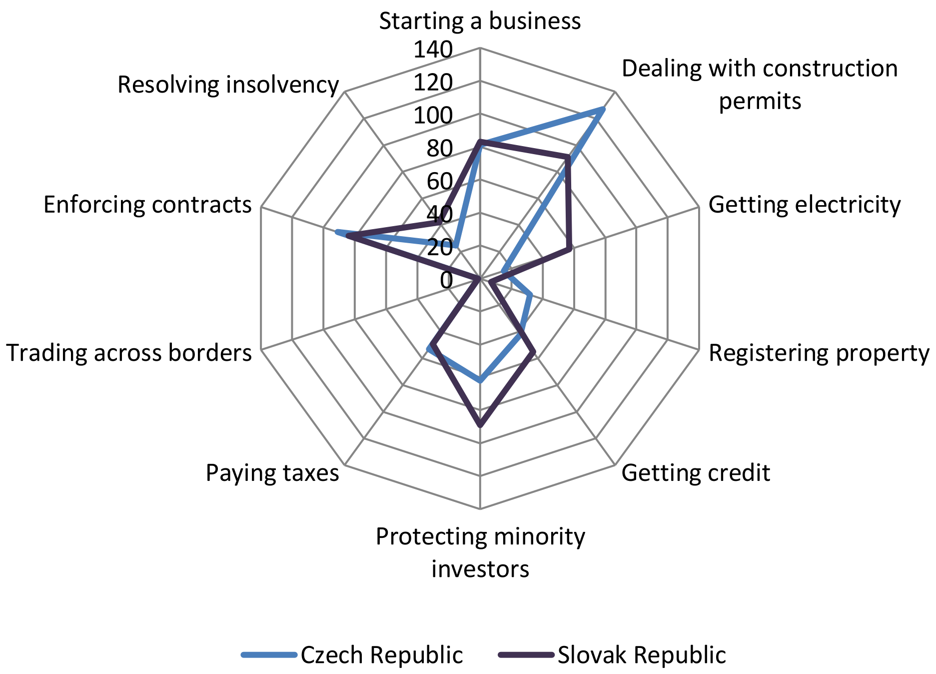
The individual business environment parameters in the countries in question show approximately the same evaluations. In the *Starting a business* area, both countries achieved a weaker ranking and ranked around the 80th ranking among the 190 countries reviewed. Regarding *Dealing with construction permits* area, the Slovak Republic occupied the 91st place and the Czech Republic ranked 127th in the overall ranking. The *Getting electricity* area is a weaker aspect of the Slovak business environment and, however, it is the second best-rated parameter in the business environment for the Czech Republic. The *Registering property* is a more positively evaluated parameter of the Slovak business environment (7th place), but the Czech Republic also ranked at a very good 32nd place. Since it is important for entrepreneurs to acquire resources for business, they also focused on *Getting credit* area in the evaluation – the Czech Republic ranked 42^{n}d and Slovakia ranked 55th. The Slovak Republic is falling behind in the *Protecting minority investors* area and ranked 89th, with the Czech Republic on the 62nd place. In the area of *Paying taxes*, both economies reach similar positions – the Slovak Republic ranked 49th and the Czech Republic 53th. *Trading across borders* area is highly positive in both of the reviewed economies. However, the *Enforcing contracts* area is identified by experts as a weakness of the business environment of the Czech Republic (84th) and of the Slovak Republic (91th). The Czech Republic (25th) and Slovakia (42th) are also significant in the *Resolving insolvency* indicator.

Conclusion

The business environment is created by bringing together several subsystems into one. It is an important environment where business entities carry out their business activities and the quality of the business environment is a determining element of business development. Changes in the business environment are also reflected in the quantitative characteristics of the business sector with some delay. Analysis of the business environment allows to identify existing trends, anticipate future developments and prepare measures to ensure its optimal development.

Graph 3 presents the visualization of data available from the Ease of Doing Business index, comparing the performance of Slovakia versus the Czech Republic in the individual sub-indices of the main index, while clearly structuring similar and different features that show evaluations of the business quality parameters of both observed economies. The closer the observed parameter is below (1 is the best score), the more positive this parameter is in the rating and gives the country a competitive advantage.

Graph 3 Regional comparison: Slovakia and the Czech Republic and the 10 sub-indices (lower ranking means overall better ranking in global ranking)



Source: Author's own elaboration based on *Doing Business 2018*

The comparison of selected economies shows that the business environment has similar features in most of the observed parameters, and so that the situation in the business environment of both economies is very similar. In no single sub-index is the assessment of the Slovak business environment significantly different from the assessment of the same parameter in the Czech Republic and vice versa. The business environment of economies showed only slightly different evaluation in the *Getting electricity* parameter, where the Czech Republic was in the top ten among the evaluated countries and Slovakia ranked 57th.

Areas such as *Trading across borders*, *Registering property*, *Resolving insolvency* and *Getting credit* were positively evaluated in both economies. These assessments are based on several positive measures by the governments of both economies. In particular, the stabilization of conditions was reflected in the efforts of economies to simplify start-up conditions, access to financial resources, technological development, good infrastructure and also active macroeconomic policy. A both positive and stable political situation is an asset of both economies. Both evaluated economies received worse evaluations in parameters such as *Dealing with construction permits*, *Enforcing contracts* and *Protecting minority investors*. The long-lasting alarming state of clientelism and low law enforcement, including corruption and lack of transparency in government and the government sector, were important aspects that impacted on the negatively assessed areas. Corruption is the biggest obstacle that distorts the business environment and negatively affects the evaluation of selected parameters of the observed foreign index in both economies.

As the quality of the business environment is primarily influenced by factors such as political stability, economic stability and growth, the level of legislation and real law enforcement, one of the most important tasks of the governments of Slovakia and the Czech Republic is to ensure sustainable economic growth combined with job creation and improvement business conditions. Further efforts should also be made in areas where progress has not been achieved and which are still showing a high degree of criticism from business. In particular, these areas are complex and frequently changing legislation, high administrative burdens, high taxation payloads and a lack of skilled workforce due to a mismatch between the requirements of economic practice and the education system.

In conclusion, a good business environment is the basis for the long-term development of entrepreneurial activity, for the sustainable improvement of the economic performance and standard of living of both the Slovak and Czech population. Systematic introduction of positive changes in the business environment e.g. the elimination of corruption, clientelism and increased law enforcement can in the medium term significantly accelerate the development of economies but also help to achieve higher ratings not only within the Doing business index but also of other foreign indices and ratings.

An example may be the initiative of the Czech Republic's Research, Development and Innovation Council, which proposed the Czech Republic's Innovation Strategy 2019-2030 (RVVI, 2019). The strategy is based on nine interrelated pillars (The Country for R&D: Research and Development Financing and Evaluation; The Country for Technology: Polytechnics; The Country for Start-Ups: National Start-Up and Spin-Off Infrastructure; Country for Digitalization: Digital State, Production and Services; The Country for Excellence: Innovation and Research Centres; The Country for Investment: Smart Investment; The Country for Patents: Intellectual Property Protection; The Country for Smart Infrastructure: Mobility and Building Environment; Smart Country: Smart Marketing), which contain the starting points, basic strategic goals and tools to achieve them. According to this strategy, in order for a country to be competitive, it must create a favourable business environment, focus on final production, technological solutions and knowledge-based services. It should generate not only volumes but mainly focus on creating high added value.

In the future, every activity of the European Commission and individual governments in favour of improving the conditions for greater participation of SMEs in entrepreneurship is important. Therefore, government administration initiatives implementation of better business conditions and impulses in the economies in question remain a challenge for the coming period.

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Environmental and Economic Aspects of Food Waste[1]

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Abstract

The paper aims to identify the environmental impacts of food wastage at the various stages of the food chain and their economic aspects. It also deals with the possibilities of eliminating food waste in joint catering facilities in Slovakia and legislation in this area. Using the results of the primary data collection in the form of inquiry, it presents the readiness and willingness of the operators of these facilities to apply alternative ways of waste management in their environment. Most of them (89%) showed interest in the possibility of composting the waste. Based on the results obtained by quantifying the economic and environmental impacts of food waste in mass caterers, other possible ways have been suggested that could help to reduce the amount of food waste in catering facilities.

Key words

ecological impacts, food supply chain, food waste, economic impacts

JEL Classification: Q15

Introduction

Food waste, together with growing population and its needs, are becoming the major problems with increasing negative impact on society within global dimension. In a world where hunger and poverty are still a real threat, food waste is a phenomenon that must be eliminated in the future periods. The existing population suffer from a lack of daily caloric income due to unavailability of nutritious foods, as well as the reckless wastage of the limited natural resources.

Wasting food means wasting resources that are needed to produce them - soil, water, human labor, but also energy. In a world where the population grows faster every year, it is unsustainable that non-consumed foods, or foodstuffs, can be thrown away without being reused after their expiration period, with respect to limited number of natural resources. The world population has a yearly increase of 1 to 2%. Technological development, health development, economic development, industrial and technological revolutions as well as the absence of widespread war conflicts contribute to making the aforementioned trend long-term and stable.

Although global food production has the potential to satisfy the nutritional needs of population, in fact, a significant proportion of the population is confronted with limited access to the necessary daily caloric intake. The fundamental problem is that many people do not have enough financial resources to provide adequate food volume or its more energy-efficient variations, and at the same time do not have the possibility of managing its own land for agricultural use.

[1] The article is an output of the project VEGA 1/0543/18 The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic.

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Poverty leads to hunger as well as hunger leads to poverty. This cycle will most likely be repeated without major and conceptual solutions. Although the share of FAO (Food and Agriculture Organization) as well as the total number of people suffering from hunger and malnutrition have been decreasing at the beginning of the 21st century, in recent years the opposite trend has been seen- the increase of these indicators. The current geopolitical situation, conflicts in developing countries, as well as environmental changes that have a direct or indirect impact on food production can be identified as the causes of the new situation.

Food wastage is an unmistakable problem all over the world and therefore in Europe, with an increasing number of safe and edible foods those end as a waste every year (Canali et al., 2017). The annual food waste production in the Member States of the European Union is approximately 88 million tones- about 20% of all food produced, representing 173 kg per person, with significant differences between countries. In addition to having a noticeable impact on the economy and the environment, food waste is also a social dimension issue.

As the Slovak Republic, like many other countries in the world, is aware of the need to make changes in environmental protection, the consumers and suppliers have to change their behavior that has a significant impact on the environment (Filipová et al., 2017). These changes also include the management of catering and restaurant waste, to which they have to respond.

1 Methodology

The aim of the paper is to identify the environmental impacts of food wastage in the various stages of the food chain and their economic aspects, as well as to investigate the possibilities of eliminating food waste in joint catering facilities in Slovakia.

The materials and data related this topic were obtained in the form of secondary and primary data. Secondary data were collected from available book literature, Slovak and foreign magazine sources and, last but not least, from Internet sources. In addition to the synthesis, the method of analysis was used, especially in the analysis of food wastage in the individual phases of the food chain, which enabled a better approximation and understanding of the issue.

The description method was used to characterize alternative methods of processing and utilization of unused food and food waste in the catering facilities as well as describing methods of implementing new technologies and processes in food waste processing.

An online questionnaire method was used to obtain primary data in order to investigate the possibility of elimination of food waste in the catering facilities in Slovakia, as well as the willingness and readiness of operators of these facilities to implement the alternative waste management methods. When preparing the questionnaire, respondents from the operators of mass caterers with a similar visitor capacity were selected to maintain the homogeneity of the sample.

In particular, the methods of induction and deduction have been used to evaluate the results obtained from respondents' responesas well as to formulate concrete conclusions and recommendations.

2 Results and Discussion

2.1 Food waste at the various stages of the food chain

The level of malnutrition and hunger in the world is on the rise, and the number of people who do not have access to sufficient quality food is growing. Nevertheless, one third to half of the food produced is discarded, destroyed or not consumed each year before reaching the end consumer. This loss, respectively. wastage occurs at all levels of the food chain - from producer / farmer, through distributor to end consumer itself (Aschemann-Witzel et al., 2015). While in developing countries we see the greatest wastage in the production phase, in developed countries it is mainly about wasting at the very end of the chain related to consumer behavior and habits. To optimize quantification, FAO divides food waste into two categories:

1. *Food loss* – is caused mainly by shortcomings in food production and supply or by their institutional and political frameworks. It is reduction of the quality or quantity of food, caused by management or technical constraints, such as the low capacity of suitable storage facilities, the absence of refrigeration elements, improper handling of food, infrastructure, packaging technology errors, or inefficient marketing systems.
2. *Food waste* - means the removal of food from the life cycle at a time when it is still suitable for consumption, as a result of the expiry of the warranty period or the degradation of food caused by poor management and storage. This type of wastage mostly occurs at the stage of sales and final consumption, most often occurring in developed countries.

However, this definition of food waste, agreed by the UN, has its critics who question whether it is right to talk about wastage when foods primarily intended for human consumption are used for animal husbandry, fertilizer or biomass. Indeed, these foods are of lower quality or could not be put up for sale for various reasons, thus providing them to the final consumer. Their application can be seen as an input to further production, so according to some authors (Bellemare et al., 2017) they should not be considered as a food waste. In this way, only foods that were unsuitable for sale to the end consumer at the time of the elimination, disposal or labeling should be marked as still satisfactory and safe to eat.

As mentioned above, food waste can occur throughout entire food chain. The first stage of agricultural production, in addition to losses due to objective reasons such as adverse weather, natural disasters or pests, is also due to the lack of technical equipment for the collection, initial processing, storage or transportation of food. One of the most important reasons for food waste at this stage are the standards that determine the sensory quality of food. Products that do not meet the specified appearance requirements, which does not diminish their nutritional value, are often discarded from the offer by the farmers themselves, as they expect, after previous experience, that such products are not interesting for consumers.

Food wastage appears in the next phase of the food chain as well. Due to the extremely differentiated spectrum of factors affecting losses at the primary and secondary processing stage, it is very difficult to quantify their specific volume. In general, the loss of volume and nutritional value of foods is mainly caused by insufficient processing, packaging and conditioning equipment, to be suitable for final consumption or to withstand transport.

At the sales stage, when food reaches wholesalers and retailers, there is a loss and wastage that is subject to internal trade regulations and specific national legislation. Stores regularly dispose large quantities of goods primarily intended for consumption (Wansink, 2018). It includes mostly the food that has reached the peak of their maturity and quality, and for aesthetic reasons it is not attractive to the customer from the vendor's point of view, so it must be discarded. Although it is still suitable for human consumption, it ends up being waste in terms of cost savings because its depreciation is cheaper than processing for other uses (Kulikovskaja & Aschemann-Witzel, 2017). Unnecessary waste at this stage of the food chain is caused by the declared expiration date or minimum durability date of the food, in addition to the decommissioning of goods. After these dates have expired, the manufacturer must withdraw the products from the sale under the applicable legislation. However, in most cases, after this shelf-life, when properly stored and not damaged, the food is suitable and safe for human consumption. In an attempt to reduce food waste, the Ministry of Agriculture and Rural Development of the Slovak Republic pushed through an amendment to the Food Act in autumn 2016, which allowed that food can be donated to charitable organizations after the date of minimum durability.

In the final phase of the food chain, when food reaches the final consumer - either directly or indirectly through catering facilities - significant differences in food waste level between developing and developed countries can be observed. In developing countries, people buy only a small amount of food to meet their hunger elimination needs, mainly for economic reasons. Conversely, oversized food purchases in developed countries cause household supplies to often outweigh the real demands for rational and proportionate nutrition, so that a significant amount of food does not fulfill their primary purpose of consumption and is naturally degraded (Hebrok & Boks, 2017). The main reasons for the food waste generation at the final consumption stage in households and catering facilities are the following:

- misinterpretation of labeling on packages that should inform about expiry date and date of minimum durability, leading to discarding of foods that may still be suitable and safe to consume,
- wrong or absent planning of purchases motivated by stock-cuts, resulting in excess food supplies that cannot be consumed in time by households and catering facilities
- improper storage and non-compliance with the preparation procedures indicated on the packages, leading to premature food degradation,
- inadequate use of packages and materials that shorten the durability of food,
- insufficient knowledge of how to use and consume food as efficiently as possible, thereby reducing food waste,
- insufficient awareness of the economic and environmental impact of food waste,
- serving too large portions for catering facilities and meals within buffet system consumption when preparing and offering more food than is actually consumed,
- even though most catering facilities currently offer their customers the opportunity to take unconsumed portions with them, not all facilities operate this practice and are involved in the production of food residues that end up in waste.

Within the food chain, it is impossible to forget about the distribution phase, where losses can also arise and also influence the quality and quantity of food.

2.2 Economic and environmental impacts of food waste

There are two ways to assess the economic impact of food waste, which covers the cost of production and the market price of goods. In the first case, according to the classical school of economic theory, the value of the goods is proportional to the resources that are needed to produce it. If calculation criteria are used, including the cost of obtaining individual goods, the economic impact can be formulated into a "value wasted by waste".

In the latter case, according to the neoclassical school of economic theory, the value of the goods does not depend on the cost of production, but on its usefulness as the market price (Kurz & Salvadori, 2002). The economic impact of food waste should therefore be estimated by using the "price of individual goods" as criteria for its quantification. Therefore, not only the market price has to be included in the calculation, but also negative externalities must be considered, thus summarizing the company's willingness to pay the price for environmental impact.

With regards to the fact that people would use a significant part of the land in a less efficient way (for non-consuming food production) and do not yet apply different alternative methods in practice, the economic impact can be assessed by calculating the occasional costs of a food-producing agricultural area that has not met its primary purpose of efficient consumption.

According to FAO data, the global economic value of food waste in 2007 was $ 750 billion USD. This amount was quantified by the total volume of food waste (per food category) in a given year and the average food price in the same period. However, its amount is increasing every year and, with the current situation, when approximately one-third to one-half of all food produced is destroyed, discarded, or wasted, around $ 1 trillion of food is wasted on the global scale, with a total economic impact of approximately 3 trillion USD per year if environmental and social factors are considered, such as deforestation, soil erosion, increased greenhouse gas emissions, water scarcity, chemical exposure and reduced farmers' profits. Food wastage also indirectly increases food prices, reducing the number of people who can afford sufficient daily caloric intake (Abdelradi, 2018).

About 100 million tons of food are disposed in Europe every year, and if people's attitude is not changed, it would increase to 120 million tons by 2020. The Europe team loses about 200 billion euros each year. Therefore, measures need to be taken to help reduce food waste and contribute to saving costs, natural resources as well as the environment (Shafiee-Jood & Cai. 2016).

The unnecessary and inefficient consumption of natural resources, as well as additional greenhouse gas emissions and the accumulation of unwanted waste occurs during production of foodstuffs that do not fulfill their primary purpose of livelihood and ensure the basic needs of people. In order to evaluate the impact of a food product in terms of understanding the environmental issue, the whole food chain in individual steps must be taken into account. In general, the environmental impact intensity is logically multiplied by each phase approaching its finalization, as the energy costs for processing, transport, storage and finishing of agricultural and food sector products are increasing (Wikström et al., 2016). To identify the environmental impact of food waste, three indicators need to be considered: the carbon footprint, the ecological footprint and the water footprint.

The carbon footprint represents greenhouse gas emissions originating from the food chain. In the specific case of the food sector, their composition consists mainly from the carbon dioxide (CO_2), derived from fossil fuel consumption, methane (CH_4) as an accompanying product of intestinal livestock fermentation and nitrous oxide component (N_2O) caused by the use of nitrogen fertilizers. Food production, including waste, brings about 3.3 billion tonnes of greenhouse gas emissions per year.

Methane is a significant part of the greenhouse gas mixture released into the atmosphere by the food and waste industries. When food is thrown away, it will, in most cases, end up in landfills where they are subject to natural biological processes, begin to rot, decompose and release into the environment, inter alia, methane, which can capture heat in the atmosphere much more efficiently than CO_2 (about 25 times better). Thus, methane is produced not only in the production and processing of food, but also secondary to the destruction of waste. Methane accounts for approximately 20% of greenhouse gas emissions (Hawthorne, 2017).

The highest carbon footprint from food waste is accompanying the consumption phase. This is caused by food waste within the food chain, when the effects of all phases through which the product has passed (eg processing, transportation, etc.) are added to the initial impact of agricultural production and the carbon footprint at the end of the food chain. This means that the carbon footprint of the consumer phase comes from, for example, cooking and final food processing, but also includes the energy used in cultivation, storage, processing and distribution, and ultimately in discarded food and landfill emissions (Pearson et al., 2017).

The water footprint is the total volume of water that is used directly or indirectly to produce a particular food product. In the context of wasting millions of tons of food, there is unacceptable loss of massive amounts of water, which can be considered an essential part of the food production process, whether in the form of irrigation, spraying, or other means of cultivation, but also in the form of of the drinking regime included in the livestock farming sector.

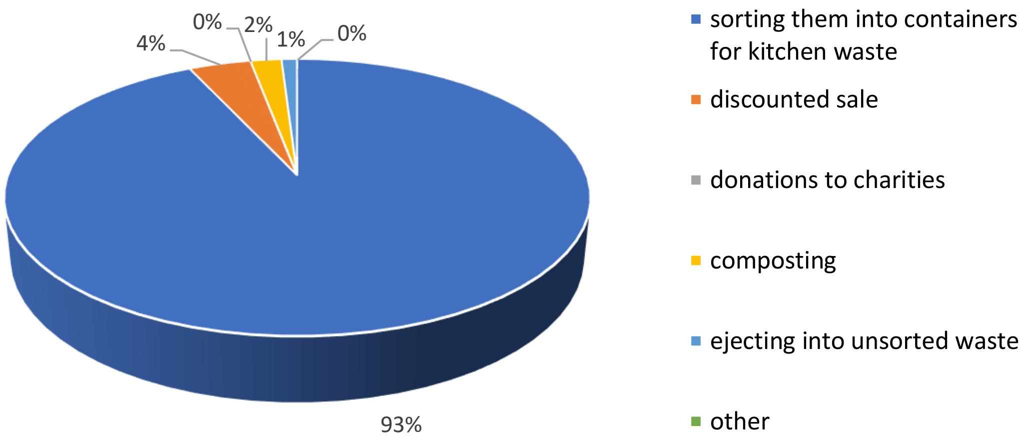
The ecological footprint is used to evaluate the environmental impact of specific population consumption. It quantifies the total land and aquatic ecosystems needed for the sustainable supply of all resources used and the absorption of all emissions produced. The land, especially agricultural land, is one of the limited natural resources threatened by various competitive commercial intentions (eg agriculture, construction, infrastructure, etc.). In addition to using and degrading land to produce food that ends up as a food waste in landfills, the ecological footprint also affects global biodiversity, especially in the food chain production phase. Considering the fact that food waste is generally the result of inefficient, short-term and non-systemic solutions, damage and irreversible changes in biodiversity arise essentially unnecessarily.

2.3 Research results on elimination of food wastage in the catering facilities in Slovakia

The survey was focused on determination of the amount and manner of handling food waste in joint catering facilities in Slovak Republic, as well as on their willingness and readiness for changes in the area of kitchen and restaurant waste after the approval of the Environmental Policy Strategy of the Slovak Republic until 2030 (Envirostrategy 2030). It was carried out on a sample of 100 respondents, 21 of whom were part of a catering chain (eg McDonald's, KFC) and 79 were privately owned. The survey was conducted in April 2019 in four cities - Bratislava (29 facilities), Žilina (21 facilities), Banská Bystrica (18 facilities) and Ružomberok (32 facilities). The participants were selected based on capacity, determined in the range of 80-120 visitors to maintain similar characteristics of the sample. The survey was conducted through an online questionnaire.

As per Act on Waste No. 79/2015 and on amendments to certain acts, mass caterers must ensure the collection and storage of unused food and catering waste in biowaste containers, and also ensure the transport and further processing of such waste in their own way or through a third party; , the purpose of the questionnaire was to determine whether this requirement was met by catering establishments. As shown in graph 1, the majority of respondents - 93% said that kitchen and restaurant waste is disposed of in dedicated containers. Although the law prohibits the another forms of food waste handling, 4% of companies sell the unused food at discounted prices, 2% by composting on its private land and 1% of participants stated they do not sort some of the kitchen and restaurant waste and put it in containers for municipal waste, which is inadmissible.

Graph 1 Method of handling unused food

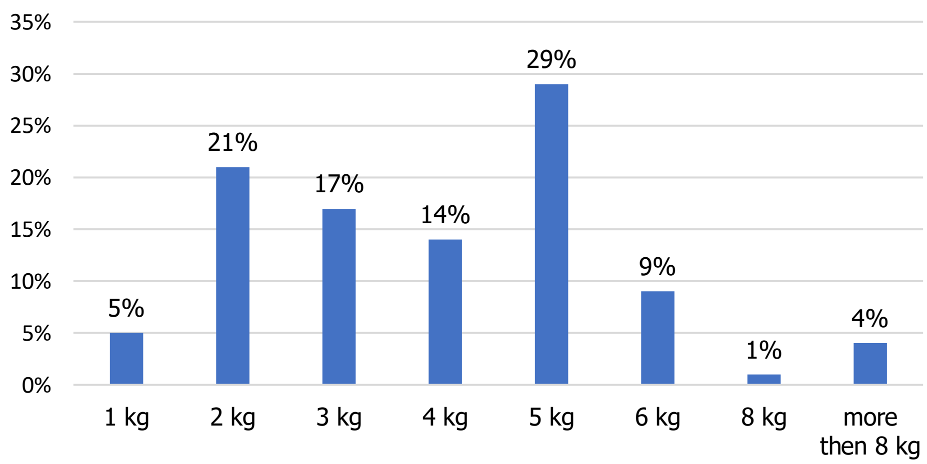


Source: author's research

The questionnaire was also focused on identifying the amount of kitchen and restaurant waste produced by individual catering facilities on a daily basis. The results presented in graph 2 show that most respondents (29%) produce 5 kg of this waste per day. The lowest number of responses consisted of one day waste limits- 8 kg, with only 1% of respondents reporting this, more than 8 kg was produced by 4% of respondents, and 1 kg of waste was chosen by 5% of participants.

In February 2019, the Government of Slovak Republic approved the document „Envirostrategy 2030“, which will be put into practice through changes to laws or sectoral action plans over the coming years. After putting „Envirostrategy 2030“ into practice, catering facilities will be required to continue to use foods that are safe for human consumption but unable to use them, for example by donating to charities. Foods unsuitable for further consumption and food waste will need to be used as a compost material or for other energetical processing. It will also be possible to sell such food and food waste for feed purposes (with the exception of wild animal feeding).

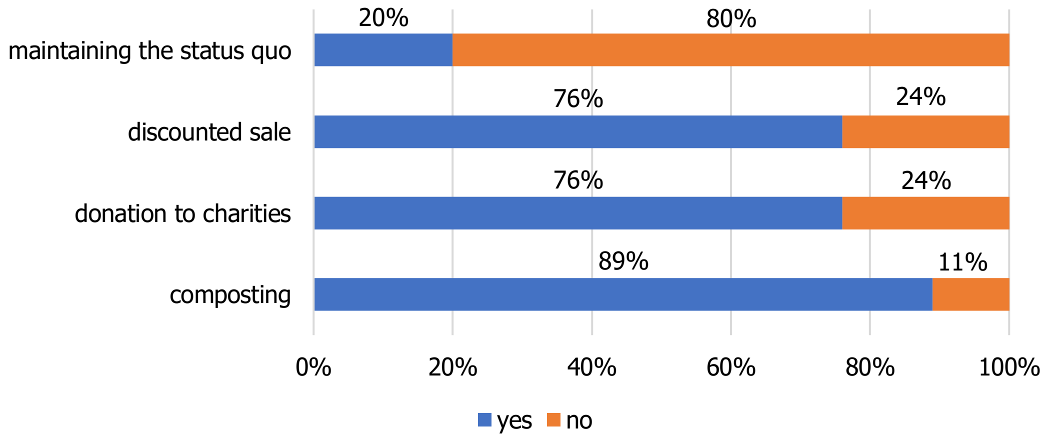
Graph 2 Amount of waste generated in kilograms per day



Source: author's research

Part of the questionnaire was to clarify if catering facilities are willing and ready to apply these alternative options for processing unused food. As shown in graph 3, 76% of catering facilities were identified with the possibility of discounted sale and with the possibility of cooperation with charity organizations. 89% of respondents expressed interest in composting. Only 20% of respondents felt that they did not consider this a change in the current management of unused food.

Graph 3 Attractiveness of selected options for alternative disposal of unused food



Source: author's research

As the survey shows, the implementation of the combination of the above alternative solutions would be the best solution for catering facilities as well as for the environment and society. Disposal of non-consumed foods would be spread over a multi-stage process, beginning with the use of unused foods still suitable for human consumption. Catering facilities would not produce raw material losses that would otherwise end up as waste if strategy of targeted and discounted portions sale implemented. In the second phase, unused foods intended for human consumption would be donated to charities. In the final phase, foods that are no longer suitable for consumption would be processed as compost material, thereby reducing the environmental impact of greenhouse gas emissions from natural decomposition of food waste.

Conclusion

Food wastage is a major global problem that is becoming increasingly important. The threat of food waste causes negative impacts on the economy, the lack of food in regions suffering from poverty and hunger as well as a significant impact on our environment. Not only catering facilities but also consumers as individuals can and must take steps to reduce food waste. The society can achieve a better and healthier environment by applying alternative ways to process food waste in mass catering facilities.

Food wastage occurs at all stages of the food chain, with harvesting and storage losses being the main causes, transport failures, food packaging errors, poor inventory management and consumer habits in the purchase and use of food products. The production of non-consumed surplus food is a high environmental cost of energy and natural resources as well as greenhouse gas emissions into the atmosphere. In addition to environmental damage, the costs of waste treatment and disposal and the loss of production enterprises' incomes have to be taken into account (Pearson & Perera, 2018).

Prevention of food waste is a major step in reducing the negative economic and environmental impacts. Rare natural resources can be protected by reusing unused foods in different ways. Nowadays, laws and regulations need to be restructured and os they can control the efficiency of food waste management.

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Health conscious food consumption behavior in seniors´ segment[1]

Dagmar Lesakova[2]

Abstract

The aim of the paper is to explore how actual determinants, perceived level of possession of different types of determinants and their importance affect older people´s health conscious food consumption. Empirical research was conducted on a sample of 280 seniors aged 65+ years. The ability to perform healthy food consumption was assessed on 21 determinants rated on the individual level of possession and importance. Principal component analysis of seven items was used to reveal healthy consumption behavior. The relation between perceived individual level and importance of a determinant is investigated on a base of Pearson production correlation coefficient. Results show that older people rated the determinants that they believed to have in a higher level as more important for healthy food consumption. We documented that perceived levels of possession of such determinants as good health, mobility, ability to smell and taste and family support exhibit highest impact on healthy food consumption. We conclude that the congruence between perceived individual level and importance of a determinant impacts significantly seniors ´ health conscious food consumption.

Key words

Health conscious food consumption, health conscious behavior, seniors

JEL Classification: M30

Introduction

Knowing the behaviour of seniors is an essential starting point how to influence them (Stremersch, 2008). Seniors currently represent 18% of Slovakia´s population and projections show that by 2035 they will account for more than a quarter of the whole population. Women account for 52% of seniors aged 65 to 69 and for 70% of those 85 years or older. Differences in life expectancy between men and women have begun to narrow – a trend that is expected to continue. In 2015 more than five in ten Slovaks aged 65 and older reported having a disability or health problem that limits their everyday activities and the disability rate rises with age. At the same time many seniors consider themselves to be in good health – 40% of those between 65 and 74 years described their health as very good or good, while among their older counterparts (75 and older) only one in four reported very good or good health. These facts point to the need for careful consideration of the behaviour of seniors in order to reach them in an effective way.

In analysing the problems of ageing it is recognized to focus more on individual responsibility for healthy life. Recently we see a shift from considering old age to be a problem in itself towards older people´s responsibility for their own quality of life. Successful ageing has been described as decreasing the risk of diseases and maintaining physical and mental functioning and active engagement in social life. The World Health Organization (2002) identified the key concepts of productive ageing (i.e. the ability to contribute directly and indirectly in older age) and healthy ageing (i.e. the

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ability to remain physically and mentally fit) as a base of active ageing policy framework. The increasing recognition to focus on personal responsibility and individual perceptions of the "healthy life" initiated research in the area of food and nutrition in relation to older people´s healthy consumption.

Nutrition is recognized as one of the major determinants of successful ageing, defined as the ability to maintain three key behaviors: low risk of disease and disease related disability, high mental and physical function, and active engagement of life (Kraft & Goodell, 1993; Moorman & Matulich, 1993). Good and proper nutrition can significantly reduce the likelihood of developing a number of common chronic diseases and slow down their progression.

The meaning of health in the process of ageing has been addressed in a number of studies (Divine & Lepisto, 2005; Luomala et al., 2015) supporting the concept of health as a multidimensional construct, comprising a state of complete physical, mental and social well-being and not merely the absence of disease. We adopt this multidimensional perspective on health by considering the impact of several economic, psychological and social health dimensions.

As people age, their living circumstances may alter. For example, when people retire, their income falls down and their social network may reduce. As health changes for worse, access to shops may become a problem. Further, loss of the partner due to death of spouse or children leaving home, may change cooking and eating circumstances.

Ageing process impacts also food and energy intake, which tend to decrease for a number of physiological and psychological reasons including reduced activity (immobility), reduced muscle tissue, lower resting metabolic rate and smaller meals. It is documented that ageing affects the ability to taste and smell. Seniors are less sensitive to the basic tastes and particularly smells. Declining ability with age to detect tastes and smells and their intensity has been suggested also to be responsible for the reduced intake of foods. It is known that social factors and the eating environment are significant determinants of food intake. Also other factors contributing to older people´s quality of life, such as access to healthy food products, nutritional information and facilities at home, impact food consumption in seniors´ population. By identifying which of these factors are important and what can be improved, it may be possible to improve older people´s healthy food consumption.

For many older people loss of social networks is a consequence of ageing. It appears that older people´s living circumstances are changing, with people being less likely to live with other family members or unrelated individuals and more likely to live alone and thus an increased probability of eating alone.

There is also evidence that older people living alone are more likely to require support from the state in the form of home helps and other social services, than seniors who live with other family members. Such changes can have an effect on quality of food consumption.

People tend to have health related goals (physical well-being, emotional well-being, preventing diseases) that are relevant to their strongest determinants (Papies et al., 2007). People who have the most congruent goals and determinants, that is, determinants that are relevant to their health goals, exhibit the highest satisfaction with food consumption (Dean et al., 2009). Extrapolating from this to older people, it could be suggested that those with goal-related determinants towards healthy food consumption would exhibit healthier consumption compared to those whose determinants are not relevant to healthy diet or those who lack the determinants to achieve the goal of healthy eating. By identifying which of the determinants are important and what can be improved, it may be possible to improve older people´s food consumption.

1 Methodology

The core of our research is the exploration of factors contributing to older people´s healthy food consumption. Factors assessed relate to availability and access to suitable foodstuffs, facilities at home, living circumstances, cooking skills, changes in people´s social networks, etc. By identifying older people´s determinants of food consumption, their level of individual possession and perceived importance of each determinant, we can investigate the relationships between food-related determinants and healthy food consumption.

The sampling frame for the empirical research was elderly people aged 65+. A total of 280 questionnaires was distributed randomly in daily clubs for seniors. The questionnaire consisted of questions exploring two areas: determinants of food consumption and healthy food- consumption behavior.

A variety of material determinants (e.g. income), personal determinants (e.g. skills) and social determinants (e.g. family and friends) exist, that an individual can use to organize his or her food consumption.

Determinants correlating with life satisfaction can also be applied in terms of food consumption. An individual´s determinant can be seen as means that is at the individual´s disposal which he / she can use to behave towards achieving healthy food consumption. As people get older, the importance of individual determinants change, and the level of possession of individual determinant may also change.

People tend to have health-related goals that are relevant to their strongest determinants (Sparks et al., 2001). People, who have the most congruent healthy food behaviour and determinants, that is, determinants that are relevant to healthy food consumption, exhibit the highest score on healthy food consumption. Diener & Fujita (1995) argue that healthy eating is likely to depend on focusing on the possession of the determinants leading to healthy consumption. Alternatively, it could be suggested that people with healthier food consumption are better able to cultivate the determinants with strong contribution towards healthy life (Dean et al., 2008). Extrapolating from this to older people, whose level of determinants possession is diminishing, it could be suggested that those with healthy diet-focused determinants would have a higher level of healthy food consumption compared to seniors whose level of possession is low or who lack the determinants needed to achieve healthy consumption.

In our research we examine how food-related determinants of older people influence older people´s healthy consumption. By identifying older people´s determinants of food consumption, the level of determinants they possess and the importance of these determinants to achieve healthy food consumption, we can investigate the relationships between food-related determinants and healthy eating. The main objectives of this study are to explore how level of determinants´ possession and their perceived importance affect health-conscious food consumption. This will be done by exploring the relationship between the determinant´s level of possession and its perceived importance in achieving healthy food consumption and by identifying the correlation between perceived determinant´s importance and actual healthy consumption.

A list of 21 food consumption determinants potentially relevant for seniors food-related life were identified and included in the survey questionnaire. (Table 2). Respondents were asked two questions relating to each of the 21 determinants, first relating to the participant´s perceived level of possession of the determinant and the second to the perceived importance of the determinant for attaining healthy food consumption. The first question about level was formulated: *How do you assess your individual possession of (determinant name)?* The second question about the importance of the determinant was formulated as: In relation to your actual consumption how important is *To achieve healthy food consumption how important is for you (determinant name)?* Both level of possession and importance of determinants was rated on a five-point scale. Healthy food consumption was measured on seven items (Table 1).

2 Results and Discussion

A principal component analysis of the seven items measuring healthy food consumption revealed one factor accounting for 69% of the variance. A composite score was computed for each individual using the mean value of all seven items (Cronbach alpha = 0.81). Actual level of items used is presented in Table 1.

The means and standard deviations for each of the 21 determinants and their level of possession and importance are shown in Table 2. Respondents viewed themselves as having high individual level of possession of storage facilities, kitchen appliances and with access to good transport. Also they expressed ability to taste and smell and to receive support from their family (Table 2). However, the participants perceived themselves as being low on money.

The determinants regarded as most relevant to achieving healthy food consumption included good health, good dental health, mobility, ability to smell and taste, good storage facilities and family support (Table 2). Access to a good external food provider (service provider) was seen as least relevant.

Tab. 1 Mean and standard deviation of healthy food consumption items

Indicators of healthy consumption	Actual level	
	Mean	SD
Nutritional information determines what I eat	3.08	0.91
I eat a healthy diet	3.57	0.78
I control my weight	3.60	0.68
I try to avoid foods that are high in fat	3.69	0.65
I try to avoid foods that are high in cholesterol	3.51	0.84
I try to avoid foods that are high in sugar	3.73	0.73
I try to avoid foods that are high in salt	3.91	0.71

Scale 1-5, where 1=strongly disagree, 5=strongly agree
Source: own calculation

To investigate how people´s perceived level of possession and importance of food-related determinants affect healthy food consumption, several analyses were carried out.

In order to check relation between determinants level of possession and its importance for each participant a correlation coefficient between each level of determinant and perceived relevance to achieving healthy food consumption was computed for all 21 determinants. The mean within subject correlation was 0.43 where 93% of the correlations were positive, and only 7% were negative. This suggests that most respondents focus on enhancing those determinants which they consider as relevant and important for healthy consumption.

In order to check the congruence of determinant´s perceived importance with healthy food consumption and to indicate whether the perception of determinant´s importance could be a predictor of healthy consumption for each individual, the Pearson correlation coefficient between determinant´s importance and healthy consumption score was indicated. Results ($r=0.26$; $p<0.001$) showed that the greater the congruence between a person´s perception of importance of healthy focused determinants and healthy consumption, the higher the score on healthy food consumption, that person experiences. This implies that people who have higher level of possession of the determinants that are important to healthy consumption, exhibit better results in food-related life. Those who have their highest possession levels in areas that are less relevant to healthy food consumption, exhibit lower score in healthy consumption.

Tab. 2 Mean and standard deviation of determinants and their level of possession and importance

Resources	Level of possession		Importance		Correlation between level and importance	Correlation between importance and healthy food consumption
	Mean	SD	Mean	SD		
Ability to taste and smell well	3.69	0.72	3.94	0.69	0.49	0.40
Access to food that is quick and easy to prepare	3.58	0.92	2.68	0.70	0.23	-0.12
Access to convenient means of public or private transport	3.64	0.92	3.50	1.08	0.34	0.36
Access to food service providers, e.g. to centre or delivery of meals	1.89	1.36	2.06	0.96	0.28	-0.18
Access to high quality food products and brands	3.60	0.84	3.49	0.88	0.40	0.42
Access to new and different types of food products	3.21	0.74	3.11	0.92	0.29	0.23
Good general knowledge about food and nutrition	3.66	0.80	3.86	0.96	0.44	0.41
Possibility to receive support from state or private bodies	1.61	1.06	1.80	1.12	0.31	-0.08
A good appetite for food	3.54	0.88	3.66	0.82	0.42	0.32
Good cooking skills	3.78	0.92	3.22	0.88	0.46	0.38
Good dental health	3.32	1.14	3.88	0.74	0.46	0.38
Good food storage facilities (freezer, refrigerator, etc.)	4.28	0.15	3.86	0.48	0.40	0.37
Being in good health	3.04	0.92	3.18	0.36	0.25	0.36
Adequate income	2.06	0.84	4.02	0.74	-0.16	0.32
Appropriate kitchen appliances and equipment to make cooking easier	4.06	0.66	3.78	0.54	0.42	0.32
Access to food at low prices	3.04	0.94	3.02	0.88	0.22	0.19
Ability to walk around on foot	3.72	0.95	3.88	0.92	0.38	0.34
Sharing the meals with other people (including partner or spouse)	3.12	1.06	3.28	0.82	0.38	0.28
Short distance to preferred food shops	3.48	0.84	2.92	0.80	0.27	0.10
Having members of the family who could help you	3.72	1.08	3.85	0.92	0.51	0.36
Having neighbour or friend who could help you	3.60	0.92	3.66	0.82	0.50	0.19

Level of possession was measured on a 5-point scale, where 1=strongly disagree, 5=strongly agree
Importance was measured on a 5-point scale, where 1=not important, 5=very important
Source: own calculation

Correlations were computed across the 21 determinants to identify the relation with healthy food consumption. The correlations (n=21) with healthy food consumption was positive and significant (0.39; $p<0.05$) suggesting that the greater the importance a particular determinant was on average to the healthy consumption, the greater the correlation between the determinant and healthy food consumption.

To achieve healthy food consumption, two groups of determinants are important and relevant. Those determinants with highest score on importance were: ability to taste and smell, good health, adequate income, followed by good knowledge about food and nutrition and access to high quality food products and brands. Determinants that were rated only slightly below 4.00 included mobility, dental health and good appetite. Based on the given list of determinants seniors indicated having good storage and kitchen facilities, good family support, access to transport and the ability to taste and smell. This shows that for older people food consumption is not only linked with health matters but also relates to food variety, social networks and surroundings. In terms of importance, the study showed that not only personal factors such as mobility and ability to taste and smell, but also social resources such as family support and material determinants such as storage facilities are also important to improve healthy consumption. Our research also found that older people perceived themselves as having good material equipment to cook and store food, good social support in terms of family help and good personal abilities such as ability to taste and smell.

The findings also showed that people rated the importance of those determinants in which they indicated high level of possession as higher. The individuals who rated the importance and the level of possession of different determinants as high, achieved also better results in healthy food consumption. That is, those who were high on certain determinant´s possession, also saw these determinants as being more important and relevant to achieving healthy consumption. This implies that either people see determinants that they possess plentiful as being highly important to achieve healthy food consumption, or they identify healthy consumption only with areas where they perceived themselves to be high on possession. Also those who indicated having high level of possession of such determinants that are important for health, exhibited better score on healthy food consumption.

The correlation between level of possession and importance for the 21 determinants showed that older people saw a small negative association between perceived personal level of possession and importance for the determinant of income (-0.16). This suggests that those who perceived themselves as having a low income, perceived income to be more relevant than those who viewed themselves as having a high income. Although this effect is small, it is still statistically significant suggesting that those who do not have money, see it as more important than those people who have money. For the rest of the 20 determinants, there was a significant positive association between perceived level of possession and perceived importance, with highest coefficients for ability to taste and smell (0.49), good dental health (0.46), good cooking skills (0.46) and good general knowledge about food and nutrition (0.44). The study also showed that those who perceived higher importance of determinants, exhibited better score on healthy food consumption than those whose rating on importance was lower

The determinants "access to high quality food products and brands" and "good general knowledge about food and nutrition" produced the highest correlation between importance and healthy food consumption (0.42 and 0.41 respectively). This is not surprising as among the indicators of healthy food consumption were also impact of nutritional information on senior´s eating and statement on eating a healthy diet. To be able to have a healthy food consumption, one needs to have access to high quality food products. Thus, for those who saw these determinants as being highly important, high level of their possession and high perceived importance led to high score on healthy food consumption. Highest levels of correlation between importance and healthy food consumption were documented for ability to taste and smell (0.40), good dental health and good cooking skills. Negative correlation was found for two determinants: access to food service providers (-0.18) and ability to receive support from state or private bodies like charities (-0.08), indicating the opposite impact on healthy food consumption.

Conclusion

By obtaining a better information about relation between perception of food determinants and actual state of healthy food consumption in senior´s population, it will be possible to identify critical areas, where changes in consumption behaviour are needed. Achieving better congruence between determinants with highest impact on healthy diet and healthy food consumption, older people could improve their food-related consumption. However, research is needed to test whether the older people are able and willing to change their eating behaviour and how easy it would be for them to acquire adequate level of possession of alternative determinants that can be used to achieve healthy food consumption.

The results show how the healthy food consumption in senior´s population interacts with different determinants available to them through their importance for healthy food consumption.

Finally, this research investigated determinants of food consumption and their contribution to healthy consumption. Our findings can be further extended by looking at the goals and motives in healthy diet.

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The possibilities of the interpretation of European traditions in tourism[1]

Juraj Litomerický[2] – Roman Staňo[3]

Abstract

The authors propose the algorithm by research of economic benefits from the existence of cultural heritage. They present the tools of support of the European cultural heritage. They offer proposal how to get European cultural heritage to the European public and how to quantify the economic benefits of the European cultural heritage (advertising, creation of the database of individual EU member states and a pan European mobile application linked to the European Heritage Center for example "European Heritage Tourist Center" managed, realized, controlled by Heritage geocaching, linking regional discount cards with the mobile application initiating cooperation.

Key words

Algorithm, tourism, economic, benefits, cultural

JEL Classification: L83, Z10

Introduction

Interpretation means comment, definition, explanation, representation, statement, understanding, version, presentation (Ivanová – Šalingová, 1993). The explanation of the abstraction will be presented by the choice of the researcher. (Ondrejkovič, 2008).

The interpretation of the cultural heritage means its presentation. We can say that is the offer of the cultural heritage to the public. The public need to be informed about the European cultural heritage on the highest level. The next step is the visit of the choice region, which offer the targeted cultural heritage. The visit brings the economic effect for the both sides.

The quality and richness of the culture characterize the richness of the nation. The culture is not only for the high society but for the wide public. The culture in the developed economies has good support. The cultural level of the nation has positive influence on society and economy. Slovakia is country which does not solve this problem active.

There are various opinions on the cultural heritage value. The art and history view evaluate the age and history value. The tourist value is presented by the number of visitors. The cultural heritage can be used as active or passive. The passive form is realized by tourist. The active form is connected by service offer (information, catering, accommodation).

The message presented by the expert group "Getting cultural heritage to work for Europe" is concentrated on evaluation and identification social effects of the cultural heritage. The accent is on the need to support European cultural heritage (innovative financing, new forms of coordination, management and creative operations).

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[1] The scientific project: 2017-1-CZ01-KA203-035428 MIECAT: Methodology of Interpretation of European Cultural Heritage throuh Attractions in Tourism

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The message presented by the expert group “Getting cultural heritage to work for Europe “are presented three main goals:

a) Economy goals
b) Social goals
c) Environmental goals

The economy effects of cultural heritage have direct influence for the financial income for the cultural or historical facility, entrepreneurs (accommodation, catering, transport and other service) and for the municipality and region also. The allocation of heritage facility has direct influence on financial turnovers.

The proposal: Research of economic benefits influenced by cultural heritage:

a/ The determination of approaches how to get European Cultural Heritage in public awareness. The creation of the economic benefit tools influence by cultural heritage

b/ The creation of connection of criteria for the quantification of economic benefits of cultural heritage. The exclusion of duplicity.

c/ The creation of financial, technical and personal conditions. The creation of economic benefits quantification tools influenced by cultural heritage.

d/ The stimulation approaches for motivation and visits of the visitors for the location or region. The active use of economic benefits influenced by the cultural heritage.

1 Methodology

The **European Culture Forum** conferences are realized every 2 years. The target of this meeting is to formulate the conception of European culture policy by the document **European Agenda for Culture**. The other activities are”: cultural activities, European Union culture innovations, employment in culture sector, social and intercultural cooperation.

The main target of the **European year of the Cultural Heritage** is to support and protect European cultural heritage. The European Commission presents the challenge for the proposals for financing European Cultural Heritage projects.

The program Creative Europe supports cultural and creative activities. It is an invitation for the stakeholders in culture, concert halls, opera, theater groups of all European Union member states.

The aim of European Commission is to find such projects which accent European dimension of our rich cultural heritage in its all forms. The commission supports the project which are concentrate on information, communication activities with long lasting effect. (5 Support Tools of European Cultural Heritage, 2016)

The brand **“European Heritage”** is European Union activity. The target is to strengthen the consciousness of European citizens on the base of common social and cultural values. The brand “European Heritage” can be received for tangible or intangible cultural heritage, natural resources. Slovak republic proposes locations: Saint Margit Church – Kopčany, Saint George Churc- Kostoľany, Red Stone – Castle, Burial Mound – Bradlo, General Milan Rastislav Štefánik – House – Košariská, Mint – Kremnica. The brand we can compare with the European version of UNESCO. The difference is that this phenomenon has wide influence based on the European values.

The European Commission grants the award **Europa Nostra** for the protection or renovation of cultural heritage, rural areas, archeological locations, art collections every year. The price is awarded in these categories: Monument Protection, Research, Special Heritage Work, Education. The challenge for the organization projects is announced every year. The international committee awards the best projects. The price is for better vision of long time period projects. Slovakia has possibility to offer the world valuable projects. The price for this price is low.

The **European Heritage Days** is initiative which connect European organizations events in one week in September. The offer are monuments, cultural heritage localities, art collections, natural heritage localities. The topic of event is determined every year. (Duchová, Derner, Urblíková, 2016)

The demand reasons for the visit European cultural heritage object or event:

- Recognition of own and foreign culture
- Education
- Shopping
- Entertainment
- Relax

The cultural heritage client segmentation can be universal and special oriented. Universal segments are families with children, young people, seniors.

The special oriented client segments are cultural heritage professionally oriented clients:

- church going clients
- cooks, confectioners, waiters
- gastronomy epicures
- history experts, archeologists
- architects
- artists
- craftsmen
- farmers
- national minorities
- nature watchers and protectionists
- folklorists
- war history experts
- salesmen
- sportsmen

The segments on the side of offer:

- presentation of the region
- education
- new contacts

- competition
- economical aspects

2 Results and Discussion

The possibilities of presentation of European Cultural Heritage to the European public in relation of quantification of economic benefits from the European Cultural Heritage

The important role of the European Cultural Heritage is possible to realize by tourist activities. The next step is quantification of the economic benefits from the European Cultural Heritage. The possibilities are:

1/ European Cultural Heritage -- Advertisement

2/ European Cultural Heritage – Database

3/ European Cultural Heritage – Mobile application

The name of the mobile application will be: "European Heritage Tourist ". The offer via European mobile operators, travel offices, travel agencies. The offer will be accommodation, catering, transport services in relation to the object of cultural heritage. The application will connect with Booking, Trip Advisor, Trivago applications. The client who will use the cultural heritage product will get discount price which will go to the database and there will be possibility of quantification of economic benefits in location or region. The database will offer information about the number of visitors, location of their interest, seasonality. These data will create the base for protection of the cultural heritage in location, region and needs of financial support from European Union. The importance of application and QR codes is a necessity for the development of registration and protection of cultural heritage in locality, region. The need of technical support by social and economic partners is a need.

Heritage geocaching will be realized in locations and regions. This system will support economic benefits of cultural heritage also. It means quantification of visits of cultural heritage objects and events.

The concentration is on the problem of duplicity by the registration of visitors. Every visitor will receive discount card with individual registration number connected with the visitor identity card.

Every cultural heritage object or event will have QR code. The database will be built by the QR code data. The statistics of the visitors will be simply gained. The present situation is that the statistics can be realized on the national level.

The cultural heritage regions need to better cooperate and activate the offer of their own product.

The example of Czechoslovak cooperation (Czechia – Slovakia) tourist bridge via river Morava, Kopčany, SK - Mikulčice, CZ. The region is famous by the history of Veľká Morava (Great Moravia).

There are 40 000 visitors in Czechia side and 4000 visitors on Slovakia side. There is offer of Moravian wines too. The 12 new archeological researches of churches is realized in present time. There is church of Saint Margit on Slovak side of the border in Kopčany from the times of Veľká Morava (Great Moravia). The idea is to create Czechoslovak Archeo Park Mikulčice – Kopčany.The project is presented by Trnava region (SK) and Južná Morava (South Morava) region (CZ). The project is financed by European Union. The vsisitor s have possibility to visit Kopčany church, Holíč Castle and horse breeding farm. (Kusá, 2017).

This offer gives great possibilities for the quantification of economic benefits of cultural heritage. The mobile applications offer to check visitors on both side of the boarder in Czechia and Slovakia, individually in every country or together as the economical multiplication effect of the cultural heritage region.

Conclusion

The success of proposed model of visit quantification of cultural heritage objects and events by "Heritage Tourists" depends:

a/ To get cultural heritage locations and objects in consciousness of European public

b/ The quantification of economic benefits of cultural heritage regions and need to be good technically supported.

c/ The factors which have influence on the number of cultural heritage tourists:

- Location
- Region
- Offer
- Transport
- Catering
- Accommodation
- Additional Service

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Slovakian legal regulation of recreational vouchers

Hana Magurová[1] – Andrea Slezáková[2]

Abstract

The basic idea of vouchers is to give resources to citizens so they can purchase the services of their choice from authorizes suppliers. In tourism it is important to finance not only supply, but also demand. In the Slovak Republic many employees so cannot afford to participate in the promotion of domestic tourism, because of their low income. On 1 January 2019 an amendment to the Act on the Promotion of Tourism entered into force in the Slovak republic. It also amended eight related laws, especially the Labour Code, Act on the Social Fund and Act on Income Taxes. If employees choose to spend their holidays in the Slovak republic, employers are obliged provide contribution for their recreation. The amount for a full-time employee is 55% of eligible expenses, up to a maximum of € 275 for a calendar year. The authors analyse one of financial tools for promotion travel and tourist industry, by which the contribution to a recreation is provided by employer. Recreational vouchers work on a similar principle as meal vouchers. Their main aim is to support domestic Slovakian tourism. The authors analyse an effective legal regulation and consider its contribution.

Key words

tourism, promotion, contribution to a recreation, recreational vouchers, employee, Slovak republic

JEL Classification: K15, K31, K34

Introduction

Tourism is a sum of activities aimed to satisfaction of needs related to travelling and staying of individuals out of their permanent residence, usually in their leisure time. The purpose is, among others, to gain comprehensive experience, including relaxation, sport, learning, cultural, religious or work activities (business travels). Tourism directly intervenes into many sectors of economy such as industry, trade, services, finance, transport, regional development, culture, healthcare, education, sport, environmental protection, forest and water management, agriculture and employment. By combining different sectors, it thus contributes to an overall development of the Slovak Republic.

Consequently, the issue of promotion and development of tourism is addressed by a number of legal regulations and concept papers of the Slovak Republic. For the purposes of this article we would like to refer, among others, to the following documents:

- Act no. 91/2010 Coll. on the promotion of tourism, as amended (hereinafter "Act on the Promotion of Tourism"), regulating the promotion of tourism in the Slovak Republic, rights and obligations of physical and legal persons active in tourism, development of concept papers and financing of the development of tourism.[3] Promotion of tourism consists in the performance of activities aimed to the increase of the number of domestic and foreign visitors, prolongation of their stay in the Slovak Republic and enhancement of their contribution

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[3] Article 1 of the Act on the Promotion of Tourism.

to economy.[4] In particular the Ministry of Transport and Construction of the Slovak Republic, higher territorial units, communities, regional or local tourism organisations and tourist information centres ensure the fulfilment of tasks in tourism;[5]

- Tourism Development Strategy until 2020 (hereinafter "Strategy until 2020"), adopted by the Resolution of the Government of the Slovak Republic no. 379/2013 of 10 July 2013;[6]
- Statement of Policy of the Government of the Slovak Republic.[7]

According to these concept papers the strategic aim of tourism is to increase its competitiveness, while better using its potential, in order to eliminate regional disparities and to create new job opportunities. The plan of the Slovak Republic is (among others) to support the interest of domestic population in domestic tourism, i.e. to motivate domestic population to use domestic tourism establishments for their holiday and recreational activities.

1 Methodology

Selection of scientific methods depends on the paper content focus and the paper aim. Theoretical scientific methods of analysis and synthesis, induction and deduction, abstraction and concretization and a comparative method were used for the creation of this paper. We have analyzed efficient legal regulation and examined whether regulation of recreational vouchers is contained in the laws of other countries as well. As it is a topical issue, we used websites of public administration bodies and stakeholders as sources of information.

2 Results and Discussion

2.1 Recreational vouchers

On 27 November 2018 the National Council of the Slovak Republic adopted the Act no. 347/2018 Coll., amending the Act no. 91/2010 Coll. on the Promotion of Tourism, as amended, as well as some other laws. Despite objections expressed by the Slovak President, this amendment was promulged on 10 December 2018 in its original wording and entered into force on 1 January 2019. As its name suggests, the act has amended (i.e. modified and supplemented) a number of acts, specifically:

- Act on the Promotion of Tourism;
- Act no. 311/2001 Coll. on the Labour Code, as amended (hereinafter "Labour Code");
- Act no. 152/1994 Coll. on the Social Fund and on amendments to the Act no. 286/1992 Coll. on Income Taxes, as amended (hereinafter "Act on the Social Fund");
- Act no. 595/2003 Coll. on Income Taxes, as amended (hereinafter "Act on Income Taxes");

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[4] Article 2 (a) of the Act on the Promotion of Tourism.
[5] Article 3 of the Act on the Promotion of Tourism.
[6] Available at: <https://www.mindop.sk/ministerstvo-1/cestovny-ruch-7/legislativa-a-koncepcne-documenty/koncepcne-documenty/strategia-developmenta-cestovneho-ruchu-do-roku-2020> as at 31.07.2019
[7] Available at: <https://www.vlada.gov.sk//programove-vyhlasenie-vlady-sr-na-roky-2016-2020/?pg=2> as at 31.07.2019.

- Act no. 73/1998 Coll. on the Civil Service of Members of the Police Force, the Slovak Intelligence Service, the Court Guards and Prison Wardens Corps and the Railway Police, as amended;
- Act no. 200/1998 Coll. on the Civil Service of Customs Officers and on amendments to some other laws, as amended;
- Act no. 315/2001 Coll. on Fire and Rescue Service, as amended,
- Act no. 281/2015 Coll. on the Civil Service of Professional Soldiers and on amendments to certain laws, as amended, and
- Act no. 55/2017 Coll. on the Civil service and on amendments to certain laws, as amended.

This amendment introduced into the Slovakian law one of instruments for financing of the promotion and development of tourism, namely recreational voucher, which was authored by the coalition party SNS.

However, the introduction of this form of promotion of tourism does not represent any breakthrough. Recreational vouchers were already mentioned in some older concept papers such as "New Tourism Development Strategy of SR until 2013" (hereinafter "Strategy until 2013"), adopted by the Resolution of the Government of SR no. 417 of 9 May 2007.[8] It states that so-called travel (or holiday or recreation) cheques (or vouchers) are used for the promotion of domestic tourism in several European countries. The nomenclature depends on the individual country.

In Switzerland the Swiss Travel Fund - REKA (Schweizer Reisekasse) was founded as an instrument for the promotion of social tourism already in 1939 and still fulfils its function. Its partners are industrial, commercial, transport and tourism enterprises, banks, savings banks, public administration institutions, hospitals and trade-union organisations which pay contributions to the Travel Fund.[9] In France the National Agency for Holiday Cheques (Agence Nationale pour les Chéques-Vacances) was founded in 1982, which manages a holiday voucher scheme called "Chéques-Vacances". Since 1990 the advantages of this voluntary scheme may be used also by workers of small and medium enterprises, which employ less than 50 persons. The French Travel Fund issues an address book of all service providers, who accept holiday cheques and offer special prices. Based on financial analyses, one euro (€ 1) claimed in vouchers means a contribution up to four euros (€ 4).[10] In Hungary a foundation, which stimulates the development of domestic tourism by issuing recreation cheques, was established in 2001.

The Slovak concept papers do not use a uniform terminology (influence of different terminology used in Switzerland, France, Hungary and other countries). So, for the name of "product" following options were used: recreational voucher, recreation cheque, holiday voucher or holiday cheque. In acts (e. g. Act on the Promotion of Tourism, Labour Code and Act on the Social Fund, etc.) the name "recreational voucher" is used.[11]

[8] For details see: < https://rokovania.gov.sk/RVL/Material/3191/1> Available as at 31.07.2019.

[9] For details see: <https://reka.ch/en/thecompany/aboutus/Seiten/about-us.aspx?lang=en> Available as at 31.07.2019.

[10] For details see: <https://guide.ancv.com/> Available as at 31.07.2019.

[11] It relates with Section 152 of the Labour Code called "Catering of employees" in which a "meal voucher" is mentioned. Employer is obliged to provide catering compliant with the principles of nutrition for employees in all shifts (including temporarily assigned employee) directly on the workplace or in its proximity. The employer does not have this obligation e.g. toward employees sent to a business travel or employees who perform work in public interest abroad. Employer provides catering in particular by providing one hot main course, including a suitable drink, to an employee during a work shift at its own or another employer´s catering establishment, or arranges catering for its employees through a legal or physical person which holds the license for provision of catering services. The entitlement to catering arises to

The attribute “recreational” is derived from the term “recreation”. Recreation or recreating (lat.) means physical and mental work that is performed in leisure time for refreshment, reinforcement and rest after work or disease, or generally recovery, relaxation, refreshment, entertainment. According to Article 7 of the Act on the Social Fund the employer as part of its social policy provides to its employees from the Fund (among others) contribution for recreation and services, which the employee uses for regeneration of his or her capacity to work.

2.2 Act on the Promotion of Tourism and a recreational voucher

According to Article 27a paragraph 2 of the Act on the Promotion of Tourism, recreational voucher is defined as a special means of payment or similar technical means that stores ownership value electronically, which is issued to limited providers according to special regulation.[12] A recreational voucher may be used only in the Slovak Republic at service providers, who have concluded a contract with a limited provider according to special regulation[13], issuing the recreational voucher. According to Article 27a paragraph 3 of the Act on the Promotion of Tourism a recreational voucher is issued to a physical person and is not transferrable. A recreational voucher serves only for reimbursement of eligible costs according to the Labour Code[14] and is valid until the end of the calendar year, in which it was issued.

As we have already mentioned, the Act no. 347/2018 Coll., amending the Act no. 91/2010 Coll. on the promotion of tourism, as amended, and amending certain laws, has amended the Labour Code as well. In Section 152a paragraph 2 of the Labour Code the recreational voucher is referred to as a form of contribution for recreation of employees.

2.3 Recreation of employees according to the Labour Code

According to Section 152a paragraph 1 of the Labour Code, an employer with more than 49 employees (i.e. with at least 50 employees or more than 50 employees) shall provide to an employee, who has been working for the employer for at least 24 uninterrupted months, at his or her request a contribution for recreation corresponding to 55% of eligible costs, but not more than € 275 per calendar year. The contribution for recreation will also be provided to an employee, who has agreed with the employer on a part-time employment. In this case the maximum amount of contribution for recreation per calendar year (€ 275) will be reduced proportionately to the part-

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an employee who works longer than four hours during a shift. Employer provides the contribution for catering in the amount corresponding to at least 55% of the price of meal, but not more than 55% of meal allowance provided for a business trip of 5 to 12 hours according to a special regulation. In the provision of catering for employees through a legal or physical person, who is authorised to mediate catering services, the price of meal means the value of the meal voucher. The value of the meal voucher must represent at least 75% of meal allowance provided for a business travel of 5 to 12 hours according to a special regulation. Employer will provide to an employee a financial contribution, only if the fulfilment of the obligation of the employer to provide catering for employees is excluded by conditions of performance of work on the workplace, or when the employer is unable to provide catering services, or when the employee cannot use any of the methods of catering of employees provided by the employer for health reasons certified by a medical specialist.

[12] For details see Article 97a of the Act no. 492/2009 Coll. on Payment Services and on amendments to certain laws, as amended, where the limited provider and its services are specified.

[13] Ibidem.

[14] For details see Section 152a paragraphs 4 and 5 of the Labour Code.

time employment. The contribution for recreation may be provided for an employee under the same conditions and in the same amount also by an employer with less than 50 employees (i.e. maximum number of 49 employees or less than 49 employees). It thus represents a voluntary (not mandatory) performance on the part of the employer, who employs 49 persons at the most. The fulfilment of conditions for provision of contribution for recreation is examined at the date of start of recreation. The number of employees means the average registered number of employees for the preceding calendar year. The contribution for recreation is rounded to the nearest Euro cent upwards.

According to Section 152a paragraph 2 of the Labour Code an employer may decide that contribution for recreation will be provided to an employee in the form of the recreational voucher according to a special regulation. If contribution for recreation is provided to an employee in this form, i.e. on the basis of a contract with the issuer of recreational voucher according to a special regulation, then the fee for arranging individual services (e.g. accommodation, catering and recreation-related services) represents up to 3% of the value of the recreational voucher.

According to Section 152a paragraph 3 of the Labour Code an employee may apply for a contribution for recreation at a single employer during the calendar year. It also provides for a prohibition of discrimination of the employee, who makes the claim for a contribution for recreation. An employee, who applies for a contribution for recreation, namely must not be discriminated in any manner against an employee, who does not apply for this contribution.

As we have mentioned above, the employer´s contribution for recreation represents 55% of eligible costs, but not more than € 275 per calendar year. In accordance with Section 152a paragraph 4 of the Labour Code eligible costs mean demonstrated costs incurred by the employee in relation to:

- tourism services[15] related to accommodation for at least two nights[16] in the territory of the Slovak Republic;
- accommodation package containing accommodation for at least two nights and catering services or other services related to recreation in the territory of the Slovak Republic;
- accommodation for at least two nights in the territory of the Slovak Republic, which may include catering services;
- organised multi-day activities and health recovery events during school holidays in the territory of the Slovak Republic for a child of an employee who attends an elementary school or one of the first four years of a high-school with eight-year educational programme. Child of an employee also means:
    - a child placed in foster custody of the employee by a court decision;
    - a child placed in custody of the employee before the issue of a court decision on adoption, or
    - another child living with the employee in a joint household.

Eligible costs also mean the above-mentioned demonstrable costs of an employee (of services) that were provided to persons participating in a recreation stay together with the employee. But such co-participating person must be a spouse, own child, child placed in foster custody of the employee by a court decision or a child placed in custody of the employee before the issue of a court decision on adoption or other person living with the employee in a joint household.

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[15] In practice, however, some problems may arise as the term "tourism services" is not defined.

[16] According to Article 2 (d) of the Act on the Promotion of Tourism night stay is a night of a physical person spent in an establishment operated by an economic entity providing transitory accommodation services, for which it has paid the local tax on accommodation to the community.

Section 152a paragraph 6 of the Labour Code provides that if a contribution for recreation has not been provided in the form of a recreational voucher, the employee shall demonstrate to the employer eligible costs not later than in 30 days after the end of recreation by submitting accounting documents that contain the name of the employee. An employer will provide to an employee the contribution for recreation after submission of the accounting documents on the next payday determined by the employer for payment of wage, unless the employer and the employee agree otherwise. If contribution for recreation has not been provided in the form of a recreational voucher, at request of the employee the contribution for recreation, which started in one calendar year and continues without interruption in the following calendar year, will be regarded as a contribution for recreation for the calendar year, in which the recreation started.

Employers (having fulfilled the conditions laid down in Section 152a of the Labour Code) are obliged (i.e. they must, not only may) to provide a contribution for recreation to their employees. They may do so in two ways. They will provide to their employees a contribution for recreation in the form of a recreational voucher. The other option is that employees by submitting accounting documents (invoices) demonstrate to their employer eligible costs that they incurred through recreation (and recreation of persons who participated in the recreation with them and who are explicitly named by the law). The employer will provide to the employee a contribution for recreation on the next payday determined by the employer for payment of wage, unless the employer agrees with the employee otherwise.

Recreational voucher is (beside of the promotion of bicycle tourism, in particular building of linear infrastructure, cycling trail marking, structures of supplementary infrastructure, maps, publicity and provision of investment support for tourism) one of the instruments of financing of the development of tourism. The recreational voucher scheme effectively supports the use of domestic tourism establishments by visitors. Based on available data (comprehensive statistics are not available on the website of the Statistical Office at the date of delivery of this article), revenues from accommodation and other tourism services in domestic tourism (because the use of contribution for recreation is limited to the territory of the Slovak Republic) increased after the introduction of recreational vouchers. From the statements of many politicians, who have merits on the introduction of recreational vouchers, it is clear that they are satisfied with the introduction of this instrument of the development of financing of tourism.

Some propose that the use of recreational vouchers should be permitted also to enterprises with less than 49 employees. On the other hand, many small entrepreneurs and family firms with 5 employees believe that introduction of this measure would have liquidator effects on their business. We also must realise that many employees would prefer monthly remuneration over the possibility to enjoy recreation.

2.4 Act on Income Taxes and recreational voucher

The amended of Act on Income Taxes states that if specific conditions are met as laid down in the Labour Code, the provided recreational contribution shall be considered as the employee's income exempt from tax and will likewise be accepted as a tax-deductible expenditure for the employer (Section 5, paragraph 7 (b) of the Act on Income Taxes). Costs on recreational contribution which were incurred in compliance with specific legislation are considered as tax deductible expenses for the employer (Section 19, paragraph 2 (c), point 5 of the Act on Income Taxes).

2.5 Creation of a Tourism and Sport Ministry

With the introduction of recreational vouchers Parliamentary Chair (from Slovak National Party/SNS) mentioned that he will be insist on creating a Tourism and Sport Ministry. At a press conference held in the village of Stará Lesná on 7 August 2019 (after meeting with representatives of the Slovak tourism industry) he repeated that he will give a respective proposal of this creation to the coalition partners at the next coalition council. He underlined that it is a necessity to have a ministry for sport and tourism that will co-ordinate this undersized area. He called it a systemic step into the future. He is absolutely convinced that a Tourism and Sport Ministry must be established next year (2020). The new ministry should have two state secretaries, one for each area.[17] We will see what the time brings. For now, we consider the creation of Tourism and Sport Ministry as a political step to get votes before elections. Currently the section on tourism is part of the Transport Ministry and in 2019 it had a budget of € 9.2 million.[18]

Conclusion

Although the situation in Slovakian domestic tourism gets better, opportunities which our country offers, are still not used as they should be. That is the reason why some arrangements were made. One of the tools for financing the support and development of domestic tourism, which is very discussed now (because it includes contributions to employees' recreation provided by the employer) is named recreational voucher. The primary purpose is to support tourism in Slovak republic by encouraging employees to look for interesting places to visit in Slovak republic and making employers reimburse part of the cost.

Contribution for recreation:

- is a benefit to employees who request for it (and fulfil conditions according to legal regulation);
- an employer with 50 or more employees must comply with the request for contribution for recreation (for employers with 49 or less employees the contribution is voluntary);
- the allowance is provided by a recreation voucher or monetary reimbursing accounting documents upon the employee's request and their submission by the employee on time (within 30 days following the end of the recreation) on the employer's next pay date, unless the employer and the employee agree otherwise. The employer can decide which form is more suitable, taking into account the costs and administration;
- employers are obliged to contribute not only to the employee's recreation, but also to the employee's family members (e.g. camps for children), as well as other persons living with the employee in a common household (specified by the Labour Code);
- each employee who has worked for the employer for at least 24 uninterrupted months is entitled to a contribution of up to € 500 per annum; 55% of the contribution is paid by the employer (max. € 275 per annum) and can be used only for holidays spent in the territory of the Slovak Republic for at least two nights. The remaining 45% (max. € 225 per annum) is paid by the employee;

[17] For details see: <http://www.tasr.sk/tasr-clanok/TASR:20190807TBA01864> Available as at 07.08.2019.

[18] For details see: <http://enrsi.rtvs.sk/articles/news/202687/a-ministry-of-tourism-and-sports-on-the-horizon> Available as at 07.08.2019.

- contribution for recreation as well as contribution for catering are exempted from the tax.

However, this support for domestic Slovak tourism will be burden for bigger Slovak employers. The law specifically states that employers must avoid any discrimination between employees who apply for recreational vouchers and those who do not, which in other words means that employers are forbidden to make any adjustments to their bonus schemes as a result of this change. Who knows, the time will show us.

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Current trends and development tendencies of commerce [1]

Monika Matušovičová [2]

Abstract

Development trends of commerce belong to the key factors that influence behavior of business subjects and operation of commerce. Worldwide and European retailing characterize new development trends that make it a major economic category of international importance. The aim of this article is to identify and characterize current trends and development tendencies of commerce. We are focusing on internationalization and gradual globalization of commerce, diversification of forms of sales and the development of outlet centers concepts. In the article we use scientific methods of analysis, description, comparison and synthesis of data from international consulting companies. The result of the research is to evaluate the current situation, to summarize and present knowledge about trends of commerce development and their causal dependencies.

Key words

retailing, trends of commerce development, internationalization of commerce, forms of sale, outlet center.

JEL Classification: L81

Introduction

Global and European commerce has in recent years undergone significant quantitative and qualitative changes that have shaped it to its present form. The complexity of the activities in the field of commerce is of a new dimension - in the form of retailing.

The majority of authors dealing with the issue of commerce (Burstiner, 1994; Armstrong - Kotler, 2011; Levy - Weitz, 2011) explain retailing as a set of business activities that involve selling products to end consumers for personal consumption rather than further production use. Some authors (Cimler, 2007; Jindra - Pražská, 2002) understand retailing as activities of internationally oriented retail companies with highly sophisticated information system, own logistics activities and distribution system. According to Cimler (2007) this type of retailing thus combines the function of selling products to final consumers for personal consumption with wholesale function as well as the function of domestic and foreign commerce.

Managers of retailing companies must take into account the current trends in business development when executing their management and marketing programs on domestic and foreign markets. Given that these development trends are gradually emerging in all markets they can be called also global development trend.

Current trends that affect business development also in local conditions include (Aktuelle Unterlage, 2013):

[1] This paper is a part of the research project VEGA No. 1/0380/17 "Economic efficiency of electromobility in logistics".

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- Concentration and cooperation of business and operating units, internationalization and gradual globalization of commerce, specialization and diversification, market dominance and development of private trademarks.
- Development of new forms of sales (outlet centers, convenience stores, pop-up stores).
- Digital in-store technology (investments in digital and mobile technologies, social networks, multichannel and omnichannel retailing)
- Technological innovations (RFID system, loyalty and payment cards, QR codes, self-service cash registers, smart shopping carts).

1 Methodology

Trade development trends are key factors that affect the behavior of business entities and the functioning of commerce. The aim of the paper is to identify and characterize current trends and development tendencies of commerce. We are focusing on internationalization and gradual globalization of commerce, diversification of forms of sales and the development of outlet centers concepts.

Application of the scientific methods used in the article included:

- description of the theoretical knowledge of domestic and foreign authors;
- content analysis of international studies Handel 2020 and Zukunft des Einkaufes;
- comparison method applied on research of global retail market;
- retailing analysis using data from Deloitte's Global Powers of Retailing 2019 international study;
- synthesis of Ecostra's analytical data;
- deduction method used to logically justify the conclusions from the generally valid pragmatic experience abroad.

2 Results and Discussion

2.1 Internationalization and gradual globalization of the commerce

Internationalization and gradual trade globalization are among the most important trends in current trade in an environment of intense competition.

The consequence of global internationalization is the development of multinational companies and trade chains (Cihelková, 2009). Internationalization of trade is an expansion of local activity beyond the borders of national economies in the pursuit of better and higher valuation of commercial capital (Čihovská, 2010). This is not a classic foreign commerce (export, import) but the export of retail business and the establishment of its own operating units abroad (Rudolph, 2000).

An argument for internationalization is currently either a negative situation in a domestic retail markets or an attempt to achieve higher profits and opportunities for international growth. Entering foreign markets opens new business locations with millions of potential customers. Increasing competition, the saturation of the domestic market, and the failure to meet turnover targets all contribute to the decision to launch internationalization activities. At present, however, more pro-active internationalization predominates. Therefore, the most important themes are the opening of new markets, the use of quantity effects, international specialization and socio-political changes in the countries. The current internationalization tendencies of the world's trading structures are illustrated in table 1.

Tab. 1 Internationalization of the largest retailing companies

Rank	Company	Country of origin	Retail revenue in 2017 (billion, $)	Countries of operation in 2017	Dominant operational format
1.	Walmart Stores, Inc.	USA	500,343	29	Hypermarket/ Supercenter
2.	Costco Wholesale Co.	USA	129,025	12	Cash&Carry/ Warehouse
3.	The Kroger Co.	USA	118,982	1	Supermarket
4.	Amazon.com, Inc.	USA	118,573	14	Non-Store
5.	Schwarz Group	Germany	111,766	30	Discount Store
6.	The Home Depot Inc.	USA	100,904	4	Home Improvement
7.	Walgreens Alliance	USA	99,115	10	Drug Store/ Pharmacy
8.	Aldi Einkauf GmbH	Germany	98,287	18	Discount Store
9.	CVS Health Co.	USA	79,398	3	Drug Store/ Pharmacy
10.	Tesco PLC	UK	73,961	8	Hypermarket/ Supercenter

Source: own processing according to: Deloitte. *Global Powers of Retailing 2019.* Available from: http://www2.deloitte.com/uk/en/pages/consumer-business/articles/global-powers-of-retailing.html.

According to Deloitte (2019) study, which annually compiles and publishes a list of the world's largest retailing companies, the share of ten world leaders in total revenues of 250 biggest companies is nearly one-third (31,6 %). Their average year-on-year growth was 6,1 % in 2017 with a total revenue of 1 430,353 billion dollar. Almost a third (25,1 %) of the total revenue of the top 10 trade companies came from foreign operations, with European retailers such as Aldi (65 %), and Schwarz (59 %) being the ones most dependent on international revenues.

As shown in table 1, in 2017, nine companies ranked among the top 10 business companies in the world with operating units in several countries of the world and only one company operated only in their home country. It is clear from the table that retailers Schwarz (30 countries) and Walmart (29 countries) are the most advanced in the process of internationalization, followed by the expansion of Aldi (18 countries).

The dynamic process of internationalization is not seen only in commercial chains with fast-moving goods, but also in specialized chains. For example, in 2017 among the top 250 retailing companies up to 40 companies specialized in fashionable clothing products. These companies operated on average in 26 countries (average across whole top 250 was 9,5 countries) with revenues of more than 11 billion dollar and the highest profit margins (Deloitte, 2019).

Internationalization activities are currently marked by exits from markets, closing stores, restructuring, reassessing and consolidating formats of stores. The expansion of the largest retailing companies continues to the Central and Eastern European countries as well as to Asia. However, it hides considerably more risks due to market saturation and increased competition. In Europe are interesting for further expansion countries like Ukraine, Romania and Bulgaria while among Asian countries it would be India, China, Malaysia, Indonesia and Vietnam. Other perspective regions can be found in Latin America and Africa (Statista, 2018).

2.2 Diversification of forms of sales

Most global retailing companies diversify their activities into related or less related areas of business to ensure greater expansion in the market or to spread risk and tax burden. In the field of commerce, one of the manifestations of diversification is the use of different ways and forms of sales. Based on study of Deloitte's Global Powers of Retailing 2019 (table 1) dominate in current retailing in particular the global hypermarkets, supercenters, discount stores, supermarkets and e-commerce.

Growing competition brings the development of new forms of operating units, with experts from the Handel 2020 study (Aktuelle Unterlage, 2013) seeing the future in new forms of sales, namely:

- Convenience stores,
- Outlet centers,
- Pop-up stores,
- E-commerce, m-commerce and social commerce.

Convenience store is a smaller shop with a limited number of common consumer goods. A typical convenience store has a retail space between 50 and 500 m^2. The range of these stores is typically made up of 500 to 2500 kinds of goods and is characterized by its width, less depth. Convenience stores offer customers basic durables for daily use (Pietersen-Schrahe, 2004). The major retailers specializing in convenience stores include the Japanese Seven & I Holdings (7-Eleven), Lawson and British Tesco (Tesco Express).

Pop up store, called also temporary store represents a type of operating unit that is open only for a certain time-bound period. This way of selling is an unconventional way of getting new customers, introducing your products, presenting advertising, and raising awareness of the company and its activities. The most famous pop up stores in 2017 (Trotter, 2017) included for example Pantone Café (Monaco), PARK-ING Ginza (Tokyo), 5-Minute Internship by Solve (Minneapolis) and Bulk (London).

E-commerce is one of the most up-to-date commerce trends that minimizes operating costs and provides greater efficiency while maintaining ongoing traffic. In addition to the standard form of sales without office space, new progressive sales channels such as mobile commerce (sales through mobile phones) and social commerce (sales through social networks) are emerging according to the study of Die Zukunft des Einkaufens (2013) by KPMG and GDI.

This is affirmed by the results of the largest e-50 companies in the world whose annual sales growth has proclaimed almost 20%, with the US and China being the most attractive e-retailing markets on a global scale. According to estimation of EuroCommerce, annual sales of e-retailing in Europe in year 2017 have been increased by 13% to over 600 billion Euro (Legéň, 2019). The largest European e-retailing markets include the UK, France and Germany.

Diversification in area of different forms and ways of selling has been an important growth strategy among many large retailers in recent years. In this context, it should be noted that global retailers are most frequently expanding abroad with at least two types of operating units. Hypermarkets are the preferred form of retail that retailers open at the beginning of a foreign expansion. After establishing themselves on the foreign market, hypermarkets tend to be joined by other types of outlets such as supermarkets or convenience stores that provide customers better service and are much more responsive to their requirements.

2.3 Outlet centers as a perspective retail concept

Based on development trends such as the growth of competition in the sector or internationalization can also be illustrated the emergence of a new concept of outlet centers and shops. After the improvised beginnings has from “bargain shopping” evolved a special retail industry with a great potential and future. From the point of view of economic theory, the outlet is a form of sales through which individual manufacturing companies ensure the sale of their branded goods collections at discounted prices. Their aim is to ensure a smooth flow of goods and to avoid additional logistical costs (Kremský, 2010).

The United States of America represents the traditional outlets shopping mall market despite the fact that this area has been showing a declining trend in the real estate market in this sphere. From the point of view of the structure of individual outlet centers the tendency towards the construction of larger and more complex centers can be noticed in the US market. On the contrary, Europe is currently an attractive market for this retail sector, as differences in the structure of the retail market still exist between individual countries.

Tab. 2 Market of outlet centers in the Europe between years 2011 and 2017

Country	Number of outlet centers		Total floor-space in m²	
	2011	2017	2011	2017
United Kingdom	37	35	549 830	522 635
Italy	23	25	459 300	521 420
Spain	16	17	203 300	239 040
France	15	22	209 700	331 335
Germany	6	14	85 600	207 925
Poland	6	12	80 500	180 720
Switzerland	6	5	84 000	59 500
Belgium	3	2	42 300	32 000
Greece	3	4	45 500	58 400
Ireland	3	2	22 800	20 000
Netherland	3	3	62 900	84 000
Portugal	3	4	92 350	97 350
Croatia	2	2	25 050	27 000
Austria	2	2	65 300	74 000
Sweden	2	2	28 200	28 500
Czech Republic	2	2	38 500	36 000
Hungary	2	2	35 000	29 500
Bulgaria	1	1	13 000	13 000

Denmark	1	2	10 000	20 000
Latvia	1	1	12 700	12 700
Norway	1	2	11 000	21 500
Romania	1	1	14 500	14 500
Russia	0	5	0	99 380
Serbia	0	1	0	13 000
Slovakia	0	1	0	14 000
Ukraine	0	1	0	15 000
Total	**139**	**170**	**2 191 330**	**2 772 405**

Source: own processing using *The big ecostra Outlet Center Handbook Europe 2011* and *Outlet Centers in Europe - December 2017*. Available from: http://www.ecostra.com/studien_und_marktberichte/.

Europe is one of the most prosperous markets for the construction of outlet centers. The traditional destination of this concept in terms of the number of individual outlet centers in Europe was and still is the United Kingdom, where 35 outlet centers were operating in 2017 (table 2). The most noticeable boom of the concept was seen in Germany where the number of outlet centers more than doubled between 2011 and 2017. Large density is also in Italy, France and Spain. Central and eastern Europe - especially Poland, the Czech Republic and Hungary - are becoming main targets for the further expansion. Russia also has a great potential with a significant increase in the number of existing outlet centers in the period under review. Looking at the quantitative characteristics of the European outlet market, the significant element is that between 2011 and 2017, the total sales area increased by almost 30 percent.

Relevant markets for the development of outlets in a global perspective include countries such as United Arab Emirates, Japan, China, South Korea and Turkey. In Japan, there are currently more than 40 outlet shopping centers. The development of outlets in this country has been stimulated in particular by the experience of Japanese tourists on trips to the USA. The largest outlet centers currently include the Dubai Outlet Mall in the United Arab Emirates, which consists of 240 outlets with an area of more than hundred thousand of square meters. Its area has already been exceeded by the E-da Outlet Mall with its 200 thousand square meter, luxury hotel, entertainment park and a skyscraper. In the US, the Sawgrass Mills Mall, with an area of 220,000 square meters and 350 Shopping Centers (Shopping Centers Today, 2016) was completed in Florida. These centers are indisputable proof of the power of the concept of outlet centers. An important element for the development of the concept is first and foremost global economic growth. The global economic climate is key to the successful expansion of the outlet center concept, with the concept being fully flexible for any country and its cultural specifics.

Conclusion

World retailing characterizes new development trends that make it a significant economic category of international importance. Internationalization and consecutive globalization belong among the most important trends of current commerce. Expansion into new countries is a part of the strategy of the most successful retail companies in the world and is one of the main tools of corporation's growth. In 2017, nine companies out of 10 ranked among the top 10 retail companies in the world had stores operating in several countries of the world and just one company was operating only in the home country. In the process of internationalization advanced the most the following companies – Schwarz (30 countries), Walmart (29 countries) and Aldi (18 countries). It can also be said that

European retail chains are more courageous than the American ones. During their expansion on the old continent they first gained multicultural experience which they are currently using in global investment.

In the area of trade, one of the main trends is currently the development and use of various ways and forms of sale, such as hypermarkets, supercenters, discount stores, supermarkets, convenience stores and e-commerce. The introduction of new ICT into the processes of retail is one of the decisive factors of success for current retailing companies. At the same time, new technologies serve the retailer as a new distribution channel. Although classical remain dominant in the market, emerging e-retailers are currently also prospering and are starting to compete with classic retailers. As a result, that customers today connect classic and online shopping, are multi-channel retailers who use both physical and online product distribution.

Outlet centers represent one of the most progressive business areas of today. Expectations for individual participants on the market of textile products are very high and the overall atmosphere in this sector is characterized by a high level of competitive business. The concept of outlet centers is an ideal tool for acquiring new customers, as it makes full use of price sensitivity as its primary competitive tool. While the concept of outlet centers may be seen as a downward trend in the US market, in the European market environment and in emerging markets, this concept is in the phase of expansion. This matter is supported not only by the global economic situation, but also by sharing common preferences in fashion and dressing up. The unification of customer tastes makes it possible to extend the concept of outlet centers to the markets of the Middle East, South East Asia and Australia.

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Employment Generated by Domestic Part of Internal Tourism Consumption[1]

Anna Michálková[2] – Martina Naňáková[3]

Abstract

Tourism industries produce a significant share of employment of the Slovak economy concerned various differences within its partial industries. The aim of the paper is to assess the impact of tourism on employment in partial tourism characteristic industries of the Slovak Republic achieved as a result of domestic part of Internal Tourism Consumption. The basis for the analysis is the outcomes of the Tourism Satellite Accounts of the Slovak Republic. The result of the paper shows us that tourism industries differs by their characteristics, which is reflected on different abilities to create jobs and achieve a performance measured by Internal Tourism Consumption per a unit of employment. In 2005-2016 Food and Beverage Serving Activities achieved averagely the highest value of the employment generated by domestic part of Internal Tourism Consumption and in contrast, it achieved the lowest values on average Internal Tourism Consumption per a unit of employment.

Key words

domestic tourism, tourism employment, internal tourism consumption, tourism satellite accounts

JEL Classification: E21, E24, L83

Introduction

The constant positive development of tourism in Slovakia and worldwide is accompanied by the development of tourism performance measurement, which has begun in the 1960s. Ottava Conference in 1991 has been an important milestone in defining and measuring tourism, where a decision was taken to unify tourism statistics. The methodology of the Tourism Satellite Accounts (TSA) was developed by UNWTO, OECD, Eurostat and UNSD´s cooperating institutions, and it has been constantly evolving ever since. The newest version of the methodology has not been released since 2008. In the past, tourism statistics authors were limited to non-financial indicators, such as the number of visitors and their overnight stays, but with the new methodology of the Tourism Satellite Accounts (TSA), a qualitative type of data for measuring the performance of the tourism sector is required (Houška, 2013).

According to Tindeche et al. (2018) forecast for tourism development worldwide is optimistic. Domestic tourism is a key driver of the tourism sector globally, accounting for 73% of total Travel & Tourism spending in 2017 (WTTC, 2018). In last 10 years, regarding time series data – Domestic and outbound tourism of residents in Slovak Republic (SOSR, 2018), Slovak citizens travel almost twice more often within Slovakia than abroad. In 2017 Slovak citizens made 7,1 million trips with an overnight stay within Slovakia and 3,9 million trips with overnight stay in abroad.

According to WTTC (2018) domestic tourism is used by the governments as a tool to eliminate local poverty, generate employment and economic growth. Domestic tourism helps relocate seasonality between the regions, mostly to the rural regions, where incoming tourists usually do not

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[1] I-19-102-00 Modern stochastic methods applied in tourism in Slovak Republic

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arrive, and also creates their employment opportunities. Strong domestic tourism may also help a country to overcome economic shocks and demand fluctuations that may occur when crises affect external source markets.

Development of domestic tourism is one of the supportive activities to achieve the strategical aim of Slovak tourism mentioned in a strategical document "Development strategy for tourism in Slovakia 2020" by the Ministry of Transport and Construction of the Slovak Republic. One of the main goals of the strategy is the creation of new jobs in the tourism sector in Slovakia.

According to WTTC (2018) political activities towards tourism development might be divided into sections which are price related, marketing-related and direct incentives and others. In Slovakia, government support is mostly represented by marketing activities. Tourism promotion in media is provided by SlovakiaTravel with the slogan "Travel in Slovakia – Good Idea", which is focused on domestic and also incoming tourism. This initiative is supported f.e. by domestic tourism calendar published on the webpage of the Ministry of Transport and Construction of the Slovak Republic.

Regional tourism development activities are independently provided by Destination Management Organizations (DMOs), Local or Regional Tourism Organizations (LTO and RTO), Tourism Clusters, etc. According to Michalkova and Furova (2017), the most significant activity of Local Tourism Organizations and Regional Tourism Organizations is marketing and promotion to assess the performance level in the destination. These organizations enable to support the utilization of complex services or a combination of services in a tourism destination.

Direct incentives may be explained as resources given to organizations for the support of domestic tourism that will develop products and services or directly given to the residents themselves. The most fruitful year for the support of domestic tourism by incentives was 2018, which has been provided by the government of Slovakia. Three main activities were carried out which should enhance domestic tourism within its residents:

a) *There has been issued amendatory Act No. 347/2018 to the Tourism Promotion Act No. 91/2010 which supports regional tourism activities. This act modifies the principle of receiving financial support for Local or Regional Tourism Organizations.*

This initiative defines criteria about the minimum number of nights spent in tourist accommodation establishments which are needed for financial support for the Local Tourism Organizations or Regional Tourism Organizations and therefore there is an economic constraint to promote the destination to get as much financial support as possible. This financial support may be used primarily for the development of regional products or promotion of the region.

b) *According to the amendment to the Labor Code, there are holiday vouchers which support domestic tourism by employer´s financial contribution to an employee who spends a vacation alone or with his or her family member at domestic recreational facilities.*

This initiative may become the most powerful action towards the development of domestic tourism, or it can just affect people who travel usually within Slovakia, but they can spend less money because of the employers' financial contribution. So at the end of the day, there might not be any economic influence towards tourism expenditure, however, authors may evaluate the influence of this action in the future with relevant data.

c) *According to Act No. 222/2004 Coll. on tax value added, accommodation tax is reduced from 20% to 10%.*

Regarding this initiative, an accommodation establishment may open new job positions or use the resources for marketing and promotion activities or development of their product.

Another government action which might help to develop domestic tourism are limited places in trains provided for free. Since 2015 students less than 26 years and seniors (62+ years old) can travel within Slovakia for free.

All above-mentioned initiatives may reinforce domestic travels in Slovakia, therefore there can be expected an increase of domestic expenditures which directly affect internal tourism consumption and mutually the growth of tourism direct gross value added (TDGVA) and gross domestic product in tourism (GDP) along with the growth of tourism employment.

In Tourism Satellite Accounts is tourism employment compiled as a sum of employment in partial tourism industries naturally without the distinction of services provided for domestic or incoming tourists. Internal tourism consumption (ITC) is a sum of tourism expenditures made by incoming and domestic visitors and a sum of other components of internal tourism consumption (other components of ITC) such as imputed rents, social natural transfers of government or non-profit institutions subsidies (TSA SR, 2005-2016).

According to UN DESA (2008), employment in tourism industries refers to all jobs in characteristic tourism industries and also non-specific tourism industries in all establishments which interact with tourists during his or her stay in the destination. Gúčik (2011) stated that tourism does not influence only direct employment but also due to the multiplier effect it creates indirect employment in the tourism sector. Fodranová et al. (2015) complete the definition by the statement that total tourism employment is a sum of direct, indirect and induced employment.

Tourism creates many job opportunities in its partial industries. According to Aynalem et al. (2016), skilled and trained human resources is a significant element in the success of any tourism development. However, tourism industries are mostly characterized as unstable, seasonal, with low status, long working hours and minimum salary. Nowadays, in the time of sustainable development of tourism demand, tourism faces challenges in terms of low salaries, low working conditions, high labour fluctuation (Baum & Nguyen, 2019). According to Kusugal (2014), tourism industries brings the solutions for many challenges like unemployment, creating regional socio-political environment or underdevelopment. According to Kadriu (2016) job creation in tourism industries can be much higher due to its indirect and induced effects and tourism benefits can occur directly, indirectly, and induced due to different types of tourism.

The paperwork aims to assess the impact of tourism on employment in partial tourism characteristic industries of the Slovak Republic achieved as a result of the domestic part of Internal Tourism Consumption. It can be used as an analysis of development of domestic tourism in Slovakia. There are examined impacts of Slovak domestic tourism, more precisely, it will be provided deeper inner analysis of tourism characteristic industries which affect domestic part of internal tourism consumption (ITC) and therefore tourism employment. Due to the dependence on data from TSA SR (2005-2016) and its data availability authors will take into consideration time series 2005-2016. According to TSA SR (2005-2016) partial tourism characteristic industries are: 1 – accommodation activities, 2 – food and beverage serving activities, 3-6 passenger transport services, 7 – transport equipment rental, 8 – travel agencies and other reservation services activities, 9 – cultural activities and 10 – sports and recreational activities.

1 Methodology

For the use of this paper, authors will apply full-time equivalent employment (FTE), tourism expenditure – domestic and incoming, internal tourism consumption and further processing available from Tourism Satellite Accounts of the Slovak Republic (TSA SR, 2005-2016).

An employee working in tourism usually serves to domestic and incoming tourists, as well as non-tourists. Therefore, authors are not able to process the data from existing sources where authors could distinguish domestic and incoming tourism employment, therefore following assumptions and calculation were researched by this paper. Authors assume and set the condition for further processing, that imputed rents, social natural transfers of government or non-profit institutions subsidies as a direct incentive are a part of domestic tourism expenditures. In this case, internal tourism consumption consists of domestic tourism expenditures together with other components of internal tourism consumption and incoming tourism expenditures.

For the need of applying share of domestic tourism authors proposed calculation of domestic part of internal tourism consumption as a share of domestic expenditure on internal tourism consumption (ITC) which was applied according to formula 1 and results are presented in table 1.

$$share\ of\ \ DITC = \frac{domestic\ expenditures + other\ components\ of\ ITC}{ITC} \qquad (1)$$

Note: DITC=domestic part of internal tourism consumption, ITC=internal tourism consumption

Share of domestic part of internal tourism consumptions (share of DITC) will be used for quantification of an employment generated by domestic internal tourism consumption (EMP DITC).

$$EMP\ DITC = share\ of\ DITC\ x\ total\ tourism\ employment \qquad (2)$$

Note: EMP DITC= employment generated by domestic internal tourism consumption

In the following step, calculation of employment generated by domestic internal tourism consumption (EMP DITC) according to formula 2 will be used for a numerical expression of a consumption per a unit of employment which is generated in domestic tourism and by other components of internal tourism consumption which are included in internal tourism consumption.

For the purpose of the paper and due to the current lack of sources for more detailed information about domestic tourism indicators authors raised a research question: *How domestic tourism influences the employment generated by the domestic part of internal tourism consumption?* Authors will define an annual numerical expression of the domestic part of internal tourism consumption per unit of employment.

2 Results and Discussion

Regarding TSA SR (2005-2016), within the years 2005-2016 employment in tourism characteristic industries reaches its maximum in 2016, which is expressed by 144 677 full-time equivalent jobs (FTE jobs). It represents 6% of total employment in the Slovak economy. Considering tourism employment as a sum of employment in characteristic industries and specific industries related to tourism, it represents 16% of total employment in the Slovak economy (TSA SR, 2005-2016). In 2016, out of 90 categories of NACE Rev2. activities, employment in tourism characteristic industries reached 11th place. The similar number of total employment reached following NACE categories: O – public administration and defense, H – transportation and storage, G46 – wholesale trade (except motor vehicles and motorcycles), Q – human health and social work activities (Database – Employment and population, Eurostat, 2019). Therefore, authors can conclude that tourism employment has a significant role in employment in the Slovak economy. However, what is the part of domestic tourism which generates tourism employment in Slovakia?

Tab.1 Share of domestic part of internal tourism consumption (DITC) in 2005-2016

Tourism industries	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1-10	0,57	0,55	0,56	0,56	0,64	0,58	0,57	0,58	0,47	0,54	0,58	0,60
1	0,44	0,44	0,41	0,43	0,56	0,51	0,50	0,52	0,40	0,52	0,48	0,50
2	0,37	0,37	0,36	0,36	0,43	0,36	0,35	0,36	0,28	0,25	0,25	0,25
3-6	0,57	0,57	0,63	0,60	0,70	0,60	0,59	0,55	0,34	0,40	0,62	0,66
7	0,73	0,73	0,72	0,71	0,83	0,70	0,69	0,72	0,63	0,72	0,71	0,73
8	0,94	0,94	0,90	0,92	0,88	0,93	0,94	0,95	0,96	0,96	0,96	0,94
9	0,94	0,92	0,93	0,93	0,96	0,95	0,94	0,95	0,96	0,97	0,96	0,96
10	0,86	0,80	0,79	0,80	0,85	0,81	0,79	0,82	0,80	0,80	0,78	0,79

Source: TSA SR (2005-2016), calculations-own processing

Note: 1 – accommodation activities, 2 – food and beverage serving activities, 3 –6 passenger transport services, 7 – transport equipment rental, 8 – travel agencies and other reservation services activities, 9 – cultural activities, 10 – sports and recreational activities.

For identifying the domestic part of internal tourism consumption authors applied the formula 1 and calculated share of the domestic part of internal tourism consumptions (DITC) for characteristic tourism industries mentioned in TSA for available years 2005-2016. From the table 1, as it comes from the nature of domestic tourism the highest share of internal tourism consumption achieved industry 8 – travel agencies and other reservation services and 9 – cultural activities. The lowest share belonged to 2 – food and beverage serving activities. Regarding partial industries 3-6 passenger transport services, 9 – cultural activities and 10 – sports and recreational activities, there is a significant share of other components of internal tourism consumption represented by social natural transfers of government or non-profit institutions subsidies. This part may be also called as a direct incentive coming from the government for the support of tourism development.

Applying the share of internal tourism consumptions (DITC) on total tourism employment from TSA, authors can interpret it as employment generated by the domestic part of internal tourism consumption and other components of internal tourism consumption. According to table 2, the number of 87 993 employees working in characteristic tourism industries were required for the creation of domestic part of internal tourism consumption in 2016. The most of them come from partial tourism industries: 2 – food and beverage serving services, 3-6 – passenger transport services and 10 – sports and recreational services. The less employment was needed in partial tourism industry 7 – transport equipment rental services. The biggest positive change between 2005 and 2016 is recorded for industry 2 – food and beverage serving services.

Tab. 2 Employment generated by domestic part of internal tourism consumption and other compnents internal consumption in 2005-2016, in FTE jobs

Tourism industries	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1-10	61 695	57 542	62 019	61 325	77 349	66 412	71 342	76 387	63 831	77 708	86 524	87 993
1	6 371	6 319	6 268	6 889	7 721	6 567	7 455	7 208	5 777	8 276	8 042	8 644

2	13 252	14 758	15 771	15 929	24 614	18 623	20 126	23 269	18 764	18 159	18 096	17 851
3-6	18 081	14 062	15 383	14 439	15 943	14 192	14 692	13 704	8 193	10 294	16 080	17 628
7	1 105	1 035	1 049	1 047	1 167	976	647	1 075	1 268	1 014	925	885
8	2 389	2 151	2 590	2 523	2 982	3 103	2 947	2 949	3 219	3 292	3 084	3 061
9	8 998	8 823	9 019	8 040	8 803	8 620	9 450	8 547	8 647	8 941	9 119	9 389
10	11 074	9 988	10 146	10 748	11 293	10 393	11 139	12 501	11 925	13 774	13 951	14 353

Source: TSA SR (2005-2016), calculations-own processing
Note: 1 – accommodation activities, 2 – food and beverage serving activities, 3 –6 passenger transport services, 7 – transport equipment rental, 8 – travel agencies and other reservation services activities, 9 – cultural activities, 10 – sports and recreational activities.

Calculations in table 3 represent how much domestic part of internal tourism consumption is allotted to a unit of employment. In 2016, a unit of employment in industries 1-10 generated 23 902EUR of the domestic part of internal tourism consumption, which is almost 100EUR per working day, for example in partial tourism industry 1 – accommodation activities, it represents 197EUR per a working day. The most efficient contribution was provided by the industry 7 – transport equipment rental, which is mainly the result of the lowest employment generated for this industry, it contributed to the creation of domestic part of internal tourism consumption by 317EUR per working day. The lowest contribution to a daily creation of domestic part of internal tourism consumption belongs to industry 2 – food and beverage serving services, which is related to the highest employment and relatively low domestic expenditures which is the major part of domestic internal tourism consumption.

Tab. 3 Annual domestic internal tourism consumption and other components internal tourism consumption per a unit of employment in 2005-2016, in EUR

Tourism industries	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1-10	22 039	23 588	25 794	27 019	19 295	20 591	20 214	21 423	20 042	17 848	21 788	23 902
1	39 970	43 628	43 118	44 254	40 166	41 649	36 268	43 180	42 154	35 988	39 903	47 233
2	15 158	14 931	15 590	16 058	10 348	11 784	11 526	10 079	8 836	6 875	8 414	9 454
3-6	21 521	27 730	34 208	38 526	28 650	27 901	30 441	34 920	35 161	30 323	42 693	43 899
7	41 649	55 228	56 016	52 154	51 448	40 718	65 454	51 121	27 247	46 947	62 757	76 115
8	28 328	34 957	29 894	31 075	16 447	27 994	32 978	31 773	34 363	38 817	43 630	44 290
9	15 489	14 319	18 492	21 389	18 010	20 061	18 280	26 058	27 864	31 556	34 659	33 768
10	23 659	21 294	25 077	21 871	17 994	17 222	16 182	19 254	16 417	14 124	15 548	16 182

Source: TSA SR (2005-2016), calculations-own processing
Note: 1 – accommodation activities, 2 – food and beverage serving activities, 3 –6 passenger transport services, 7 – transport equipment rental, 8 – travel agencies and other reservation services activities, 9 – cultural activities, 10 – sports and recreational activities.

One of the highest values of annual domestic part of internal tourism consumption and other components of internal tourism consumption per a unit of employment belongs to partial tourism industries 3–6 passenger transport services (table 3) and also one of the highest value of the employment generated by domestic part of internal tourism consumption and other components of internal tourism consumption. According to TSA SR 2005-2016, authors analyzed that there has been an increase of the value of other components of internal tourism consumption from 0% (in

2014) to 57 % (in 2016) within the partial tourism industries 3-6 – passenger transport services. Therefore, we can assume that the biggest part of the employment in industries 3-6 – passenger transport services generated by internal tourism consumption was provided by government intervention for tourism development as a part of direct incentives.

Authors summarize that the biggest economic contribution to domestic part of internal tourism consumption generated by an employee represent the partial tourism industries 7 – transport equipment rental and 1 – accommodation activities, 8 – travel agencies and other reservation services activities and 3-6 passenger transport services which comes from the nature of tourism main needs, which is transport, accommodation and consequently refreshments, leisure and activities in the destination.

From the social point of view, the biggest contribution to the employment generated by domestic part of internal tourism consumption belongs to partial tourism industries: 2 – food and beverage serving activities, 3–6 passenger transport services and 10 – sports and recreational activities.

In 2016, according to TSA SR (2005-2016), there were 14,5 mil. domestic trips made by Slovak citizens within Slovakia, which were served according to authors calculations by 87 993 employers working in tourism characteristic industries. Those 14,5 mil. trips generated 2,1 mld. EUR of the domestic part of internal tourism consumption (TSA SR, 2005-2016). Authors can assume according to their calculations that 100 trips generated annually 0,06 jobs in tourism characteristic industries in 2016. If we consider that 2,1 mld. EUR of the domestic part of internal tourism consumption generates 87 993 employers in 2016 then each 1000 EUR spent in domestic travel generated annually averagely 0,04 jobs in tourism characteristic industries.

Conclusion

To answer the research question: *How domestic part of internal tourism consumption or domestic tourism influence tourism employment?* authors provided an innovative approach for expression of employment in tourism characteristic industries generated by the domestic part of internal tourism consumption. This employment is necessary to express in connection to the focus of national authorities into the support of domestic tourism and provide a numerical expression of domestic tourism employment.

Support of domestic tourism determines goals for the development of tourism awareness within Slovakia. Domestic tourism might become a strong base for the Slovak economy in a time of economic crisis when other industries, which are dependent on financial sources, may be endangered, as in the case, in countries such as Portugal, Spain, Croatia or Greece. With the support of the initiative of the Ministry of Transport and Construction of the Slovak Republic, there is a huge potential to raise the number of domestic travels and assume growth of tourism expenditures and consumption which may affect tourism employment. Naturally, government support of domestic tourism is mostly focused on industries 1 – accommodation activities and, 3-6 – passenger transport services, which are primary services when it comes to tourism customer satisfaction and interaction with tourists. Despite the low efficiency in some labor-intensive industries in tourism, for example in partial tourism characteristic industries 1 – accommodation activities or 2 – food and beverage serving activities, they contribute to the creation of new jobs in the economy, moreover, in regions. Those partial tourism industries help fulfil the objectives of regional policy and its employment is characterized by the significant share of low qualified human resources, however, this employment represents the savings in labor costs in the implementation of the of social policy and employment policy.

For the future research of this topic, it would be plausible to focus on the evaluation of the innovative government activities mentioned above such as holiday vouchers and lower VAT in accommodation establishments and consequently the influence on the creation of new jobs in the tourism sector.

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Containerization in the Freight Transport and the Logistics as a Phenomenon of the Impact on the Transaction Costs Dynamics in Export Price

Marek Minárik[1]

Abstract

The objective of the article is to evaluate the importance of the containerization in the logistics and to determine its impact on the size and the structure of the transaction costs in export price. We use the managerial model of the hypothetical export price structure based on the Transaction Costs Matrix. In this sense, we are based on the theories of Coase, Williamson and Kindleberger whose economic research about the costs of contract signing (according to Coase, they are the largest costs for any enterprise) and the transport costs incorporating into pricing are the framework of our investigation. We move in spheres like intermodality and multimodality, with the emphasis on a well-done international buying and selling contracts. According to the Williamson's idea of not focusing solely on saving the transaction costs, the result of the study is a partial replacement of the costs of a negative nature with the costs of a positive nature.

Key words

Containerization, Multimodality, Transaction costs in export price, Contracts.

JEL Classification: L91, R40, F60

Introduction

The presented study is based on the idea of the TEAT model – Transaction costs, Export price, Added value, Transportation (Minárik 2014), which comes out from the model of the hypothetical structure of export exchange costs in export prices. The main idea is trying to quantify the contribution of the export exchange cost items to the total export price of 1 TEU container. According to the model of the hypothetical structure of export exchange costs in export prices we consider some of the cost items the ones with a positive nature and the others with a negative nature. We focus on the cost structure forming the price and not on the the creation and the importance of cycles of margins.

The framework of this research study are export exchange operations, legally based on the international contracts of sale and reflecting the international market environment the best (Fuchs, 1999).

The first central problem of this research was to express the mutual dependence between the countries of export and import when overcoming the geographical and institutional space and which is the role of transport and logistics. In this context, it is necessary to mention the Kindleberger´s neoclassical synthesis about the impact of the transport on export and import and a large research of D. Hummels, in particular, his work about the relativity of transport costs within the INCOTERMS clauses of FOB and CIF (Radelec & Sachs, 1998) or about the relativity of time, speed and perceived utility of the transport and logistics for the owner of goods, which enter into the international trade transactions (Hummels, 2001, 2007).

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The globalization in progress has created the need of a new way of how to overcome the geographical and institutional space in the international trade and a new export exchange cost´s structure in the world of volatility, uncertainty, complexity and ambiguity (VUCA). The structure of the export price has to quantify not only the costs of delivery (Doing Business (DB) 2015 and Global Competitiveness Index (GCI) 2012-2013, the finance costs and the costs of crossing borders, rather than a big amount of other transaction costs of a positive nature (Coase, 1937). The complex of these costs implies the term of price wedge in export price (Brakman et al., 2009; Findlay & O´Rourke, 2001; Hansenová & Cempírek, 2013).

The second central problem was the creation of a different cost structure of export prices, which would reflect more the importance of the VUCA world and the formation of new economies. In the centre of the hypothetical structure of export price, it was placed the new added value, which could reflect well the sustainable competitiveness of the whole sectors and economy. There were also theories, which have had a fundamental impact on the creation of other cost structure in export price, like Porter´s theories of competitiveness (2011) and especially transaction costs theories according to Coase (1937, 1988) and Williamson (1985). We also considered the importance of Coase´s and Williamson´s (1985) transaction schemes: the value of transfer of ownership of negotiable goods, bounded rationality, opportunism and asset specificity.

1 Methodology

The objective of the article is to evaluate the importance of the containerization in the logistics and to determine its impact on the size and the structure of the transaction costs in export price. To achieve the objective of this study, we had to verify the hypotheses we had formed and to evaluate the importance of the containerization in terms of the export costs of 1 TEU container obtained from the Doing Business (DB) 2015 (the latest data available) reports that contain the data for the countries in the analysis. For the purpose of this research, we have created a database for the 133 states in terms of the quality of the business environment determined by selected indexes of the Global Competitiveness Index (GCI) 2012-2013. We have selected 8 indexes such as the extent of marketing, soundness of banks, business costs of crime and violence, firm-level technology absorption, extent of staff training, ethical behavior of firms, quality of overall infrastructure and the burden of custom procedures completed by the average export costs of 1 TEU container from the report of Doing Business 2015. We assume that there has to by a time shift of at least 1 year between the indicators from GCI 2012-2013 and data for the costs to export of 1 TEU container from DB 2015, because the improved quality of business environment can reflect on the costs with a time delay of at least 1 year. The number of selected countries is 133, the number that is lower than the data available in GCI 2012-2013. This number was considerably adjusted according to the data available in the database of the DB 2015, so there are the same countries in both reports (GCI 2012-2013 and DB 2015) .

The Hypothesis H: The quality of the business environment given by the selected indexes from the GCI 2012-2013 affects the costs of exporting 1 TEU container expressed in USD for each country out of the 133 in 2015.

To verify H we used regression analysis based on the data: costs to export 1 TEU container in USD from the DB report 2015 (the latest data available) and the quality of the business environment determined by the selected indexes from the GCI 2012-2013. For the purpose of the research on the importance of containerization, we used the ideas of the TEAT model (Minárik, 2014) based on the hypothetical structure of the export price and the Transaction Costs Matrix. It divides the cost items that form part of the total export costs of 1 TEU container into two groups by their nature. On one hand, we are talking about costs of a positive nature (contract and marketing costs, knowledge costs, costs of information, and ecology costs) and, on the other hand, costs of a negative nature (financial costs, costs of risks, unethical costs and administrative costs). The costs of a positive nature have a multiple use and they can be seen as investments. The costs of a negative nature have a one single use and the can be seen as expenditures. We have developed this idea and defined these costs items as indexes representing the level of quality of the business environment as it was based on the GCI data for 2012-2013 from the World Economic Forum. The selected indexes are always determined with a number from the interval <0; 7>. We transform the interval to <0; 100> with the purpose to express the number of cases when the indexes are applied in the rage of 0 to 100 % - the percentage way of expression. Those indexes we considered to have a positive nature were transformed from the numbers from the interval <0; 7> to the interval <0; 100> using the following equation: **(i x 100) / 7 = P**, where *i* is the index from GCI reports and the *P* is the resulting value of the index. The resulting *P* is determined from the interval <0; 100> and expresses the number of cases out of 100 for which the index is applied and **contributes to the export price decrease of 1 TEU container.** These were indexes: extent of marketing, firm-level technology absorption, extent of staff training and the quality of overall infrastructure.

We named the remaining indexes as those with a negative nature and we processed them through the transformation using the following equation: **[(7 – i) x 100] / 7 = P**, where *i* is the index from GCI reports and the *P* is the resulting value of the index. The resulting *P* is also determined from the interval <0; 100> and expresses the number of cases out of 100 for which the index is applied and **contributes to the export price increase of 1 TEU container.** These were indexes: soundness of banks, business costs of crime and violence, ethical behavior of firms and burden of custom procedures. When we summed all of the indexes for each of the analyzed countries, we obtained the resulting values varying from around 334,3 to around 448,6.

In the following step of the analysis we tried to form a model of these 8 selected external factors (indexes) with their importance expressed in the percentage values for each analyzed country for the total export price of 1 TEU container. 100 % is the sum of all the 8 factors for each of them (of the analyzed countries). To obtain the sum of all 8 factors equal to 100 % we modified the values from the previous part of the investigation calculating the constant values as ratios of the average value of all the sums for each country and the exact values of the sums for each country. The last step was to modify the values of all of the external factors for all countries multiplying their exact values with the constant values for each country.

The resulting formula is given by the table 1, e.g. for Switzerland. The numbers in the following table 1 indicate the relative importance of the factors for the total export price of 1 TEU container exported from Switzerland to its most important partner countries. The database contains the data for 133 countries (GCI 2012-2013) including Slovakia and Czech Republic.

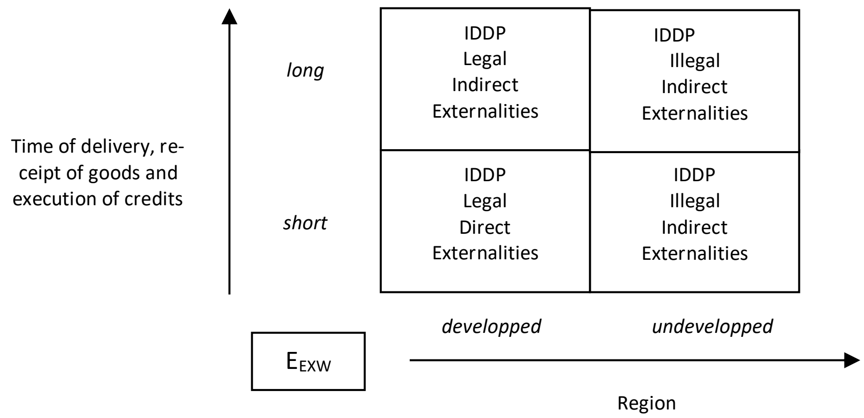
Tab. 1 The model of all of the external factors from GCI 2012-2013 for Switzerland

A	B	C	D	E	F	G	H	I	J
Country/ 2012-2013	**Extent of marketing (%)**	**Soundness of banks (%)**	**Business co-sts of crime and violence (%)**	**Firm level technology absorption (%)**	**Extent of staff trai-ning (%)**	**Ethical be-havior of firms (%)**	**Quality of overal infras-tructure (%)**	**Burden of custom pro-cedures (%)**	**The sum of B to I**
Switzerland	20,13888889	3,819444444	3,125	21,52777778	19,44444	2,08333333	22,91666667	6,944444444	100 %

Source: own processing based on the data of GCI 2017-2018 and 2012-2013

The previous part of the methodology is based on the tool of a managerial model of the hypothetical export price structure based on the Transaction Costs Matrix.

Fig. 1 Transaction Costs Matrix in exports and imports



Source: H. Hansenová et all, 2012, 82-96

Fig. 2 The managerial model of the hypothetical export price structure

FACTORY PRICE / PROCUREMENT PRICE

LEGAL DIRECT TRANSACTION COSTS
Costs of making and controlling contracts
Delivery costs according to the Incoterms
Financial costs
Risk costs
Costs of information
Costs of knowledge
Costs of ethics
Environmental costs
COSTS OF EXTERNAL ADMINISTRATION
ILLEGAL TRANSACTION COSTS
EXTERNALITIES

LEGAL INDIRECT TRANSACTION COSTS: TIME COSTS OF OWNERSHIP TRANSFER OF GOODS BY ROAD

TOTAL COSTS OF EXPORTER
PROFIT (MARGIN)

Source: H. Hansenová et all, 2012, 82-96

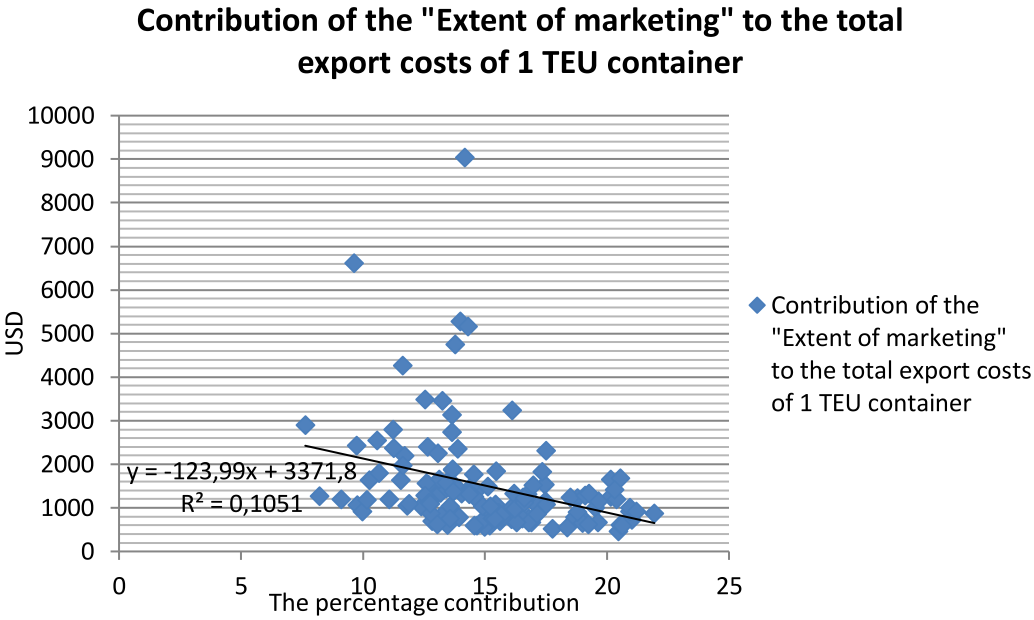
The Matrix is based on the idea of the managerial model of hypothetical export price structure which has the form in the previous figure 2.

The Transaction Costs Matrix, apart from direct legal costs, also includes indirect and illegal costs and externalities: time, bribes, conflicts (forensic processes), social responsibility or speed of change, too. Its main benefit is that the traditional and formalized value measurement methods currently in use do not outweigh the actual costs that the final consumer has to bear.

2 Results and Discussion

The verification of **the hypothesis H1:** The quality of the business environment given by the selected indexes (factors) from the GCI 2012-2013 affect the Doing business (DB) costs of exporting 1 TEU container expressed in USD for each country out of the 133 (in 2015).

Graph 1 The percentage contribution of the factor of extent of marketing to the total export costs of 1 TEU container in USD (GCI 2012-2013, DB 2015)



Source: own processing based on the data of GCI 2012-2013 and DB 2015 (the latest data available)

We find out whether there is a dependency between the factor of the extent of marketing and the average costs of exporting 1 TEU container. The dependent variable Y is the export costs of 1 TEU container and the independent variable X is the extent of marketing expressed as a percentage contribution to the total costs of exporting 1 TEU container.

In our case, we assume that the greater the importance of the extent of marketing factor, the lower the costs of exporting 1 TEU container (due to the positive nature of the factor according to the model of the hypothetical structure of the export costs in export price and the TEAT model). The idea is based on the fact that in the business operations and especially in its early stages, the scope of the use of marketing is critical for attracting new customers. It is more expensive to acquire new customers than to keep existing ones. Our output of regression and correlation analysis consists of three parts: the first part is the output of the correlation analysis the second part is the ANOVA output, where we test the suitability of the used model. The third part of the output will start the interpretation of the results.

The regression function has a general shape of y = b0 + b1.x, our regression function has the following shape: **y = 3371,8 – 123,99 x**. The value of Intercept – b0 = 3371,8 says the following: if the extent of marketing was 0, the costs of exporting 1 TEU container would be equal to 3371,80 USD. The value X of variable 1, b1 = -123,99 says, if the factor of the extent of marketing increases by one unit (1 % point), the export costs of 1 TEU container would drop by 123,99 USD. P-value for Intercept is $2{,}08 \cdot 10^{-10} < 0{,}1$. This suggests that Intercept is statistically significant. The P-value for the regression coefficient is 0,000141 < 0,1, which also confirms the significance of this coefficient. In addition to this information, this part of the output table also offers a 90 % confidence interval for b0 and b1. If the extent of marketing is increased by 1 % point, with 90 % probability the export costs of 1 TEU container will be reduced approximately from 71 USD to 176 USD.

The Multiple R value is equal to 0,324. This value, the closer is to 1, the stronger is the dependence. In our example, this is a lower degree of dependence between the extent of marketing factor and the costs of exporting 1 TEU container. The value of R Square is the value of the coefficient of determination, its value reaches 0,1051. This value indicates that the selected regression line explains the variability in the export costs of 1 TEU container to about 10,51 %, the other represents unexplained variability, the impact of random factors and other unspecified effects. Adjusted R-square also takes into account the number of estimated parameters and the number of measurements. The value of Standard Error should be as small as possible. The analysis of the dependence between the extent of marketing factor and the costs of exporting 1TEU container was carried out in 133 countries of the world. In the ANOVA section, we are testing the zero hypothesis H0A.

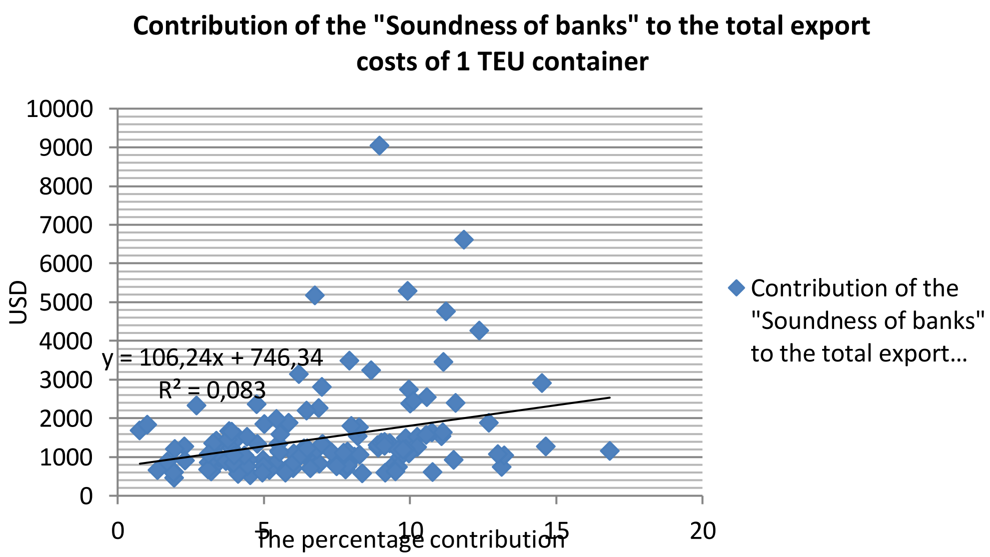
Regression Statistics								
Multiple R	0,324212							
R Square	0,105114							
Adjusted R Square	0,098282							
Standard Error	1130,791							
Observations	133							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	19675575	1967557	15,3873	0,000141			
Residual	131	1,68E+08	1278689					
Total	132	1,87E+08						
	Coefficients	*Standard*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 90,0%*	*Upper 90,0%*
Intercept	3371,778	489,1529	6,89309	2,08E-10	2404,117	4339,439	2561,463	4182,093
Extent of marketing)	-123,989	31,60841	-	0,000141	-186,518	-61,4602	-176,351	-71,6277

The verification of **the hypothesis H0A**: the model we chose to explain the dependency (in our case a linear regression line) is not appropriate.

The F test is used to evaluate this claim. The Significance F = 0,000141 < 0,1 (α - level of significance), **we do not confirm the hypothesis H0A**, we confirm the hypothesis H1A which means that the model has been selected correctly.

Due to limited article lenght, we made the same analysis for the data from GCI 2012-2013 and DB 2015 of some of the indicators from the model of the hypothetical export exchange costs in export price (soundness of banks and extent of staff training) implementing the same process to depict how this price structure could work.

Graph 2 The percentage contribution of the factor of soundness of banks to the total export costs of 1 TEU container in USD (GCI 2012-2013, DB 2015)



Source: own processing based on the data of GCI 2012-2013 and DB 2015 (the latest data available)

We find out whether there is a dependency between the factor of the soundness of banks and the average costs of exporting 1 TEU container. The dependent variable Y is the export costs of 1 TEU container and the independent variable X is the soundness of banks expressed as a percentage contribution to the total costs of exporting 1 TEU container.

In general, the quality of the banking sector affects the availability and costs of financing business activities (The indicator of soundness of banks from GCI speaks of the quality of the banking sector, with the higher quality of the sector, finance costs are lower and vice versa). It follows from GCI 2012-2013 that the higher the value of the indicator, the lower likely the application of the indicator, that is the reason why we recalculate the indicator to get the one of the poor quality of the banking sector, which presupposes the existence of financial costs.

The regression function has the following shape: **y = 746,34 + 106,24 x**. The value of Intercept – b0 = 746,34 says the following: if the soundness of banks was 0, the costs of exporting 1 TEU container would be equal to 106,24 USD. The value X of variable 1, b1 = 106,24 says, if the factor of the soundness of banks increases by one unit (1 % point), the export costs of 1 TEU container would increase by 106,24 USD. P-value for Intercept is 0,002132 < 0,1. This suggests that Intercept is statistically significant. The P-value for the regression coefficient is 0,000771 < 0,1, which also confirms the significance of this coefficient. In addition to this information, this part of the output table also offers a 90 % confidence interval for b0 and b1. If the soundness of banks is increased by 1 % point, with 90 % probability the export costs of 1 TEU container will be augmented approximately from 55 USD to 157 USD.

The Multiple R value is equal to 0,288. This value means a lower degree of dependence between the soundness of banks factor and the costs of exporting 1 TEU container. The value of R Square is the value of the coefficient of determination, its value reaches 0,083. This value indicates that the selected regression line explains the variability in the export costs of 1 TEU container to about 8,3 %, the other represents unexplained variability, the impact of random factors and other unspecified effects. Adjusted R-square also takes into account the number of estimated parameters and the number of measurements. The analysis of the dependence between the soundness of banks factor and the costs of exporting 1TEU container was carried out in 133 countries of the world. In the ANOVA section, we are testing the zero hypothesis H0B.

Regression Statistics	
Multiple R	0,28812
R Square	0,083013
Adjusted R Square	0,076013
Standard Error	1144,67
Observations	133

ANOVA

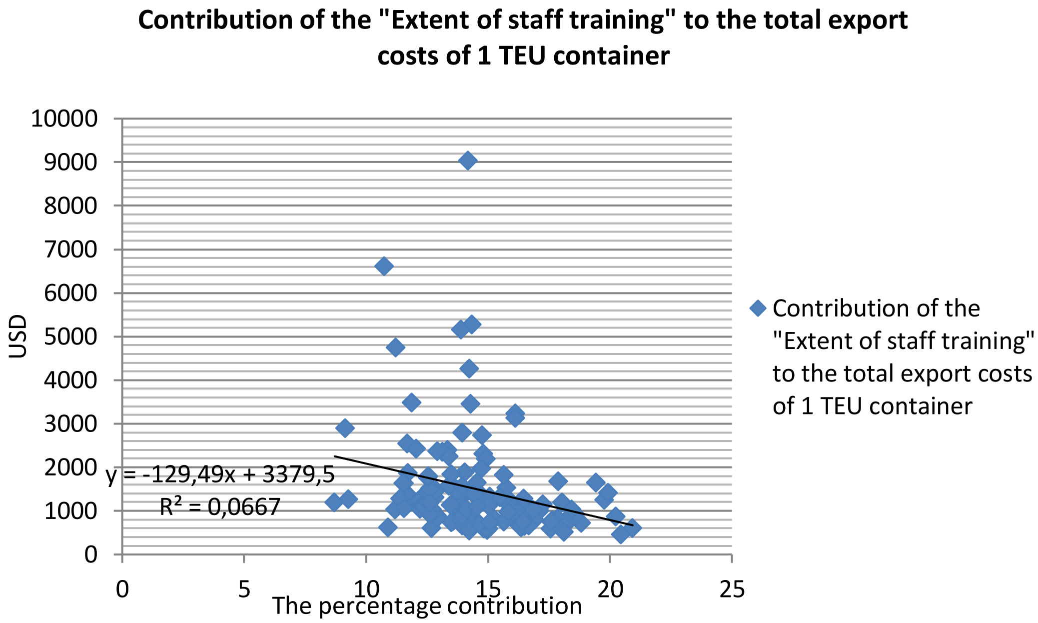
	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	15538678	15538678	11,85916	0,000771
Residual	131	1,72E+08	1310268		
Total	132	1,87E+08			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 90,0%*	*Upper 90,0%*
Intercept	746,34	238,1773	3,133548	0,002132	275,1686	1217,512	351,783	1140,897
Soundness of banks	106,2353	30,84907	3,443713	0,000771	45,20851	167,2622	55,13173	157,3389

The verification of **the hypothesis H0B**: the model we chose to explain the dependency (in our case a linear regression line) is not appropriate.

The F test is used to evaluate this claim. The Significance F = 0,000771 < 0,1, **we do not confirm the hypothesis H0B**, we confirm the hypothesis H1B, which means that the model has been selected correctly.

Graph 3 The percentage contribution of the factor of extent of staff training to the total export costs of 1 TEU container in USD (GCI 2012-2013, DB 2015)



Source: own processing based on the data of GCI 2012-2013 and DB 2015 (the latest data available)

We find out whether there is a dependency between the factor of the extent of staff training and the average costs of exporting 1 TEU container. The dependent variable Y is the export costs of 1 TEU container and the independent variable X is the extent of staff training expressed as a percentage contribution to the total costs of exporting 1 TEU container.

At present, in a period of increasing importance of the knowledge and digital economy, the system of a lifelong learning is preferred. This is also done in the form of corporate trainings of different focus. The costs of organizing trainings affect the growth of the cost items of companies, which need to be covered by revenues from the economic activities of the companies, ie. business cases. It follows from GCI 2012-2013 that the higher the value of the indicator, the higher likely the application of the indicator.

The regression function has the following shape: **y = 3379,5 - 129,4 x**. The value of Intercept – b0 = 3379,5 says the following: if the extent of staff training was 0, the costs of exporting 1 TEU container would be equal to 3379,50 USD. The value X of variable 1, b1 = -129,4 says, if the factor of the extent of staff training increases by one unit (1 % point), the export costs of 1 TEU container would drop by 129,4 USD. P-value for Intercept is $2{,}92 \cdot 10^{-7} < 0{,}1$. This suggests that Intercept is statistically significant. The P-value for the regression coefficient is 0,0026 < 0,1, which also confirms the significance of this coefficient. In addition to this information, this part of the output table also offers a 90 % confidence interval for b0 and b1. If the extent of staff training is increased by 1 % point, with 90 % probability the export costs of 1 TEU container will be reduced approximately from 59 USD to 199 USD.

The Multiple R value is equal to 0,2583. This value means a lower degree of dependence between the extent of staff training factor and the costs of exporting 1 TEU container. The value of R Square reaches 0,066. This value indicates that the selected regression line explains the variability in the export costs of 1 TEU container to about 6,6 %, the other represents unexplained variability, the impact of random factors and other unspecified effects. Adjusted R-square also takes into account the number of estimated parameters and the number of measurements. The analysis of the dependence between the extent of staff training factor and the costs of exporting 1TEU container was carried out in 133 countries of the world. In the ANOVA section, we are testing the zero hypothesis H0C.

Regression Statistics								
Multiple R	0,258309							
R Square	0,066724							
Adjusted R Square	0,059599							
Standard Error	1154,792							
Observations	133							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	12489597	12489597	9,36572	0,002682			
Residual	131	1,75E+08	1333544					
Total	132	1,87E+08						
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 90,0%*	*Upper 90,0%*
Intercept	3379,472	624,8463	5,408486	2,92E-07	2143,377	4615,567	2344,371	4414,573
Extent of staff training	-129,486	42,31099	-3,06035	0,002682	-213,187	-45,785	-199,577	-59,3952

The verification of **the hypothesis H0C**: the model we chose to explain the dependency (in our case a linear regression line) is not appropriate.

The F test is used to evaluate this claim. The Significance F = 0,002682 < 0,1, **we do not confirm the hypothesis H0C**, we confirm the hypothesis H1C, which means that the model has been selected correctly.

Conclusion

The presented study deals with the concept of containerization in freight transport and logistics. The main objective was to evaluate the importance of the containerization in the logistics and to determine its impact on the size and the structure of the transaction costs in export price on the basis of regression and correlation analyses. The main purpose was to deal with the importance of the selected external factors (indexes) from the GCI 2012-2013 and their impact on the costs of exporting 1 TEU container (data from DB 2015). These data allowed us to analyze the behavior of these transaction costs in the reference period. There were selected the following external factors: extent of marketing (preface of contract), soundness of banks (relation with the finance costs), business costs of crime and violence (relation with the costs of risks), firm level technology absorption (relation with the information and communication), extent of staff training (relation with the knowledge costs), ethical behavior of firms (relation with the costs of unethics), quality of overall infrastructure (relation with the environmental and infrastructure costs), burden of custom procedures (relation with the costs of external administration).

The inspiration for this research was the managerial model of the hypothetical export price structure based on the Transaction Costs Matrix, which is based on the theories of Coase, Williamson and Kindleberger. Their economic research about the costs of contract signing and the transport costs incorporating into pricing is the framework of our investigation.

Based on the confirmed hypothesis H1, we can summarize that the quality of the business environment given by the selected factors (indexes) from the GCI 2012-2013 affects the costs of exporting 1 TEU container expressed in USD for each country out of the 133. Specifically, e.g. in the case of the extent of staff training, if the significance of this factor increased by 1 % point, the costs of exporting 1 TEU container would drop by around 129 USD. In the case of the soundness of banks, if the significance of this factor increased by 1 % point, the costs of exporting 1 TEU container would increase by around 106 USD and in the case of the extent of marketing, if the significance of this factor increased by 1 % point, the costs of exporting 1 TEU container would drop by around 124 USD. When we take into account that according to the report of the DB 2015, the costs to export 1 TEU container from Switzerland to its most important partner countries reach the amount of 1660 USD, we have to admit that the 1 percentage growth of the importance of the selected factors from GCI can significantly change the value of total export costs of 1 TEU container and can have a negative impact on its competitiveness.

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Key changes in charter air transport on Slovak market

Ľudmila Novacká[1] – Alexander Frasch[2]

Abstract

The charter market in Slovakia has been characterized by stability and significant representation of one charter air carrier for several years. The following summer charter season brings with it a number of changes that influence the operation of the airline, travel agencies and clients as well. The aim of the paper is to identify the key changes on the Slovak charter air market and to quantify their negative consequences. The goal is achieved mainly through the case study of Smartwings Slovakia, monitoring of charter flights from Bratislava Airport and prediction. The smaller number of based aircrafts apparently weakens the airlines position on the market as well as its economic results, allowing foreign airlines to penetrate the Slovak charter air market. This situation is a great business opportunity for Slovak airlines operating in the ACMI segment.

Key words

Charter air transport, airlines, Slovak market, travel agencies, client, consequences

JEL Classification: L93, Z32

Introduction

Charter air transport has irreplaceable meaning in the conditions of Slovak market of organized tourism. It is generally known that the airline market in Slovakia was extremely turbulent in the past time period. The current market of Slovak travel agencies with charter air transport is dominated by Smartwings Slovakia for several years (formerly Travel Service). This airline has a monopoly position on the market and ensures the vast majority of charter flights in the summer holiday season. This position gives the airline a strong negotiating power vis-a-vis travel agencies that contract entire "series" of charter flights through Smartwings or other local carriers from destinations to which they operate flights.

Smartwings is the largest Czech airline and one of the fastest growing carriers in Central Europe, belonging to the Smartwings Group. Smartwings operates scheduled flights, charter flights as well as private jet business flights. In addition to the Czech Republic, the airline operates in Slovakia, Poland, Hungary and Germany as well, where it has its subsidiaries (Smartwings, 2019).

The summer holiday season 2019 has brought with it many changes that the air carrier, travel agencies and the clients have experienced. One of them is the story of Boeing 737 MAX and the following consequences. Two accidents, following precautions, groundings of these types of aircraft from the operation. In the current situation, airlines that have relied on this type of aircraft must solve their stoppage. Travel agencies provide package holidays with charter air carriers. This means they book the entire capacity of an aircraft of the airline that can provide flights according the requirements of the travel agency to the specific destinations. Travel agencies, as the costumers of airlines affected by the groundings, also had to deal very quickly with the situation. The lack of these

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aircraft on the market required the maximum optimization of the aviation capacity available (Novacká, 2019).

1 Methodology

To obtain the results, a secondary research was carried out - collection, processing of already available data in domestic and foreign sources. By comparative method, which is based on comparison of observed phenomena, we found out the identical or different features in the studied subject. Selected methods using logical thinking principles as abstraction, analysis, synthesis were also used in the paper. Based on observation of charter flights from M.R. Štefánik Airport in Bratislava from 19.6 – 28.6. 2019 we pointed out the share of Slovak and foreign air carriers that provide non-scheduled air transport. Through the Smartwings case study, we identified the impact of the reduced airline capacity on the Slovak charter air market and defined their impacts on travel agencies as well as the client. Based on prognosis, we figured the planned revenue of Smartwings Slovakia.

$$TR_{2019} = TR_{2018} * \overline{\Delta TR_{2015-2018}} \qquad (1)$$

TR – total revenue

Δ – change between the variables

The aim of the paper was to identify key phenomena and changes on the Slovak charter air market in the 2019 summer season and to highlight the massive arrival of foreign air carriers providing charter flights during summer season from the Slovak market. The secondary objective was to quantify the negative consequences of the weakening of the market position of Smartwings Slovakia.

2 Results and Discussion

Charter or so-called non-scheduled air transport consists of contracting all or a certain capacity of an aircraft. Most often, it is seen as part of a package holiday created by a travel agency. Transport of clients to destinations is provided by the travel agency as quickly as possible, ideally without any transfers and as close as possible to the final destination (Novacká et al., 2014). The product of charter airlines are so called charter flights that represent an irregular air connection at which, the whole aircraft is rented and the passengers are most often the clients of travel agencies. Travel agency is the one to order these flights from the airline and therefore bears the risk of unsold capacity (Gupta, 2008). Charter air transport is operated according to charter contract from one airport to another, in order to use the full capacity of the aircraft, while several subjects may also participate in the order of the entire capacity (Pruša et al., 2015).

In practice, we differentiate between two types of charter flights:

- Ad-hoc charger flights are one-way (return) flights not available for the public ordered for a specific purpose. They are used mainly for transport for instance of a sports representation team, delegation of a business company or diplomatic corps but also for fans of sport events or for the clients of a travel agency in case of unexpected important success.

- Scheduled charger flights, so called series are charter flight organized in certain limited time period. Unlike the scheduled flights, they have exclusively a seasonal or otherwise limited duration. They are used mainly by travel agencies and charter airlines during holiday seasons, or armed forces for transport of personnel on the regular basis. These flights are not part of airline's regular schedule for public (Doganis, 2010).

Tab. 1 Importance of the charter air transport from M. R. Štefánik Airport in Bratislava

Kľúčové prevádzkové informácie Key operating information	2017	zmena 17/16 diffrence 17/16	2016	zmena 17/16 diffrence 17/16	2015
Počet cestujúcich Number of passengers	1 942 069	10.5 %	1 756 808	12.3 %	1 564 311
z toho na pravidelných linkách Scheduled flights	1 373 634	2.9 %	1 335 007	24.2 %	1 074 700
z toho na nepravidelných linkách Non-scheduled flights	563 067	35.0 %	417 021	- 14.0 %	484 871
ostatné linky Other flights	5 368	12.3 %	4 780	0.8 %	4 740

Source: available on https://www.bts.aero/downloads/rocne-spravy/rocna-sprava-2017.pdf

The available data represent the importance of charter air transport on the Slovak market. It is proved that charter air transport accounts for an extremely significant proportion of the total number of carried passengers. In the period under review, the number of passengers carried increased every year, except for the year 2016, in non-scheduled transport, where there is a 14% decrease in the number of carried passengers. Every year, the number of passengers carried by charter air transport accounted for almost one-third of the total number of transported passengers, what only proves the importance of charter air transport in Slovakia.

2.1 Summer season 2019 and change of conditions (case study Smartwings Slovakia)

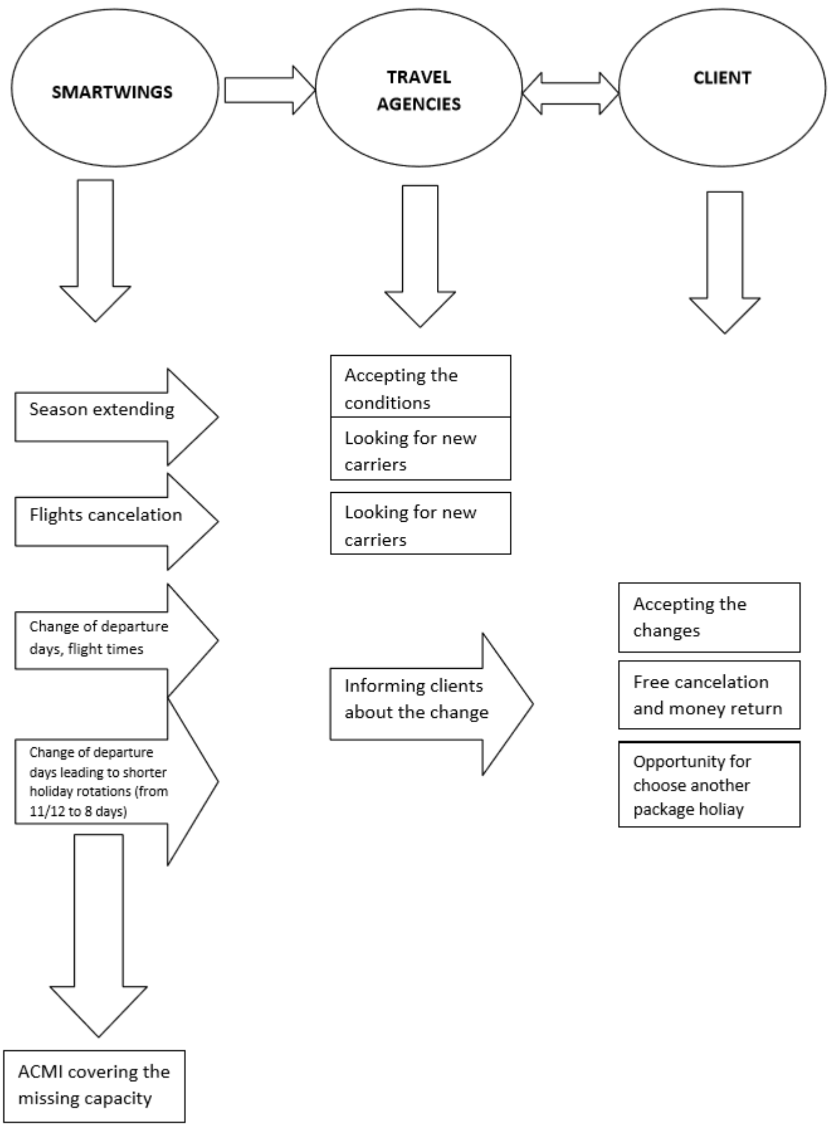
The upcoming summer season will bring with it a number of specificities and will be definitely different from the previous ones. A significant change, especially for the Slovak travel agencies, was the pressure from the Smartwings to extend the summer season, which meant earlier start and later termination of charter flights. Most of the Slovak travel agencies have accepted these conditions, but few of them, after years of good experience with Smartwings, have turned to another, mostly foreign airlines, and refused to accept these strict business terms.

An example of such a travel agency is the largest Slovak tour operator, which in its summer catalogue proclaims cooperation with the following airlines: Bulgaria Air, Tailwind Airlines, Cyprus Airways, Tunisair, Nouvelair, FlyDubai, Air Arabia Marocco, Montenegro Airlines, Vueling, Ryanair AirCairo, Freebird, Ellinair, Aeroviaggi, Bulgarian Air Charter, and also Smartwings. However, the travel agency has decided to give preference to foreign airlines, which have been able to meet the requirements related to the length of the charter season. For Smartwings this action represents a massive loss of capacity. Loss of this extremely important partner as well as a slight reduction or optimizing the flights of other travel agencies has resulted in a significant decrease in the planned amount of flights, for which 4 aircrafts in Bratislava base were originally suppose to be sufficient.

In the recent past, the airline industry has been paralyzed by the grounding of Boeing 737 MAX aircrafts, which were operated also by Smartwings in a total number of 7 aircrafts and the airline counted with 15 aircraft of this type for the summer season. This fact has made the company extremely difficult to operate, as it lacks a significant part of the capacity to cover contracted flights during the summer season on several markets including Slovakia. The airline was forced to cancel selected contracts with travel agencies, canceled many of its own scheduled flights, and closed selected smaller bases. In Czech Republic, the company canceled all flights from Pardubice airport and significantly limits its operation from Ostrava airport for the upcoming summer season. In total, up to 8% of flights should be canceled due to grounded aircrafts.

This situation has also affected the Slovak market. From the original 4 planned aircrafts based in Bratislava, only 3 remained and 2 of them are leased from Slovak airline Air Explore. The loss of one aircraft means canceling contracts with travel agencies, or changing days of charter flights departures caused by flights optimization. There have been extensive interventions in the originally scheduled flight plans for the summer season 2019. Many travel agencies have been forced by these facts to look for alternative foreign air carriers to cover the air transport to their holiday destinations.

Scheme 1 Algorithm of processes of the airline requirements, travel agency and customer variant solutions



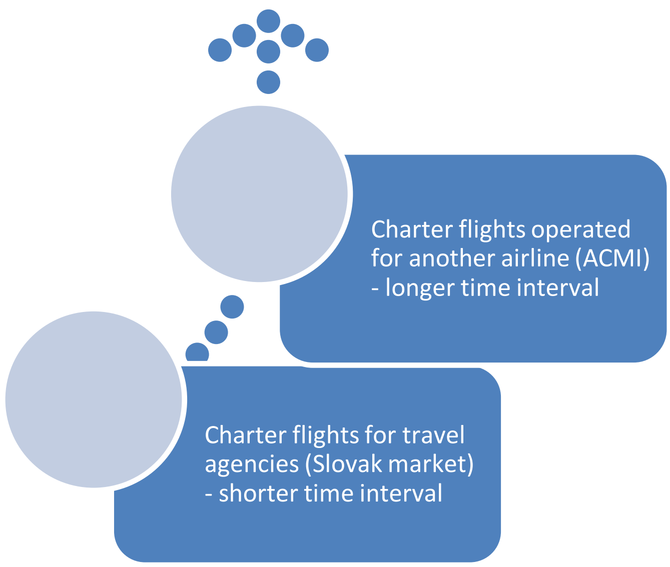
Source: own processing

The airline's situation may also result in further complications during its operation. Monitored negative effects represent the most significant problems caused to all travel agencies and clients by Smartwing in its history. As a result of the mentioned factors, the market share of foreign airlines in the total charter air transport is increasing, while Smartwings is losing its market power and indirectly opens up business opportunities to other airlines. The problem is the fact that these business opportunities are taken by foreign airlines and our economy will be missing a huge amount of money which will just flow abroad, while there are 3 Slovak airlines operating on our market (Smartwings Slovakia, Air Explore, GoSky).

It is very positive that the business environment in Slovakia on the market of charter carriers is becoming more competitive, but on the other hand, business opportunities are taken by foreign companies and not by the Slovak airlines. As a part of the stabilization of the market situation, Go2Sky and Air Explore should consider their secondary focus also on the charter segment and should be more open to negotiation with travel agencies in this area.

The problem is that these ACMI airlines are able to lease aircrafts to other airlines for up to 6 months for the summer season, while the need of the Slovak charter market is only for 4 months. It is also important from an economic point of view, that leasing the aircrafts to other airlines is more profitable in terms of economic indicators compared to selling the capacity to travel agencies. In the case of flights realized for other airlines (ACMI long term contracts), there are often other services provided (adjustment of the aircraft livery, crew uniforms, etc.)

Scheme 2 Time dimensions of charter flights according to the purchaser



Source: own processing

Tab. 2 Revenue prediction of Smartwings Slovakia

	2019	2018	2017
Revenue	37 670 083	74 086 149	58 927 081
Number of based aircrafts	3	6	5
Revenue per 1 aircraft	12 556 694	12 347 694	11 785 416

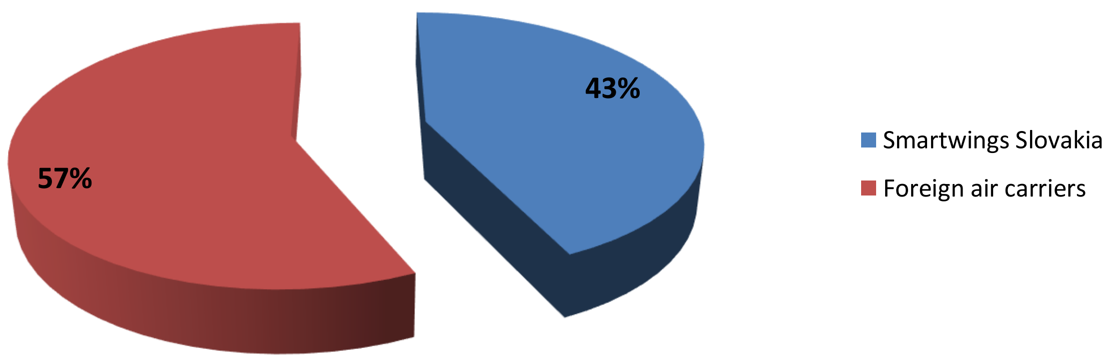
Source: own processing based on data from https://finstat.sk/47880627

Based on the overall reduction in contracted charter flights, we expect a significant weakening of the company in terms of revenue. We reflect this decline through the calculations in the table above. In connection with reducing the total number of based aircrafts we expect approximately 50% decrease in the company's revenue in 2019 compared to the previous year. This loss will bring with it a decline in the tax paid to, in employment and the consequent loss of contributions to social and health insurance.

2.2 Comparison of charter air performance at the Bratislava airport

Based on the phenomena identified so far on the Slovak charter market, it was easy to clearly predict the upcoming situation. The most significant charter air carrier in Slovakia is losing its strong position and thus opens up business opportunities for foreign airlines. In order to confirm our statements, we monitored the available data on the Bratislava Airport website for 10 days in connection with all departures of charter flights at the beginning of the summer charter season.

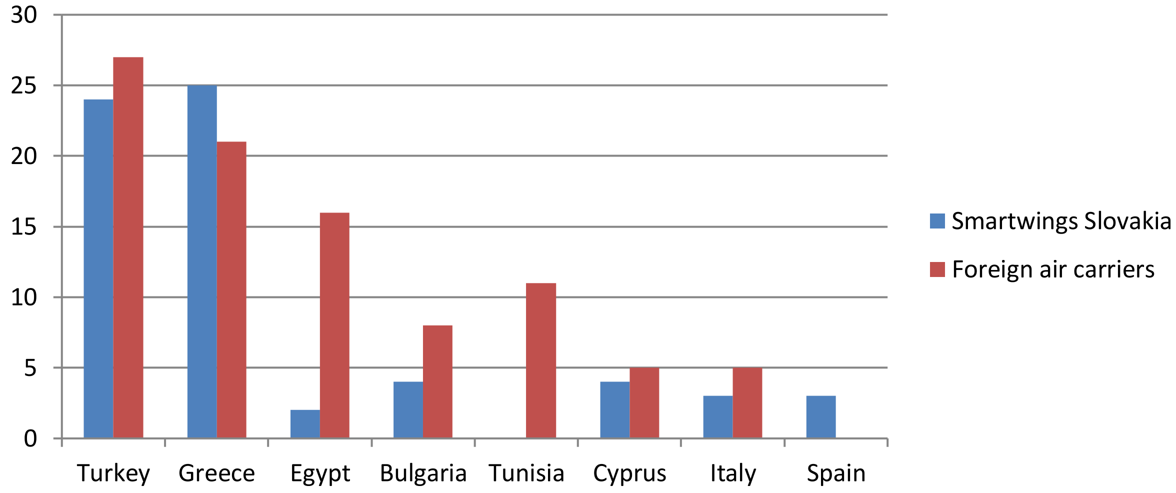
Graph 1 Air charter carriers and the total share of realized charter flights from M. R. Štefánik Airport in Bratislava



Source: own processing

In the monitored period of ten days, totally 167 charter flights departed from Bratislava Airport, while 95 flights were operated by foreign airlines. This clearly confirms the fact that Smartwings Slovakia is losing its dominant position on the charter market in Slovakia. Despite the fact that Smartwings Slovakia realized the charter air transport through 6 based aircrafts in 2018 (currently there are only 3 aircrafts based), we can´t talk about a significant decrease in the number of charter flights carried out by Bratislava Airport due to the massive increase of foreign air carriers on our territory. On the other hand, foreign carriers carried out charter air transport in the monitored period, often by aircrafts with significantly lower total capacity, in comparison with Smartwings Slovakia, whose fleet consists of Boeing 737-800 aircrafts with a total capacity of 189 passengers.

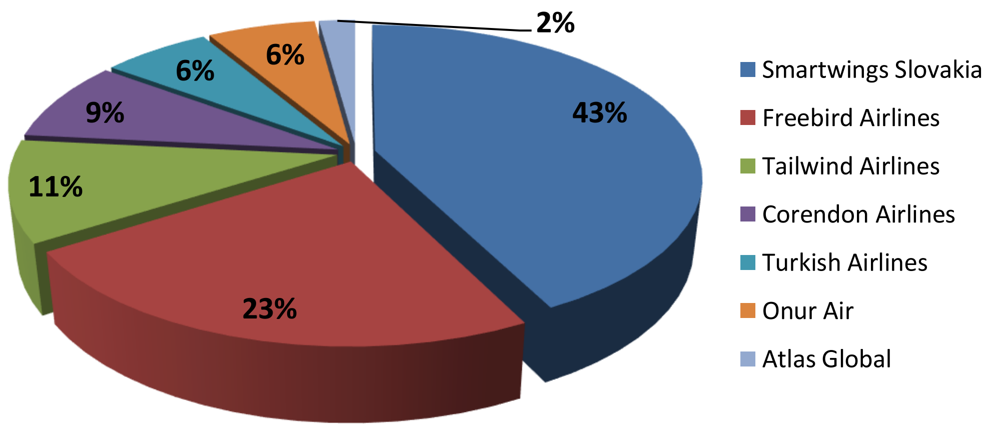
Graph 2 Most frequent destinations in charter air transport according to the air carriers from Bratislava Airport



Source: own processing

This chart reflects the total number of charter flights by destination and air carrier. The most of the charter flights were operated to Turkish airports (mostly Antalya) in the monitored period. However, in this case, it should be pointed out that here we also include flights by several Turkish airlines that operate charter flights to Northern Cyprus, which is not an internationally accepted state, and therefore a technical stopover in Turkey is needed. In almost all monitored destinations, we are witnessing more charter flights operated by foreign carriers, except Greece and Spain. Quite interesting is the fact, that there is charter air transport to Tunisia exclusively operated by foreign carriers. Similarly, there are flights to Egyptian destinations (Hurghada, Sharm El Sheikh, Marsa Alam) where we record a large gap between the flights realized by Smartwings and foreign carriers.

Graph 3 Charter air transport operated to Turkey according the airlines from Bratislava Airport



Source: own processing

On the example of the most popular and most visited holiday destination of Slovak tourists, we can clearly prove the diversity of air carriers providing charter air services. In total 7 air carriers provided charter flights to Antalya or Izmir in the period under review, with 6 cases involving several Turkish airlines. We are experiencing a new phenomenon in charter air transport on Slovak market – combination of charter with scheduled air transport (Smartwings flights to Antalya). These are cases where a tour operator contracts a certain seat capacity on a regular flight at intervals of organized package holidays. These flights are also listed in the carrier's timetable and the airline is selling the minimum capacity of the flights under its own brand. In this case, there is a certain compromise for the travel agency (to get the air transport for the required number of passengers but maybe in less favorable price conditions).

Conclusion

The summer holiday season 2019 has brought with it many changes to the different subjects on the Slovak charter market. The changes caused by the business terms of Smartwings as well as the grounded aircrafts of the Boeing manufacturer had an immediate effect on the activities of travel agencies as well as their clients. Smartwings lost a significant part of the Slovak market, so travel agencies had to deal with a change in departure days, shortened of the package holiday rotations, or the total cancellation of routes to selected destinations by the carrier. The loss of Smartwings' s significant capacity on market has also been proved in its predicted revenue, which is expected to be about half less than last year. The consequences of these acts have in many cases affected the client himself. The client had the option of not accepting these changes under the applicable legislation and requesting a full refund of the money for the paid package holiday. The weakening of the presence of the Smartwings Slovakia has in practice meant a significant increase of foreign airlines within the charter segment on the Slovak market. From the Bratislava Airport, we recorded a large number of foreign air carriers, which realized 57% of all charter flights, while the rest was provided by Smartwings during the monitored period of 10 days at the beginning of the summer season. Most of the foreign air carriers were flying to Antalya - Turkey, with totally 6 Turkish air carriers. This significant arrival of foreign air carriers means the massive outflow of money paid for charter flights abroad, outside of our economy, while there are two other Slovak airlines operating on our market which are leasing their aircrafts for different airlines, in the so-called ACMI segment. The current situation and the instability on the charter air market in Slovakia is a great opportunity for Slovak ACMI airlines to start negotiations with travel agencies to create a competitive environment on the Slovak charter market, consisting mainly of Slovak air carriers.

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Could We Be Closer to Sustainable Marketing Through the Circular Economy?[1]

Oresky Milan[2]

Abstract

The cornerstone of the circular economy's construct is the idea of balancing economic development with environmental and resource protection, leading to greater operational efficiency through lower energy consumption and lower pollutant emissions. In addition to the origin of this idea, we are discussing the idea of hierarchizing the use of resources and the main economic effects of the circular economy. Research is focused on the similarity of the circular economy construct and sustainability, despite the introduction of two business models using circular economy principles. On the other hand, we identify limitations and some critical views on the circular economy. The conclusion of the research sees the great potential of the circular economy construct as a pragmatic move towards sustainability and as a challenge for current marketing to be closer to sustainable marketing.

Key words

circular economy, sustainability, sustainable marketing, linear economy, closed-loop systems, product service systems

JEL Classification: M30, Q50

Introduction

To contribute to the scientific debate on moving current marketing to the ambitious goal we call sustainable marketing through the relatively new construct of the circular economy, we must examine *the origin and nature of the circular economy and its relationship to sustainability.* When we talk about the circular economy, but above all about sustainable development, we must mention Brundtland's report (Brundtland, 1987), which called for a holistic approach by society (including businesses) to *"... development that meets the needs of the present, without this is jeopardizing the ability of future generations to meet their own needs ”*. The basic assumption is that physical resources are not unlimited, so they must be driven for future generations, as reflected in the definition. Circulation is a regenerative system in which inputs and waste, emissions and energy leaks are minimized by slowing, closing, and narrowing material and energy loops that can be achieved by long-term construction, maintenance, repair, reuse, refurbishment, renovation and recycling (Geissdoerfer et al., 2017) The term circulatory economy is becoming increasingly popular when its supporters have identified the current economic model as a linear economy.

Sometimes the production of goods leads to undesirable externalities, including waste pollution and environmental damage. The linear economy model assumes that there is an unlimited supply of natural resources and that the environment has an unlimited capacity to absorb waste and pollution. Cooper (1999) claimed that the circular economy reduces energy and raw material permeability. The aim of the circular economy is, therefore, to restore or minimize any damage in sourcing by ensuring that a small amount of waste is generated during the production process.

[1] VEGA project No. 1/0587/19 Possibilities and perspectives of marketing during the transition period on the circular economy in Slovakia as a new business model

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Obviously, this construct is based on previous concepts of sustainable development, including sustainable consumption and production (Cooper, 2012, 1999; Porter & Van der Linde, 1995). Its basic idea is to balance economic development with environmental and resource protection; leads to higher operational efficiency through lower energy consumption and lower pollutant emissions (Hanuláková, 2017).

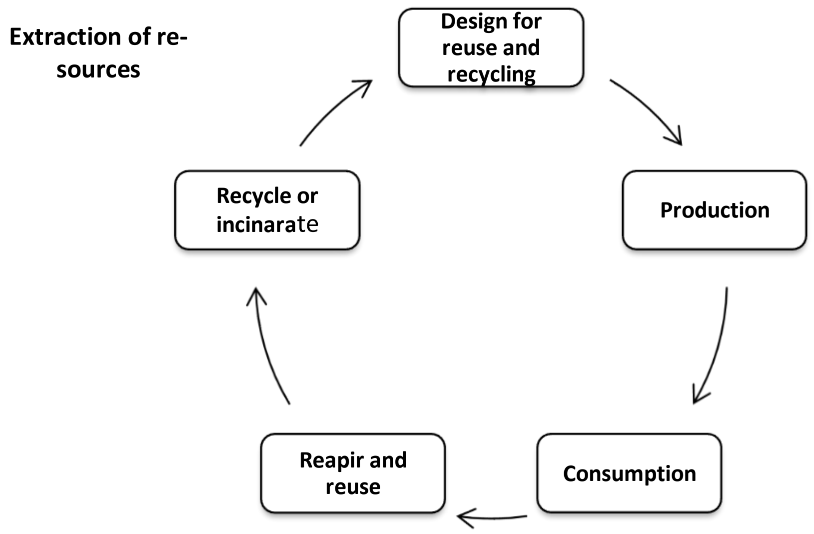
From linearity to circularity

The practice and way of thinking in the mainstream economy has been a linear value chain, the flow of capital and nature through an open-ended economy, as shown in Figure 1. In a traditional economy that builds on weak sustainable development, there are no physical constraints on the input side, only relative restrictions through prices and subsequent technological innovation. What we call a traditional economy still forms a substantial part of global economic activity today. The value chain in Figure 1 is stopped by "consumption" because the output is considered to have no value by definition. Of course, Figure 1 is a very simple outline of the economic system, but the main point is that the physical boundaries of nature are being attacked on two sides: the extraction of raw materials on the input side and the production of waste and pollution from economic activity on the production side.

Fig. 1 Linear value chain

Source: author`s own processing

Fig. 2 The simplified design of the circular economy construct



Source: authors' adaptation based on literature review

One consequence of the long-term system of relative prices used in neoclassical economics and the relative scarcity is that little attention has been paid to arguments to limit the extraction of raw materials. However, with regard to the output side of Figure 1, exciting and necessary changes have been made (still mostly in the theoretical area) that have led us to Figure 2, a new design of the economic system, especially from the point of view of resource utilization and disposal. The main change from the linear economic data is that waste is taken up in the value chain. What can be considered waste can be repaired and reused, recycled or incinerated to generate energy? We shall explain to why this change happens mainly on the output side, but it is not a consequence for the input side.

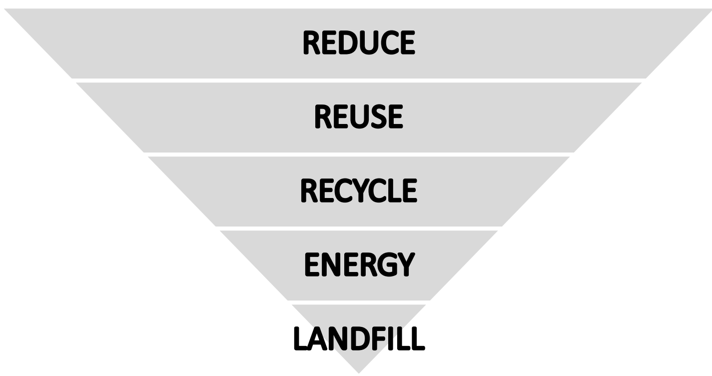
Figures 1 and 2 are obviously simple models of reality. Some comments are needed:

- There is often some waste at all stages and between them as a result of the necessary material losses.
- Energy use is required in and between all boxes.
- The circular chart does not have "distribution" as separate boxes. This is because distribution is necessary between all the boxes and as part of the arrows.
- Figure 2 shows smaller loops within a large loop, for example, products can go directly from consumption for recycling and skip repair and reuse.

The Ellen MacArthur Foundation continues to devote to this point and outlines a model in which they depict the circulatory economy as a series of tightening circles, which means that at least new materials are used before reusing, renovating, or producing materials. "*Such products offer the greatest savings in terms of cost, materials, energy and labour. They also offer the greatest savings on environmental impacts or externalities, such as emissions to air, soil or water, including reducing greenhouse gas emissions.*" (Ellen MacArthur Foundation, 2015).

The resource use hierarchy consists of the same steps as the circular economy. The main difference is that the hierarchy gives priority between levels and that the main focus must remain at higher levels (based on the laws of thermodynamics). From the circular thinking in Figure 2, it is possible to read the order of priorities, but it is not as explicit as in the waste hierarchy. The hierarchy recommends the following order in resource management in the economy, as shown in the inverted pyramid in Figure 3) reduction of raw materials use, 2) reuse, 3) recycled materials, 4) heat recovery combustion, 5) landfill (Cecere, Mancinelli et al. 2014). The term "resource hierarchy" or "resource use pyramid" is better than the waste management hierarchy. In this paper, the difference in wording is simply that there is no other practical or theoretical difference between waste and resources. We prefer to use the term resource use hierarchy.

Fig. 3 The hierarchy of resource use



Source: authors' elaboration based on Cecere, Mancinelli et al., 2014, pp. 163-176

The main interest of our research is at the higher levels of the hierarchy, and therefore we will pay less attention to describing subsequent levels. Our ambition is to present environmental arguments of priority based on thermodynamic laws. In addition to the hierarchy, *reducing and reducing the use of raw materials* is a prerequisite for strong sustainable development. This is also the most effective environmental approach to addressing a particular problem, whether it is waste or resource depletion. Another alternative is to replace the material - call it material A - with another material B. One example of how to solve the waste problem by replacing the A by B material is the current discussion on replacing plastics with biodegradable plastics. Plastic waste today is an enormous environmental problem, but biodegradable materials can increase pressure on land use, as well as affect the biological structure of the receiver or the end environment, such as the sea. A thorough evaluation of life cycles A and B, including recycling processes and their alternatives (reuse, incineration), is necessary before material exchanges begin.

These constraints are important arguments for not automatically replacing one problem, extraction A with extraction B. In addition, the resource utilization hierarchy says that it is possible to reduce the extraction of raw materials where possible and if necessary. This is always the case whether it is raw material A or B. Then, once the raw material is extracted, the hierarchy says it keeps it in the economy through reuse and recycling as-long-as possible before incineration or landfilling. So, the next step in the hierarchy, after reduction is reuse. This includes any operation by which non-waste products or components are reused for the same purpose for which they were created. Cleaning, repair or similar steps are often required before reuse, so the term "re-use preparation" is often used.

Recycling can be product recycling, material recycling and raw material recycling. The first means that the chemical and the physical composition of the material are retained, but the product is not used for its original purpose. Two examples are tires or glass bottles recycled into building material. The recycling of material means that the chemical composition of the material is retained, but the physical composition changes. This form of recycling includes, for example, metal melting and reprocessing and composting of biogenic materials. The last type, raw material recycling, changes the physical as well as the chemical composition of the material.

The difference between reuse and recycling, and hence the priority order in the hierarchy, is the increase in entropy. In recycling, entropy increases more than in reuse. In addition, recycling requires more energy than reuse - in general.

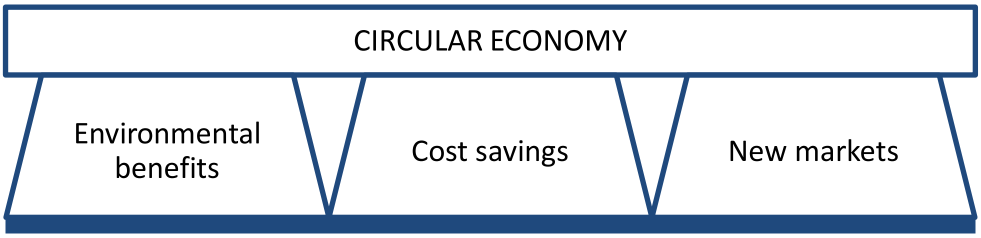
Energy recovery from materials is the fourth step of the hierarchy of resource use. There are different forms of energy recovery, but the overall most common is incineration and which is the only we mention here. As we move down in the hierarchy, the environmental advantages are becoming less. But incinerating is an end-of-pipe solution as the recovered energy can only be used once. It can therefore not constitute a part of a circular economy but is the next option when reuse and recycling are not possible. Burning materials may also emit dioxins and other harmful pollutants and contribute to global warming. Still one advantage of incineration, in addition to the recovery of energy, is the destruction of toxic substances.

The landfill is the least preferable option for resources both in the hierarchy and in circular economic thinking, as here resources inevitably become waste. The landfill is a final sink, defined as a process that receives anthropogenic material flows that have no positive value for present societies. The landfill is the largest human-created source of methane and is thereby a substantial contributor to global warming. Still, it has been pointed out that final sinks are an indispensable prerequisite for realizing clean cycles (Brunner, 2010). But it cannot continue to be the most used alternative for resource use, as it still is even among OECD countries (Brocklehurst et al., 2015).

The current situation and challenges of the circular economy

The transition to a circular economy also has major economic effects, based on three pillars: 1) environmental benefits, especially in terms of reduced impacts and resource use; 2) cost savings from reduced natural resource needs; and 3) the creation of new markets that provide additional economic benefits for the circular economy processes, e.g. in terms of job creation or wealth creation (Figure 4).

Fig. 4 The three pillars of the economic effects of the circular economy



Source: authors' elaboration based on Ellen MacArthur Foundation, 2013

The circular economy, in theory, promises significant environmental and economic benefits and should therefore rapidly replace the linear economy, but in practice, the "linear model" still dominates the economy. The complexity of the construct of the circular economy and the volatility of commodity prices are two major explanations for why its implementation is not going so fluently.

- First, the circular economy is an extremely complex concept with potential economic impacts. The circular economy has different meanings and impacts for different industries and other economic operators. What, for example, is the circular economy for the construction industry and how does it differ for car manufacturers? What is the difference between the circular economy for a city and for a multi-sector corporation or start-up company? Those who decide in private enterprises and policymakers at radically different levels, from city to national and macro-regional scope, need clearer information on how the circular economy is relevant to each type of economic operator and economic activity sector.
- Secondly, the circular economy has become a priority for EU policy (in part) in response to volatility in commodity prices and lack of resources (EU, 2015). Today's commodity prices, particularly in the energy, food and metal sectors, are significantly different than in 2010-2014, and some commodity prices are lower (e.g. crude oil). Low commodity prices significantly weaken one of the three foundations of the circular economy by reducing the potential cost savings associated with reduced resource use. On the other hand, the rise in prices (such as some metals such as copper etc.) increases the pressure to implement the circular economy construct.

1 Methodology

This research analyses the context and processes that clarify the conceptualization of the circular economy construct, its connectivity to sustainability and support for sustainable marketing. We used qualitative content analysis to identify the current state of the academic review with respect to this promising concept. Therefore, this research method included an analysis of the relevant content or contextual relevance of the relevant to the circular economy and/or its related closed-loop systems.

The texts were mostly in electronic form and were obtained from scientific articles. We put the keywords "circular economy", "sustainability", "circular economy AND sustainability", "sustainable marketing", "circular economy AND sustainable marketing" through the Web of Science databases. Results are in Table 1 and follow comments.

The assessment was limited to English-language publications. We used a content analysis approach to verify or conceptually extend the theoretical framework or theory that reflects recent developments in academic research.

The critical analysis included an iterative process to achieve consistency in the literature review. The findings from the guided content analysis have broadened the supporting evidence for the conceptual development of the circular economy. Like any multidisciplinary area, the circular economy also contains elements from different disciplines and research directions that are the forerunners of current knowledge. The research has identified academic literature with different views on access to the circular economy, including; its contribution to resource scarcity, sustainable consumption and production. The in-depth review states that closed-loop systems improve waste management, reduce environmental impact and deliver significant operational and strategic benefits, including cost savings and operational efficiency for professionals.

To investigate the research gap, the following two research questions were formulated:

RQ 1: Which are the main characteristics of the circular economy construct and similarities or differences between the circular economy and sustainability?

RQ 2: How experts perceived limitations and weaknesses of the circular economy today?

In work towards answering these two research questions, we employed similar methodological techniques. First, we conducted bibliometric research, a well-established form of meta-analytical research of literature. This is a method that analyses published data, measuring texts and information such as authorship, affiliation, citations, and keywords, unveiling articles and illustrating linkages between and among articles about a certain research topic. It can be used to describe, evaluate and monitor the state of a particular field over time, evaluating meta-analytically the development of a given research area to identify their key components and underlying theoretical frameworks.

Tab. 1 Number of articles resulting from the search string

Search term	Number of articles found in Web of Science
circular economy	3 986
sustainability	150 968
circular economy AND sustainability	886
sustainable marketing	23 657
circular economy AND	186

sustainable marketing	

Source: author's elaboration based on WOS data

A bibliometric review was thus conducted to identify the articles that describe both sustainability and the circular economy, while also revealing the most cited authors, keywords mentioned. Data were collected from Web of Science in May – June 2019 by searching with the strings as shown in Table 1. These searches helped in identifying the initial sample of papers that would be investigated in depth through an extensive literature review. Furthermore, as the circular economy is a recent research topic, we observed the importance of analysing its emergence and progress before analysing its relationship with the literature on sustainability.

Table 1 shows a sharp increase in the number of publications on sustainability, which is enormous especially in the last years. Significant participation within this volume has topic sustainable marketing (15.6%). However, the absolute number of publications on the circular economy is small compared to sustainability publications. This finding suggests that research into the circular economy may be far from saturation and there is great scope for improvement in terms of conceptual development and cross-support from other areas of research. For us is an important direction to contemporary marketing.

2 Results and Discussion

Companies are encouraged to continuously review their existing operations, management systems and production processes as they need to identify value-added procedures (Porter and Van der Linde 1995). Their industrial operations can be improved by sophisticated processes, by removing some of them, by modifying certain technologies and / or by developing new technologies. The proposals are formulated so that companies can adopt management systems that create the right conditions to reduce their negative environmental impact. Companies in their technology can (and often do so today) apply the proposed principles of the circular economy in the following ways: a) repair - prolong the life of a product by repairing its parts; b) reconstruction - prolonging the life of the product by significant overhaul; c) remanufacturing - the new product is based on old products; d) re-use - design the product so that it can be used multiple times; e) recycle - products may be reprocessed and converted into raw material to be used in another or the same product, and f) reduced - even if the product uses less raw material or produces less waste for single-use, could also continue to bring benefits that are comparable to the previous version. These preventive and regenerative procedures are related to the circular economy. Therefore, the word "circular" derives a descriptive meaning that refers to two types of cycles: a) biogeochemical cycles and b) product recycling (Ellen MacArthur Foundation, 2013).

The basic circular economy construct described above cannot be a complete assessment of the circular economy. We will use it to introduce business models, which obviously bring new challenges to current marketing in both theory and practice.

2.1 Closed-loop systems and product-service systems – business models for the circular economy

Good thoughts, in our case, the design of a circulating economy must be quickly transferred to new or innovative business models. We will explain in more detail two innovative ones.

Closed Loop Systems

The biological and/or technical sources that are used for the production of goods and resources are either designed to re-enter the biosphere 'safely', or to re-circulate at high-quality, without entering the biosphere. Therefore, the circular economy proposition comprises a 'closed-loop economy' that involves a 're-design' thinking. Murray et al. (2017) suggested that sustainable production is optimized via biomimetics, wherein the structure and function of natural systems would inform industrial processes. This approach is related to UNEP's (2006) proposition to 'design out' waste, return nutrients via product recycling. Such closed-loop systems emit lower emissions of pollutants and will result in high efficiencies for an industrial economy which is, by design or intention, restorative in nature. In industrial symbiosis, firms use each other's waste as resources (Ellen MacArthur Foundation, 2013). By increasing the longevity of products through better manufacturing and maintenance, the rate of replacement decreases, and so the use of resources is considerably reduced.

Therefore, companies of all sizes could engage in new sustainable approaches such as extending the producers' liability, life-cycle analyses, material-use and resource flows, and eco-efficiencies (Ellen MacArthur Foundation, 2013). Cooper (2012) held that individual consumers would prefer to use longer-lasting products. Such products would appear to provide added value for money to customers. The longevity in product design could not always be efficient, in ecological terms. However, durable products consume more useful energy than those that are designed towards more environmentally friendly outcomes. For example, paper and cardboard items are more sustainable than plastics in landfills. And the products that are made out of natural nutrients are more easily re-assimilated back into the environment. Notwithstanding, long-lasting materials may eventually prove harder to break down into key components for further recycling. Very often the unwanted outputs of one industrial process could be used as raw materials in other industrial processes. In a sense, the circular economy is a model of economic development that is based on the ecological circulation of natural materials, often requiring compliance with ecological laws coupled with the good re-utilization of natural resources.

There is more to the circular economy's model than improving resource utilization. Hu, Xiao, Zhou, Deng, Wang, and Ma (2011) stressed that the focus of the circular economy is on resource productivity and eco-efficient improvement, through reducing, reusing, recycling and recovering. The circular economy approach encourages the re-organization of economic activities with feedback processes that could mimic restorative ecosystems. This happens through a process where natural resources are transformed into manufactured products and by-products that could be reused as resources in other contexts. Hence, the throughput of energy and the raw material is considerably reduced (Cooper, 1999).

The circular economy also aims to repair previous damage by re-designing better operational systems. It draws on concepts such as resource efficiency where industries reduce their environmental impact by being waste-free. For example, Rolls Royce has improved its manufacturing processes and technologies to reduce waste and keep resources in circulation. The British car and aerospace engine maker have boosted its efficiency and productivity levels by reducing the number of processes and items that are required to make turbine discs. This translated to significant savings in terms of costs, time and operational efficiencies for the facility (Eco-Business, 2015).

The circular economy approach involves developing closed-loop systems that avoid waste and resource depletion as small improvements in eco-design, waste prevention and waste reuse can bring net savings to business and industry. Hence, this concept focuses on the redesign of manufacturing and service systems. Closed-loop systems increase resource throughput in industrial production and consumption. The recycling of resources has been a significant part of sustainability practices for many years. For instance, the formation of inter-firm clusters at the supply chain level that was represented by eco-industrial parks (EIPs) involved industrial symbiosis where firms use each other's waste as resources (Dong, Zhang, Fujita, Ohnishi, Li, Fujii and Dong, 2013; Geng, Zhang, Côté & Fujita, 2009). The unwanted outputs of one industrial process may be used as raw materials in another industrial process.

Notwithstanding, responsible businesses could increase the longevity of products through better manufacturing and maintenance (Camilleri, 2017). They could decrease resource utilization and their rate of replacement. The Ellen MacArthur Foundation (2013) has described the circular economy as an industrial economy that is restorative or regenerative by intention and design. This second perspective suggests that the circulation of resources could regenerate the organizations' operational performance, whilst ensuring environmental protection.

Product Service Systems

Many academic commentators and experts say product service systems (PSS) are moving society towards a resource-efficient economy (Tukker, 2015; Tukker & Tischner, 2006). The product-service system is based on the needs and desires of end-users as individual products. In this business model, marketing plays a key role. Therefore, businesses could design systems to meet needs with less environmental impact. Tukker (2015) suggested that companies should be motivated to extend the life of their products and efficiently use costs and material as possible. Therefore, PSS representatives argued that this could minimize material flows in the economy while maximizing business service performance and user satisfaction.

For example, Koninklijke Philips N.V. (Royal Philips, commonly known as Philips), a diversified technology company based in the Netherlands, claims to be close to closed-loop initiatives as it innovates its model of circulating economy; the use of materials, components and products. Philips sells lighting as a customer service and is responsible for the technological risk of its investments. The Dutch company installs its lighting equipment (including street lighting), maintains it and ensures that it runs for a very long time. Finally, it gets his device back when the right time to recycle materials. This model is visible in the product and service system where proprietary rights remain distributed among clients and their providers throughout the lifetime of the product (Tukker, 2015). Philips has recognized the untapped opportunity to maintain its products because the Dutch company is committed to having the infrastructure and its components at the end of its life. At the same time, customers (including the government) do not have to pay high initial costs for their lighting equipment. In addition, Philips also uses closed-loop systems in healthcare environments, where it has leasing relationships with clients for its health infrastructure. Again, the company will eventually return its equipment and upgrade it if necessary. Most Philips products are recyclable, upgradeable and maintainable (McKisney, 2014).

Very often, businesses resort to new PSS models where product ownership remains with the provider during its lifetime. Many companies also offer integrated solutions or even experience that enable them to achieve a competitive advantage by creating customer support and value creation (Tukker, 2015). For example, when manufacturers provide integrated service products (ISPs), they meet their demanding client needs with service packages that include a physical product as well as the provision of comprehensive services (Berkovich, Leimeister & Krcmar, 2011). There is the number of experts that we support that focusing on product-service systems results in a transition to a resource-efficient circular economy.

2.2 Similarities and differences between sustainability and circular economy

The following section summarizes the identified types of the main similarities and differences between the two concepts in contemporary literature, which can clearly be seen as a current range of scientific and expert opinions.

Table 2 provides an overview of the most relevant similarities between sustainability and the circular economy. Both concepts underline the environmental risk-driven commitments of the environment and signal the importance of increasing agencies and public engagement with multiple and co-existing development pathways. They also have a basically global perspective, highlighting issues at the planetary level that lead to shared responsibility and the importance of multi-agent coordination. Both concepts often use multidisciplinary or interdisciplinary approaches to better integrate non-economic aspects into development, which often demonstrate that system design and innovation are the main drivers for achieving their ambitions.

They also describe not only potential costs and risks but also the importance of diversification in taking advantage of distinct opportunities for value creation. Both concepts view cooperation between stakeholders not only as desirable but as imperative to reach their expectations. To guide and align stakeholder behaviour, both concepts rely heavily on regulation and increasingly on the deliberate design of incentive structures. Private business plays a central role among relevant stakeholders because it commands more capabilities and resources than any other actor. Since the implementation of more sustainable solutions seems to lag behind expectations and technological capabilities and advances in material and production technology are becoming ever more incremental, authors increasingly see business model innovation as the key pathway to the necessary socio-technical transitions.

Tab. 2 Similarities between sustainability and the circular economy

Intra and intergenerational commitments
Global models
Integrating non-economic aspects into development
System change/design and innovation at the core
Multi-/interdisciplinary research field
The potential cost, risk, diversification, value co-creation opportunities
Cooperation of different stakeholders necessary
Regulation and incentives as core implementation tools
The central role of private business, due to resources and capabilities
Business model innovation as a key for industry transformation
Technological solutions are important but often pose implementation problems

Source: authors' elaboration based on literature review

The literature review also reveals a range of differences between the two concepts. For example, the concepts have different origins, goals, motivations, system prioritisations, institutionalisations, beneficiaries, timeframes, and perceptions of responsibilities.

2.3 Criticism and limitations of the circular economy

There are potential challenges and opportunities for implementing a circular economy and its closed systems. The circular economy approach can very often be criticized for *its overly simplistic objectives as well as for its unintended consequences.* In addition, there are macroeconomic factors, including political, economic, social and technological issues that could also affect responsible and sustainable business behaviour (Camilleri, 2017). However, we see that their use and implementation is not easy, especially on a global scale.

Responsible initiatives can sometimes produce negative results. For example, the alternative fuel that is produced from palm oil or soybeans has inevitably led to the loss of large wooded areas around the world. Green energy production also requires large areas of arable land and creates enormous pressures on food chains (Kovács, 2008), especially in the poorest countries.

The idea that *we can design many products with longer lifetime* seems useful. However, product life is not always feasible and may not be effective from an environmental point of view. Many long-lived products that do not break quickly consume more useful energy and release more entropy than those designed to achieve a more natural result. Building long-term materials will make it harder to break them at the end of their life. Environmentally friendly technologies, including wind turbines and solar panels, rely on certain minerals that are difficult to recycle. These "green construction" will always require service and replacement. Therefore, the prices of such green technologies do not necessarily reflect the actual cost of their materials and components. These structures contain technological materials that will inevitably require considerable, cost-intensive service and replacement, for nothing lasts forever in the entropy universe (Murray et al., 2017). Delaying the life cycle of products through long-term service, therefore, may not be a sustainable strategy.

The transition toward a zero-waste model could prove to be a very difficult endeavour for the business and industry. Although financial investments in new technologies could possibly improve operational yields and efficiencies, there could still be a low demand for them, particularly if these new systems require behavioural changes by their users (Porter and Van Der Linde, 1995).

If business and industry *managers would not feel pressure for changes* that could be imposed on them by institutions and politicians, it is very likely that they would choose to keep the status quo where they are locked into their traditional linear models (Bocken, de Pauw, Bakker & van der Grinten, 2016).

Several challenges could slow down or may prevent their implementation of the circular economy. For example, certain *developing countries may not follow the international regulatory guidelines and principles for sustainable development.* There may also be characterized by the poor enforcement of their respective legislation. Critical issues may include the shortage of advanced technology, weak economic incentives, poor leadership and management of corporations, and the lack of performance assessments of sustainability models. Technology is a key factor in the development of a circular economy model. However, businesses may not always be in a position to invest in economic and efficient infrastructures.

Technology is a key factor in the development of a circular economy model. However, businesses may not always be in a position *to invest in economic and efficient infrastructures*. Moreover, they may not be incentivized to conduct “green activities” in terms of their waste management, since changing or updating equipment is usually both time- and money-consuming, while the potential economic benefit is limited.

The business managers may see little economic incentives to save energy, material and water. The producers can easily transfer the manufacturing costs to their customers in the form of higher sale prices. *The active engagement of the marketplace stakeholders, including suppliers and distributors is indispensable to the development of the circular economy.* At times, local governments may lack the human and institutional capabilities to encourage corporate sustainable behaviours (Camilleri, 2017).

Meanwhile, the current economy's outlook focuses on environmental and economic issues. As far as *the social dimension* is concerned, it is virtually silent, as there is no explicit recognition of the social aspects contained in other sustainable development concepts. Circular economy may seem to be aimed at redesigning production and service systems that will benefit the biosphere; through green recovery and survival, and by reducing the use of final resources (Murray et al., 2017). Social needs are not included in the basic wording of the circulating economy.

Conclusion

Previous sections summarized the history, definition and relevance of sustainability and the circular economy. Both concepts are essentially global, sharing concerns about the current state of technology, industrial production and consumption, which can not only threaten future generations but also present sources of unexplored competitive advantage. They also stress the importance of better integration of environmental and social aspects with economic progress and changes at the systemic level themselves.

In addition to these similarities, the terms are used in particular in different contexts and for different purposes. Sustainability, especially in terms of early rooting of sustainable development (Brundtland, 1987), is more open than the circular economy and is used to justify a wider range of institutional commitments.

Since both concepts are being adopted by a growing number of academics and professionals, the relationship between these two concepts and the future evolution of correlation needs to be examined and predicted. Knowledge of their relationship, similarities and differences is important for conceptual clarity, as well as for revealing the interests and goals that their policymakers and societies use.

This research can, therefore, help efforts to integrate these concepts in order to better set up good practice applications such as sustainable marketing.

The relatively significant constriction in the focus of the circular economy involves close coverage of social welfare by most authors. When social aspects are mentioned, it is mainly job creation, as it does not seem clear to what extent a circular economy can contribute to subjective well-being. Some authors, such as Webster (2015), are trying to create additional elements of the social dimension by adding a fairer and more effective tax system and changing lifestyle.

However, conceptual integration in the work of most authors is unclear and the increasingly evident negative impacts of the circular economy, such as the deterioration of safe employment, which is subject to social security contributions and the elimination of affordable housing in cities and tourist destinations, thus damaging social inclusion and prosperity.

The circular economy mainly refers to individual economic benefits through reducing inputs, increasing efficiency and preventing waste with relatively immediate results compared to sustainability. Organizational and consumer behaviour should be stimulated by stimuli in the circular economy, while many sustainability approaches favour behavioural change through engagement and education, although incentives also play an increasing role (Webster, 2015).

While some authors consider the interpretive flexibility of the sustainability paradigm as a strength, that allows its adaptation to different contexts and wide institutionalisation (Leach et al., 2007), others argue that it is too vague and, consequently, hinders operationalisation (Middleton & O'Keefe, 1993).

The concept of Circular Economy, on the other hand, is often seen as more narrowly framed, which would provide clearer directions for its implementation.

First, based on key literature, *we define the circular economy as a regenerative system in which resource input and waste, emission, and energy leakage are minimized by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling.*

Second, *we define sustainability as the balanced integration of economic performance, social inclusiveness, and environmental resilience, to the benefit of current and future generations.*

We found that the circular economy is an emerging topic that has attracted increasing research interest. While the roots of the topic are European, much of this recent surge started with Chinese authors after the implementation of regulatory controls in this country. Chinese and European scholars have in particular have taken up this topic and there is an exponential growth in publications. This could reflect the increased interest from companies and policymakers in these regions.

To answer the first research question - What are the main conceptual similarities and differences between sustainability and the circular economy? This paper summarises the main similarities between sustainability and the circular economy of course, after introducing the basic characteristics of the circular economy construct. Despite these terms often being used in similar contexts, the similarities and differences between these concepts have not been made explicit in the literature. The similarities presented by us support the thought tendency of the circular economy as one way towards sustainable development.

We are convinced that by clarifying their similarities and differences, we not only contribute to conceptual development but also serve to better identify the interests, motivations and practical consequences of their use in the public and private sectors.

Second research question - How experts perceived limitations and weaknesses of the circular economy today? The review outlines the currently identified and published views on circular economy constructs as they are these ones: the negative results and impacts of some initiatives, the question of prolonging the lifetime cycle of products, the difficult implementation of zero-waste models in businesses, the lack of management commitment in businesses, weak political and legislative support in some developing countries, insufficient financial and human resources etc. However, some current limitations can be eliminated.

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How to build the confidence into brand in 21st century

Jozef Orgonáš[1] – Barbora Paholková[2] – Zuzana Francová et al.[3]

Abstract

The branding strategy of the company – the architecture of the brand – reflects the number and character of common and differing elements of the brand. The confidence of the brand represents the positioning of the brand, especially of the private brand. It brings the increasing of the loyalty of the customer, widening of the product range, the satisfaction of the customer needs, the rising of the profit. The brand value and its added value for the owner of the brand bring better position among the competitors, higher allegiance of the customers and lower vulnerability against the crisis, better margins.

Key words

brand, private branding, branding, marketing communication (

JEL Classification: M31

Introduction

Brand management and branding processes are a relatively new area for Slovak companies, In the consumer's life, the brand plays an important role. Identifies source or manufacturer product and enables the consumer to assign responsibility to a manufacturer or supplier distributor. Most important, however, is that brands are of importance to the consumer. Thanks to the experience with the product and its marketing program, consumers are branded many learn. I can tell which brand meets their needs and which, on the contrary, does not. Therefore, brand results help consumers to make choices when choosing products, they decrease purchase risk and create expectation. The relationship between the consumer and the brand it is a kind of agreement where the consumer offers his confidence and loyalty with the knowledge that the brand will behave in a certain way and offer its own merit. But also, for companies and organizations, the brand offers immensely valuable features with ability to influence customer behaviour. These properties can even be bought or sell and give the owner the certainty of future profitable profits. Investing in brands can attribute to the product some unique properties and associations that differentiate them from other products. If the customer is satisfied with the product properties, he has the brand offers, apparently the product will be reselected.

The aim of this contribution is to point to the perception of LIDL by consumers and to point to the importance of building a brand in the 21st century in the retail segment, where it is important to build brand names for individual product lines.

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1 Methodology

The aim of the paper is to emphasize the importance of building a brand in the retail chain of LIDL Slovakia and its perceptions by customers. At the beginning, we used methods of analysis and synthesis to obtain basic information and define theoretical backgrounds. For verification, we conducted a survey using a structured questionnaire. The survey was realized from October to December 2018 on a sample of 302 respondents. On the survey participated 225 women and 77 men of a total 302 respondents. We used induction and deduction methods to implement and formulate conclusions from research results.

Building a strong brand requires careful planning and a great deal of long-term investment. At the heart of a successful brand is a great product or service, backed by creatively designed and executed marketing (Kotler – Keller, 2006). One of the hottest brands in private branding is LIDL with its private brands.

Why do customers value brands, inclusive the private ones? Why would an organization purchase one product over another, often spending more in the process, all because of a brand name? Brands provide (Winer – Dhar, 2011):

- reduced information search costs,
- risk reduction,
- expectations of quality,
- prestige and emotional needs.

And does it touch the private branding, as well. The concept of a brand is complex, not only because the components of a brand name are multidimensional, but also because there are several different branding concepts. There are at least five different types of brands (Winner – Dhar, 2011):

1. Corporate brands. This is sometimes referred to as "umbrella" branding or a "branded house" strategy (General Electric, Heineken …).
2. Corporate parent brands. These are brand names where the corporate brand is carried with individual product names (Toyota Corolla, HP LaserJet series …).
3. Distinct product brands. These are brand names separate from the corporate brand (Crest is not marketed with the Procter & Gamble name. This is often referred to as "house of brands" strategy.
4. Sub-brands. Sub-brands include the name of the corporate brand along with the distinct product brand (Sony Play Station, Nestlé KitKat …).
5. Co-brands. Often, two independent companies will cooperate to have both brands highlighted in a product (Mattel – Caterpillar).
6. Ingredient brands. A special case of co-branding is ingredient branding. This is when a company decides to put the name of an ingredient as part of the product name as in the case of DuPont´s Gore-Tex.

One of the reasons for implementing the brands was a fact, that the customer didn´t know the producer and was not able to judge the quality of the products. He had to buy the goods with the risk to buy such quality, which was proclaimed. The trade mark products dug the danger of non-quality and positioned the brand with the producer. Best example for that are the producer from the alimentary sector (Geršlová, 2011). Such way appointed the term brand equity. The assets and liabilities underlying brand value fall into five categories, as follow (Winer – Dhar, 2011):

1. Brand loyalty. The strongest measure of a brand´s value is the loyalty (repeat buying, word of mouth) it engenders in customers.
2. Brand awareness. The simples form of brand equity is familiarity. A familiar brand gives the customer a feeling of confidence, so he or she is more likely to consider and choose it.
3. Perceived quality. A known brand often conveys an aura of quality (either good or bad). A quality association can be of the general halo type, such as Hewlett-Packard´s outstanding reputation for both its products and as a place to work. It could also be a category-specific association, such as Gillette´s reputation in razors and blades.
4. Brand associations. Although quality associations are important, more subjective and emotional associations are also important parts of brand value. These could include personal, emotional, and many other kinds of associations. Taken together, these associations form a brand personality that suggests situations for which a brand is (and is not) suitable.
5. Other brand assets. Other assets, such as patents and trademarks, are also valuable to products and service.

Branding means creating a memorable meaning for the brand in people's minds. It is based on signals and associations that are linked to the tag. These signals must reflect what the symbol symbolizes. A strong brand is usually the result of great branding. At first it is important to have a simple and concrete brand idea created, because the easier and more specific it is, the more impressive is the branding and memorability of the brand itself and its associated associations (Adamson, 2011).

Illustration scheme

Source: Pixabay, 2019.

To most valuable intangible assets of the companies belong their brands. The strong brand brings the loyalty of the customers -behind in the quintessence have to be the perfect product or services. The brand equity is the value, what the brand adds the products and services. It may consist in the way , how the consumers think, feel and handle towards the brand, equally in the prices, market share and profitability, which the brand brings (Keller, 2008).

Although there is agreement about basic principles, several models of brand equity offer some different perspectives. Here we highlight four of the more established ones (Kotler – Keller, 2013):

- Differentiation measures the degree to which a brand is seen as different from others.
- Relevance measures the breadth of a brand´s appeal.

- Esteem measure how well the brand is regarded and respected.
- Knowledge measures how familiar and intimate consumers are with the brand.

Differentiation and Relevance combine to determine Brand Strength. These two pillars point to the brand´s future value, rather than just reflecting its past. Esteem and Knowledge together create Brand Stature, which is more of a "report card" on past performance.

Based on these pieces of knowledge it is very important for the company, retail company to create adequate marketing mix.

Tab. 1 Brands TOP 100

	Brand	Category	Brand Value 2018 $Mil.	Brand Contribution	Brand Value % Change 2018 vs. 2017	Rank Change	Country of Origin
1	Google	Technology	302,063	4	+23%	0	
2		Technology	300,595	4	+28%	0	
3	amazon	Retail	207,594	4	+49%	1	
4	Microsoft	Technology	200,987	4	+40%	-1	
5	Tencent 腾讯	Technology	178,990	5	+65%	3	
6	facebook	Technology	162,106	4	+25%	-1	
7	VISA	Payments	145,611	5	+31%	0	
8	McDonald's	Fast Food	126,044	4	+29%	2	
9	Alibaba Group	Retail	113,401	3	+92%	5	
10	AT&T	Telecom Providers	106,698	3	-7%	-4	

Source: BRANDZ, 2018

2 Results and Discussion

LIDL is a successful chain of grocery stores and have been expanding strongly throughout Europe for over 40 years. By now, LIDL is operating in 29 countries worldwide and offers food and non-food products of highest quality at the lowest possible prices in over 10 500 stores in 29 countries.

LIDL is proud of its humble beginnings. In 1973, the first modern LIDL store opened in Ludwigshafen (25 miles south of Frankfurt). Employing 3 people and offering about 500 products, this small store was to become the foundation of LIDL's far-reaching expansion. During the 1990´s they started branching outside of Germany and within a few years, we expanded across Europe.

Today, LIDL operates over 10 500 stores in 29 countries. LIDL has a history of cultivating relationships with local suppliers in each region to offer our customers high quality products at low prices. They´ve recently expanded to the United States and are striving to be a time-saving, life-enhancing grocery store where you love to shop.

At LIDL, it is the mission to offer the communities high quality products at low prices. And the sustainability is a key indicator of quality. In this regard, LIDL holds it selves to a high standard and aim to provide transparency around our sustainability initiatives.

As an international company, LIDL aware of its size and public visibility. It respects the variety of cultures and recognize the diversity of their values and traditions and its work is characterized by the following company principles (LIDL, 2019):

- Customer satisfaction is our highest priority.
- Superior quality for the lowest price possible determines our position in the market.
- LIDL´s continued growth is determined by expansion and constant improvement in the stores.
- As an efficient company, LIDL work according to defined processes and procedures.
- The success is ensured by short decision paths and simple work processes.
- It grows through development and continuous improvement in own stores – LIDL believes success is never final.
- In the daily activities LIDL makes sure to abide by the law and internal policies.
- LIDL assesses itself as an economically, socially and environmentally responsible company.
- Fairness to all in the company is imperative.
- LIDL respects and encourage each other.
- Agreements are upheld in an atmosphere of trust.
- Recognition, acknowledgment and constructive feedback determine the operating environment in LIDL´s daily work.
- LIDL fosters an environment for leadership growth to ensure continuous success.

Tab. 2 The most valuable Retail brands, 2018

		Brand Value 2018 $ Million	Brand Contribution	Brand Value % Change 2018 vs. 2017
1	Amazon	207,594	4	+49%
2	Alibaba	113,401	3	+92%
3	The Home Depot	47,229	3	+17%
4	Walmart	34,002	2	+22%
5	JD.com	20,933	3	+94%
6	Costco	18,265	3	+12%
7	IKEA	17,481	3	-8%
8	Ebay	14,829	3	+20%
9	ALDI	13,785	3	+12%
10	Lowe's	13,111	3	-2%
15	Lidl	8,219	2	+14%

Source: Brandz.com, 2018

High quality. Low prices. Hassle-free shopping that gets you in and out. A product assortment and store layout that’s refreshingly simple, yet full of surprises to discover at every visit. LIDL is not the cookie-cutter grocery store. LIDL revolutionizes grocery shopping. It has a less complicated process that allows us to simply deliver low prices, high quality, and the best shopping experience for our customers (LIDL, 2019).

The results depend in high degree on private branding. LIDL, only in Slovakia, offers about 83 % share of private brands on whole supply. The most known brands are: Pikok, Pilos, Cien, Dulano, Bluedino, Fruit Jumbo, Formil, W 5, Silvercrest, Parkside, Lupilu, Esmara, Livergy, Crivit and many others.

Fig. 1 Private brands of LIDL company

Source: LIDL, Internal material

According to Huklová 2019, the composition of food and drugstore sales changes in January. However, based on the Nielsen survey, it can be said that paradoxically in the area of private labels it is an increase because people after Christmas buy mostly cheaper and alternative products compared to the Christmas season, preferring especially luxury and branded products and therefore private brands at the end of the year for most consumers, are less attractive and attractive (Huklová, 2019).

Within the first 30 most important groups of food products, the private label has the largest share of milk, with more than two-thirds of total revenue in this category (67 %) traveling to private label products and paying on average one-fifth less than branded milk. Almost half (49%) is a private brand in cream and a third place in the importance of private brands takes on pasta with a share of 38%. For pasta, the price difference between "home" and "brand" pasta is bigger, about 80 cents per kilogram. A similar share in cheese and private label brands is also a popular alternative to snack consumers where more than 30 % of total sales are directed to private label products (Huklová, 2019).

Fig. 2 Photography of merchandising in the LIDL store

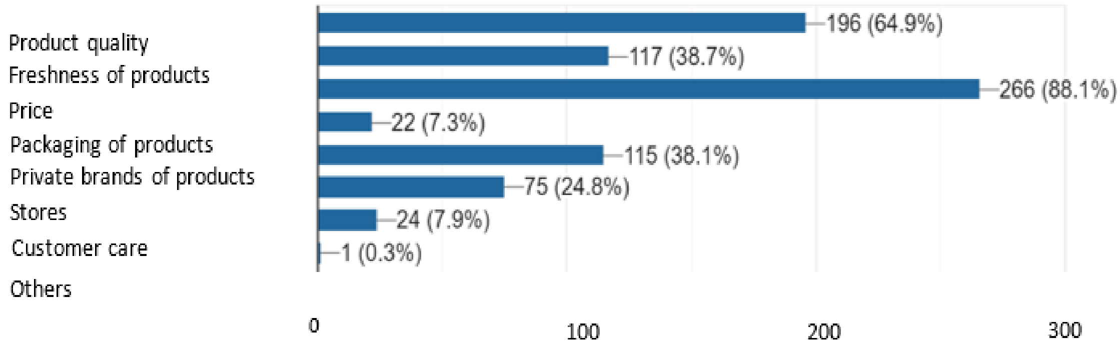
Source: Bruteničová, 2019

In connection with the awareness about the brand LIDL we realized the field research, which was focused with the view on young generation, on students at the age of 18 – 25 years. The structure of the sample was given by the gender participation at the University of Economics in Bratislava. We prepared 4 basic questions:

1. What do you like on brand LIDL?
2. Do you perceive the brand LIDL as the guarantee of the quality?
3. Do you consider the brand LIDL as socially responsible?
4. What would be your proposal for enhancement at LIDL?

The questions of the research, research flow and the results were consulted with the expert bodies of LIDL Slovakia.

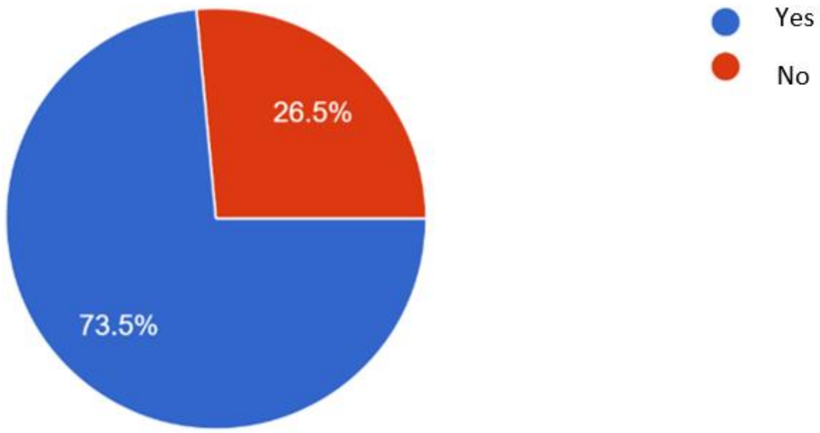
Fig. 3 Customers preferences of LIDL company



Source: Own procession

On the first question, we wanted to know what customers are interested in and like them on the LIDL brand. As the figure 3 shows, the highest quality attributes, product freshness, private brands and stores have achieved the most. However, the still important position in the consumer's mind is still the price, which has also been confirmed as one of the most important attributes in this case. The prize was the most important factor by up to 266 respondents.

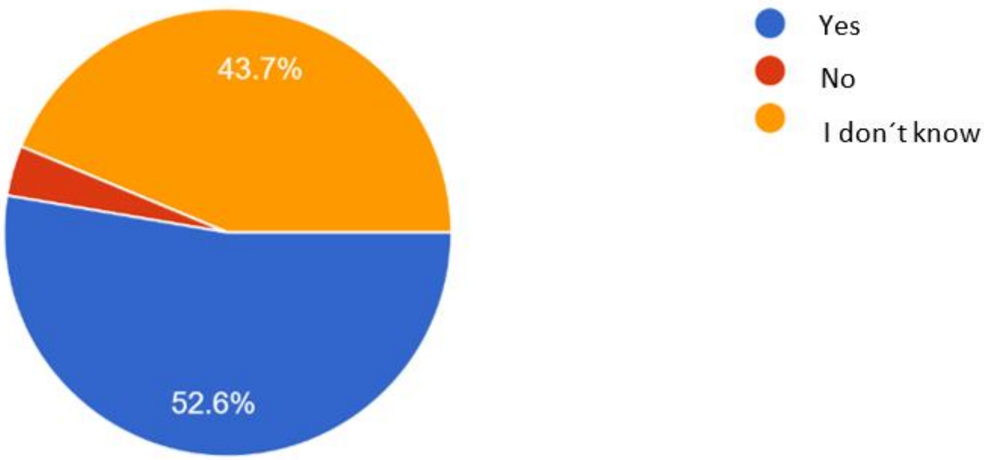
Fig. 4 LIDL as a guarantee of quality



Source: Own procession

As shown in Figure 4, 73.5% of respondents consider LIDL and its brand as a guarantee of product quality. This fact is borne out by the various awards that LIDL owns and also that there has been no serious incident with regard to the quality of its products during the period of its operation, whether it would be fines or miscellaneous bad news.

Fig. 5 LIDL as a corporate social responsibility company

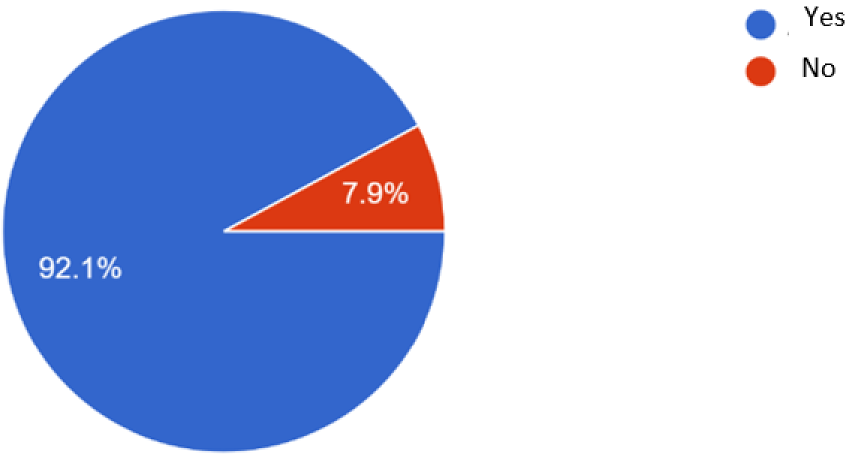


Source: Own procession

Another question is to find out whether respondents regard LIDL as socially responsible because CSR activities help build a brand and leave a positive impression on the consumer's mind. Because it is an entrepreneurial activity that goes beyond legally defined activities. According to respondents, LIDL is perceived as a socially responsible society in the eyes of respondents.

However, as you can see, 42.6 % of respondents were unable to comment on this issue, which may be due to a lack of understanding of the problem or the term CSR.

Fig. 6 Recommendation of LIDL company



Source: Own procession

On the last question, we wanted to find out if respondents recommend LIDL to their acquaintances, as shown in Figure 6 to 92.1 %, which is almost 100 %, would recommend LIDL to its well-known, highly valued overall. Because this is confirmed by the fact that respondents perceive brand branding and understand the idea of the company.

Research question Nr. 4 and the results

What would be your proposal for enhancement at LIDL?

- long waiting lines before the cash desk;
- the implementation of self-service cash desk;
- small (handy) shopping baskets;
- straightness in the shops;
- leaflet product accessibility;
- more Slovak products;
- fewer plastic packages, more ecological substitutions.

Evaluation of the research – discussion

During the research and during the final evaluation we could recognize, that the brand is all along very important for the customer, his product apperception, especially the private brands and for the company, as well, an important aspect of brand equity development. The Brand equity is really the added value endowed to products and services, and as a matter of course for the company the way of turnover increasing. Especially, the private brands at LIDL help to make the products recognizable as unique and different and for the customers make it easy to identify items the purchase routinely. The LIDL private brands are an important aspect of purchase, not only for promotional and informational reasons, but also as point of differentiation for the future. Our research confirmed, that the customers have a favourable response to private brands of LIDL, what differentiates this provider from the others and helps him to build the specific position among the consumers, not only as discounter. The private brands also promote other products of the manufacturer or of LIDL portfolio, in common. In this case we may speak about the customer-based brand equity. Our research confirmed besides the argument of Kotler and Keller (2006, p. 277), else: they are three ingredients of customer-based brand equity:

1. Brand equity arises from differences in consumer response.

2. These differences in response are a result of consumer´s knowledge about the brand.

3. The differential response by consumers that makes up the brand equity is reflected in perceptions, preferences and behaviour related to all aspects of the marketing of a brand.

The questioning, on other hand, disclosed some deficiencies and problems that must be, from part of LIDL, solved, or minimally must be discussed as possible way for the betterment.

The everlasting problem at LIDL is the time waiting for cashier desk. The situation is in sequences better and better. But the customers feel this fact as gap. One of the proposals of the customer is to establish the self-service cashier points. LIDL works with the limit formats from 1 280 m2 till 1 440 m2. That causes, that the product range is limited and the place for cash register, too. In extended format the number of cash points is ten, in the minor one only 6 – 8.

The smaller shopping baskets could be the solution. LIDL experimented with them in some shops, but the result was, that the volume of the purchase was smaller. The limitary area brings also the problems with the sufficiency of non-food products, especially of them, they are promoted in leaflets. We apprise, the share of non-food products is about 12 % of the turnover and it increase, therefor this reality is non-conform for the customer, notably if the action persists one week. The customer coming at the end of the week, very often don´t find the enquired products.

Next demand of the quizzed, nota bene the customers, was the quota of Slovak products. Our forecast is, that the proportion of them is about 18 – 20 %. The grocer with highest quotient, COOP Jednota Slovensko, works with the share about 65 – 70 %. Our prediction and qualified adjustment are, LIDL has the possibility to increase this ration till 25 – 30 %.

The final discontent of the participant of the questioning was the fact, that LIDL use, currently, to many plastic packing materials. The quantity is falling, due to the legislation and the reality, that in frame of the CSR (Corporate Social Responsibility) LIDL follows the newest trends and one of them is to eliminate the plastic materials, at all.

Conclusion

Our topic – How to build the confidence into brand in 21st century we analysed in our text. To support the results, we realised the questioning among young people, they as students of the university sufficiently represented the young generation of whole county in the age 18 – 25 years.

The research equally confirmed, that the brand is very important factor of consumer decision and it is, for LIDL, fundamental to build the brands, to broaden the consciousness about it, to communicate it in all possible forms, holistic, to position it at the customer, so deep, as possible. The reasons are many, some of them – economic disruptions, multi loyalty of the customer, the challenging needs and demands of the customer, inside-out approach of modern and young customers, the changing consumer behaviour, instant gratification, daily attacking by various brand positioning.

Therefore, the quality of communication oriented on young generation must be credible, forward-thinking, flexible, systematic building the brands, private brands with the aim to diversify from the others and to be special, unmatchable, to be different.

Following 3 rules for brand strategy in the 21st century (www.brandhook.com, 2019):

1. Sameness is boring. A core part of branding is about presenting a consistent face so customers can be reassured of quality and family rise themselves with your brand – but sameness and hyper consistency are boring. The most exciting brands are dynamic, and whilst they keep core elements consistent, they are flexible enough to execute localized and differentiated touchpoints to create excitement and a less 'standardized' feel about the brand.
2. The brand is the sum of its interactions. Gone are the marketing driven days when you could tell consumers what to believe about your brand via the company logo and a few well-placed advertisements – now more than ever every single touchpoint works in concert to create the overall perception of the brand.
3. Stand for something more. Brands are the 21st century leaders. Increasingly, the role of brands is moving beyond 'selling us stuff we don't need' to inspiring and guiding us to a better way of living. A core part of business in the 21st century is making your brand stand up and stand for something.

The own brands are of advantage to more points of view. The retailer oneself appoints the composition of the products and has a free hand in pricing. It´s more simple to reduce the price of the private product as of the real brand product. Hardly anybody knows, that the private LIDL brand and the brand products come from the same producer (Trend, 2019)

For LIDL is it necessary to optimize the brand experience and the customer reaction, because it supports the brand health. Brand range building is long-life process and every company is supposing to do it, hearing the customer ideas, in particularly at private brands, they are with 83 % share very considerable for discount chain LIDL.

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Wealth versus debt in V4 countries

Ľuboš Pavelka[1] – Rastislav Martiška[2]

Abstract

New Allianz Wealth Equity Indicator 2019 shows us redistribution of wealth of selected 53 countries for the year 2018. Slovakia leads this index two years in row. Authors are focused on V4 countries and four main parts as Allianz Wealth Equity Indicator, household saving and liabilities, public debt growth and comparison of public debt per capita and minimum wages. Paper seeks to point out differences in V4 countries. The paper seeks to point out the differences in the V4 countries and asks why the status of those countries that have a common past and a starting line. In the 30 years since the fall of the Iron Curtain and similar developments in the economies of the countries, some indicators such as household indebtedness or household savings differ significantly.

Key words

public debt, household liabilities, savings, wealth, minimum wage, V4 countries

JEL Classification: D14, E21, H63

Introduction

Paper is aimed at comparing the wealth of the population with debt in the V4 countries (Slovakia, Czech Republic, Hungary and Poland) based on the Allianz Global Wealth Report 2019, which uses the new Allianz Wealth Equity Indicator (AWEI), aimed at redistribution of wealth of selected countries. It shows that Slovakia is the most egalitarian state among the countries under comparison. The authors compare the savings of the population with the debt of the population recalculated per capita and at the same time with the public debt recalculated per capita. Paradoxically, when we are comparing total assets, the inhabitants of Slovakia has less assets than the citizens of other V4 countries.

Paper is divided into four main parts. First part describing calculation of the Allianz Wealth Equity Indicator, which was introduced in 2018. In the first part the authors focus on the output graph Allianz Wealth Equity Index where Slovakia obtain first place from 53 observed countries.

Second part compare household debt and savings per capita in V4 countries for the period 2008 – 2018.

Third part the third part monitors the development of the public debt of the V4 countries between 2008 and 2018. By adding a trend line, the authors seek to point to a linear increase in the public debt of the V4 countries due to large-scale government spending in stabilizing the global financial crisis.

Last part has a large gap between the public debt per capita and the minimum wage of the population in the country. The authors are trying to metaphorically point to the high gap between the lowest income in the country and the public.

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1 Results and Discussion

1.1 Calculation of the Allianz Wealth Equity Indicator (AWEI)[3]

The AWEI is based on five different parameters for wealth distribution:

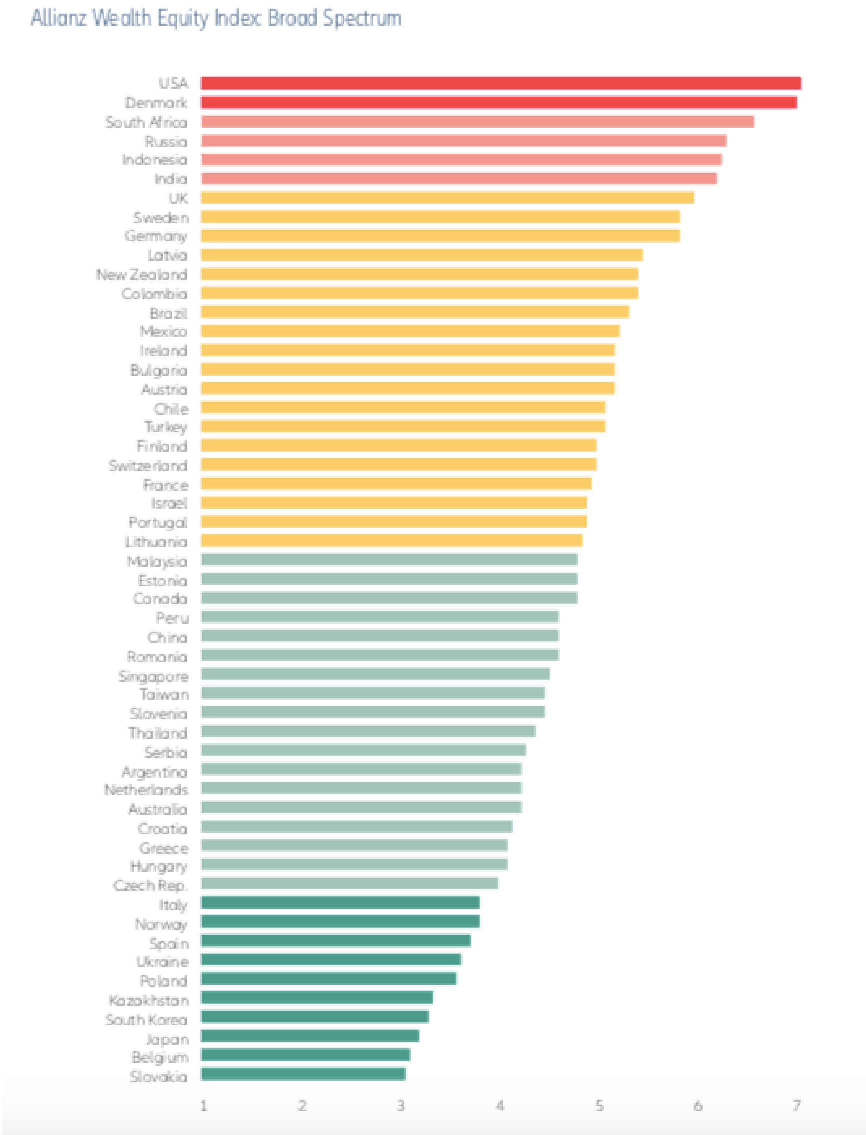
- The share of the national wealth middle class in total net financial assets –a measure of the middle's participation in national prosperity; weighting: 20%
- The share of the richest decile of the population in total net financial assets and the change since 2000 – a measure of the concentration of wealth at the top; weighting: 15% (share) and 5% (change)
- The share of the lower half of the population in total net financial assets and the change since 2000 – a measure of the so-called trickle-down" effect; weighting: 15% (share) and 5% (change)
- Median net financial assets as a percentage of average assets and the change since 2000 – a measure of the degree of distortion in wealth distribution; weighting: 20% (share) and 10% (change)
- Growth in net per capita financial assets since 2000 – a measure of the general increase in prosperity; weighting: 10%

The AWEI thus takes into account both structural features of wealth distribution and changes in these, with a lower weighting being given to the latter. The primary aim of the new indicator is to obtain as comprehensive a picture as possible of the current situation. However, changes play a part insofar as they influence perceptions: for example, wealth concentration of 60% will be interpreted differently depending on whether the figure was previously 70% or 50%.

The original values for the parameters are transferred to a scale of 1 to 7, in which 1 represents the best figure. The distribution of individual figures is based on a normal distribution, i.e. the parameter values are assessed not on the basis of normative guidelines – e.g. a wealth concentration of only 40% is very good – but instead based on the relative distribution of degrees of wealth. In view of the difficulties involved in drawing up standardized normative criteria for such culturally different societies as those that we are dealing with in this analysis, the adoption of such a relative perspective seems to make sense. However, that also means that the country with the best indicator value may not necessarily be a country in which wealth is perfectly distributed. It is simply the country in which distribution is least distorted among the countries analysed here. The overall indicator AWEI is the weighted sum of the individual parameter values and can range from 1 (very good) to 7 (very poor). (Allianz Global Wealth Report 2018)

[3] Allianz Global Wealth Report 2019 – Economic Research

Fig. 1 Allianz Wealth Equity Index: Broad Spectrum 2019

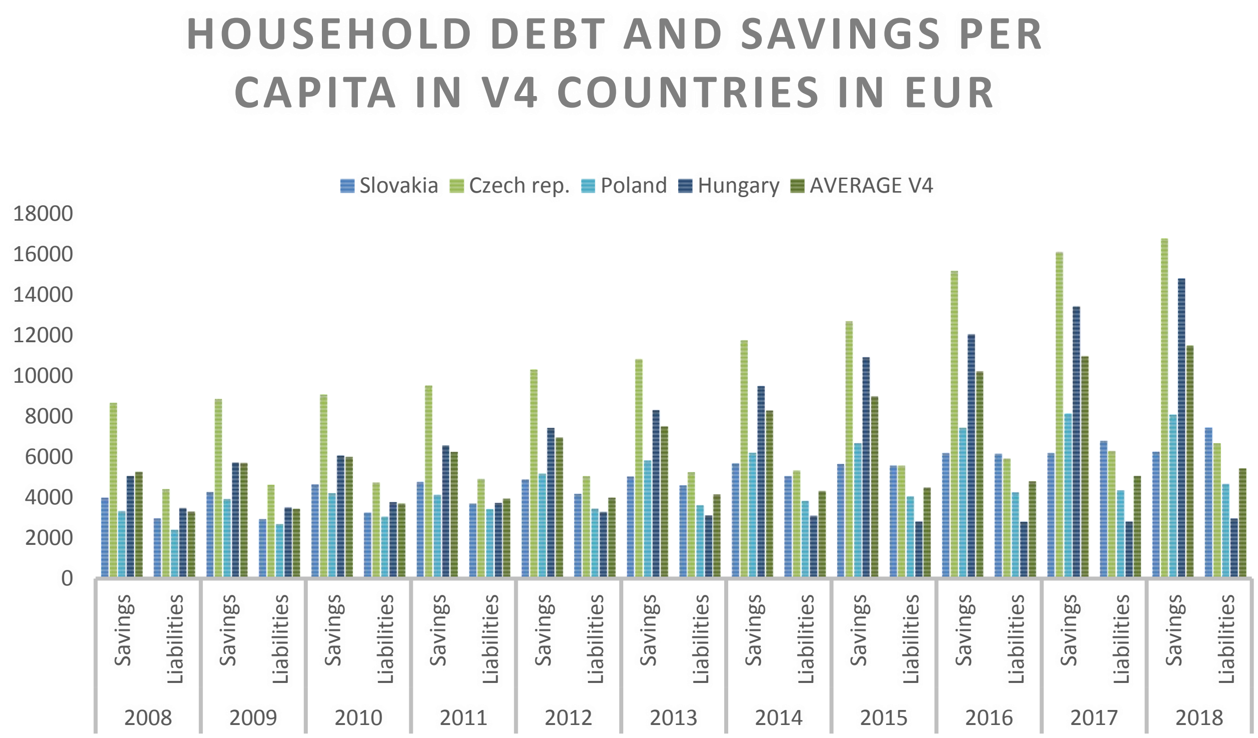


Source: Allianz Global Wealth Report 2019 – Economic Resear

The above chart shows that, in addition to countries where the gap between rich and poor, such as the US, South Africa, Indonesia and the United Kingdom, has long been relatively large, there is also a surprisingly uneven wealth distribution in Denmark, Sweden and Germany. And it is precisely in the ranking of equality of wealth distribution that Slovakia is the absolute leader. According to a study by Allianz, attributed mainly to the legacy of liberal reforms after the end communism. The other V4 countries are in the AWEI index at the bottom at around 3 to 4 which means well. The specific location of the other V4 countries is as follows: the Republic of Poland ranked 6th, the Czech Republic ranked 11th and Hungary ranked 12th. (Allianz Global Wealth Report 2019)

Last year Allianz Global Wealth Report 2018 also lead Slovakia, following Belgium and South Korea. Other V4 countries ranked on: 6th place – Republic of Poland, 13th place Hungary and 16th place Czech Republic. We can observe a shift up several rungs into AWEI in the Czech Republic and Hungary from time period 2018 to 2019. Poland and Slovakia remained unchanged for both years. (Allianz Global Wealth Report 2018)

Graph 1 Household debt and savings per capita in V4 countries



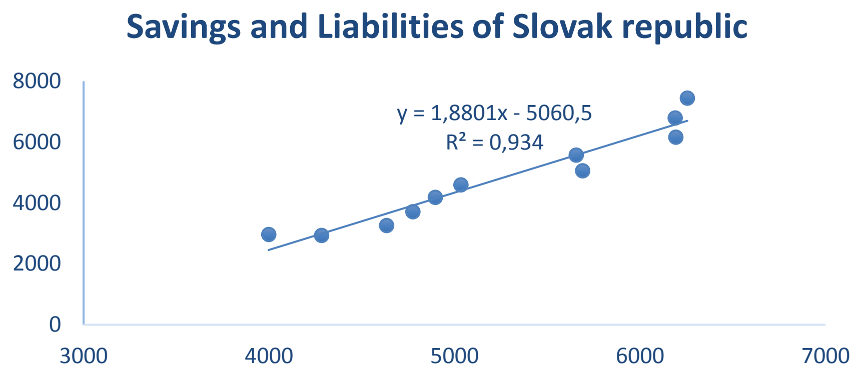
Source: Author's own processing according to: Allianz Global Wealth Map (2019)

Last year, financial assets of Slovak households grew by only 5.5%, which is the same increase compared to the previous year. This is mainly due to deposits in banks, where the Slovaks cumulate up to 60% of their savings and which recorded an increase of only 4.2%. Securities, insurance and pension assets, which recorded double-digit growth, did not help either. In the wealth ranking, Slovaks with savings of 6 255 euros per person are ranked 40th out of 53 countries evaluated. The average in the V4 region is significantly higher, reaching EUR 11 483.50. Within the V4 region, all other countries were ahead of us in savings, for example, the citizens of the Czech Republic has more than doubled, namely EUR 16 785, the citizens of the Hungarian Republic EUR 14 813 and the citizens of the Republic of Poland EUR 8 273. From historical data we can see that the inhabitants of the Czech Republic had the highest financial assets of all V4 countries in the period under review, followed by the inhabitants of the Hungarian Republic. Between 2008 and 2011, we can observe the evolution of financial assets of Slovak households higher than that of the Polish population, but this changed in 2012 since the inhabitants of the Polish Republic have higher financial assets than Slovak households.

The Slovak Republic, as the only V4 country under review, has higher credit indebtedness. Since 2010, the demand for loans has risen more strongly than the average in the region. Last year, the debt increased by 9.4%, so each Slovak owed an average of 7437 euros, while the average of the region is 5436 euros. The increase in credit indebtedness is not significant in any of the countries under review in the period under review.

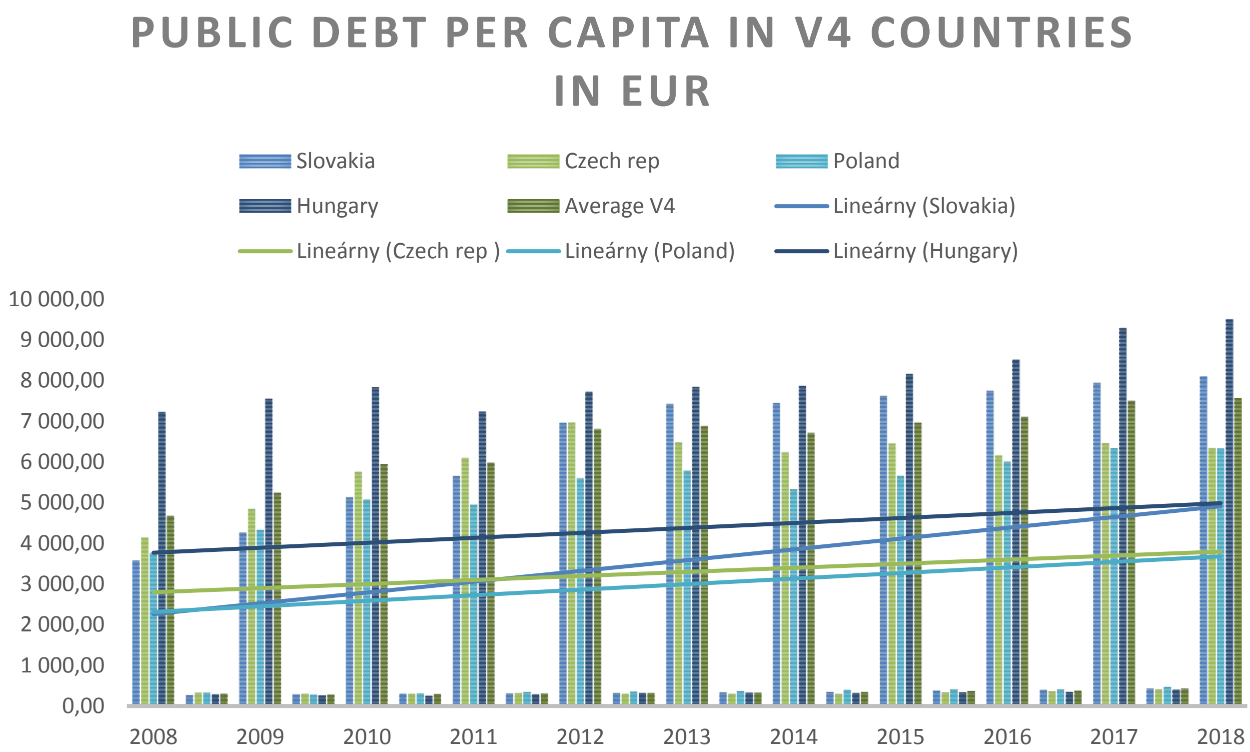
The authors also found a correlation between the monitored indicators and state that the correlation coefficient for individual countries in the monitored years is very high. In Slovakia, the correlation coefficient = 0.966, in the Czech Republic the correlation coefficient = 0.985, in Poland the correlation coefficient = 0.962, in Hungary the correlation coefficient = 0.865.

Graph 2 Savings and Liabilities of Slovak republic – Lineae regression



Source: Author's own processing according to Eurostat (2019)

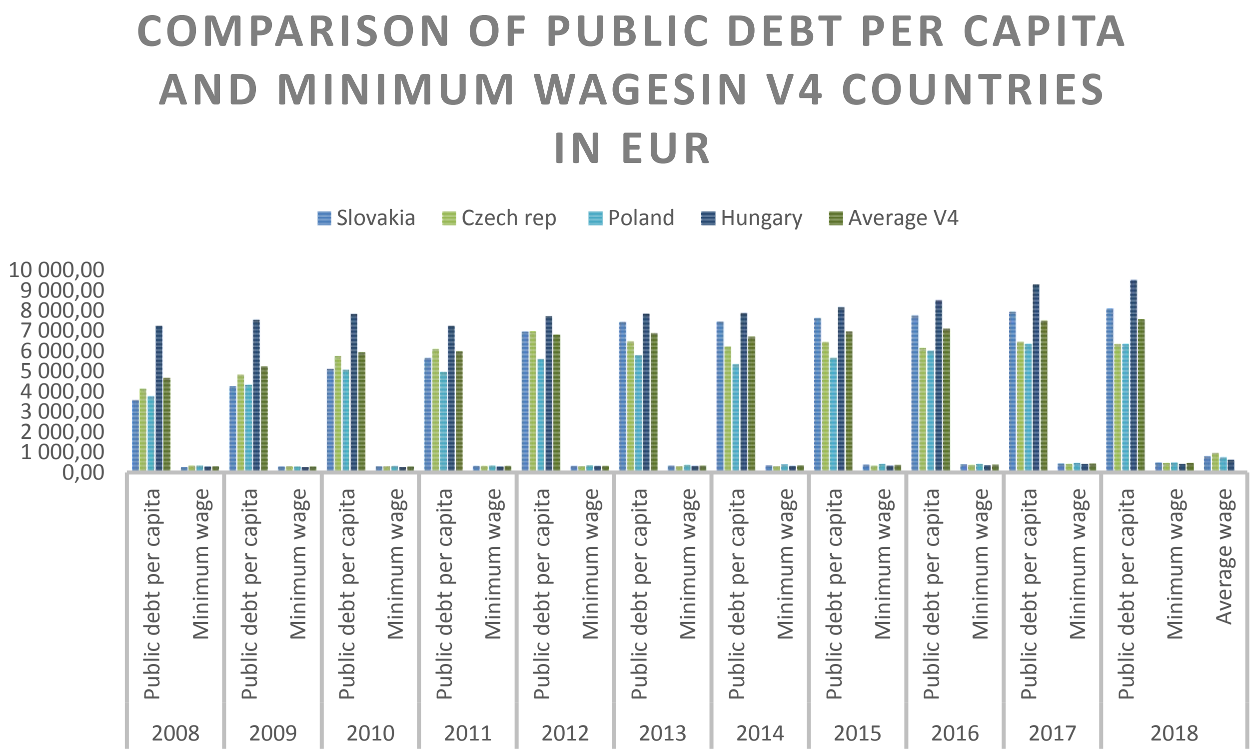
Graph 3 Public debt per capita in V4 countries in EUR



Source: Author's own processing according to Haushaltssteuerung.de and Countryeconomy.com (2019)

According to the figures given above for Slovakia, the country's public debt, in absolute terms and per capita, has doubled from EUR 3575 to EUR 6960 over the period 2008-2012. In August 2019, the amount of public debt per Slovak was already EUR 8086, which is more than in the case of Poland (EUR 6407) or the Czech Republic (EUR 6400). Within the V4 countries, it is higher than in the Czech Republic alone (EUR 9465). The increase in public debt in the Czech Republic was more pronounced than in other economies. The consequences of the global financial and later economic crisis, due to a fall in tax revenues and an increase in government spending, to prevent redundancies in companies, increased spending on active labor market measures have been reflected in a widening public finance deficit and faster acceleration of public debt growth. The increase in the level of public debt in the Slovak Republic in the period under review was considerably faster than in the case of other V4 countries, as evidenced by the trend lines of individual countries.

Graph 4 Comparison of Public debt per capita and minimum wagesin V4 countries in EUR



Source: Author's own processing according to Eurostat, Haushaltssteuerung.de and Countryeconomy.com

The last part compares the public debt with the minimum wage, demonstrating a large gap between the public debt per capita and the minimum wage of the population in the country. Here is an example: if, for example, the Slovak Republic earning a minimum wage was to repay the public debt calculated per inhabitant of the Slovak Republic (in 2018 it was 8099 EUR), it would have to pay almost 17 full monthly wages. If we take into account the average wage (which in Slovakia was in the year 2018 on the level of 1013 EUR), it would need to pay almost 8 the whole monthly wages from time to time. For the other V4 countries under review, this trend is very similar.

The authors also found a correlation between the monitored indicators and state that the correlation coefficient for individual countries in the monitored years is very high except Czech Republic. In Slovakia, the correlation coefficient = 0.838, in Poland the correlation coefficient = 0.816, in Hungary the correlation coefficient = 0.890. In the Czech Republic the correlation coefficient = 0.200, that means correlation coefficient is very low and public debt and minimum wage have no link.

Conclusion

As part of the new Allianz Wealth Equity Indicator (AWEI), which provides an image of the country's wealth distribution, Slovakia is the country with the highest wealth equality. AWEI values in individual countries show continuing trends of wealth gap between rich and poor especially in

USA, South Africa, Indonesia or Great Britain, but also in countries called social market economies, where Denmark, Sweden or Germany can be included. Slovakia's absolute leadership in property equality is in contrast to the fact that Slovakia, along with Romania and Bulgaria, are among the poor countries in the Allianz Global Wealth Report 2019, which concerns the annual assessment of total wealth in the world. The above-mentioned positions of Slovakia in international rankings should therefore be the subject of further research in the academic environment as well as social practice.

Hungary and Poland have long been considered indebted economies before 1989. They solved their economic problems and public finance deficits by borrowing foreign loans and devaluing their currencies. When the market conditions were introduced in 1990, the Czechoslovak economy was characterized by a low level of public debt. This reflected the long-term balanced economy of the country without public deficits.

After 1990, in Poland, foreign creditors forgave a substantial part of their debts in an effort to help the economy cope with structural reforms. Today, Polish public debt is comparable to Slovakia. Our public debt after the independence of the Slovak Republic continued to increase, while in 2008 it was at the Czech Republic level. Given the enormous growth in government spending to mitigate the effects of the economic crisis in 2009 and 2010, our debt increased sharply and outstripped the Czech Republic's public debt ratio relative to GDP.

Czech public debt is therefore currently one of the lowest not only among the V4 countries, but also within the EU as a whole. This was also influenced by the Moody's rating in October 2019, when Czech Republic rating was changed from A1 level to the Aa3 level.

His paper is a part of a research project of the Ministry of Education, Family and Sports of the Slovak Republic VEGA (in the period 2017 - 2019) No. 1/0897/17: “The Importance of European Energy Union Project for Strategic Interests of This Grouping in the Context of the Enhancement of Competitiveness of the Slovak Republic.”

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Artificial intelligence and its use in communication in tourism facilities

Ingrid Potisková [1]

Abstract

For customers of travel agencies the way of communication and online marketing is often an important factor when they choose a trip. Nowadays, online communication tools are essential and contribute to the effectiveness of customer communications. In the present article we analyze what on line communications tools customers usually use, whether they need personal contact when choosing a trip or communication based on artificial intelligence is perceived positively or more negatively.

Key words

tourism, travel agency, online communication, artificial intelligence

JEL Classification: O33

Introduction

Tourism is a very dynamic industry that is growing. Slovakia also has a great potential on this field, so tourism facilities regularly improve marketing activities and communication technologies. The right way to set up communication with customers, operate in the field of online marketing and individual activities of the company are crucial for tourism entrepreneurs.

Marketing online communication is nowadays an integral part of every successful company, without exception also tourism facilities. Information and communication technologies are constantly developing and businesses are also aware of the benefits and efficiency of their use. We are currently living in a period of the 4th Industrial Revolution, which is increasingly affecting every area of social life. Artificial intelligence, robotics, the Internet of Things, or 3-D printing create new opportunities for online communication with customers in tourism facilities and can have a significant impact on this area. New technological trends help improve productivity and efficiency in all sectors of social and economic life.

For customers of travel agencies the way of communication and online marketing it is often an important factor when they choosing a trip. In this article, we discussed chatbots as a new form of communication with the client. Chatbot comes to market along with the introduction of artificial intelligence as part of the 4th Industrial Revolution. Chatbots are becoming increasingly influential in day to day life. These programs have been developed to aid in a range of industries, from simple banking transactions, to healthcare enquiries.

In collaboration with the Hydrotour travel agency, we conducted a survey to see if the clients of the travel agency needed personal contact when choosing a trip and whether they perceive communication based on artificial intelligence positively or rather negatively.

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1 Methodology

When writing the article, we used the Method of Analysis. In the first part, information concerning new trends in communication in tourism facilities was analyzed. We used deduction method to evaluate a short survey among customers of Hydrotour travel agency.

In order to select, name and describe selected forms of on-line communication, we collected information from available sources and processed it into the present article. The analysis of the individual parts of the selected problem has enabled us to better understand the problem as a whole in its functioning and further, in the framework of the synthesis, we have been able to monitor the mutual and substantial connections between the various components of the issue under consideration.

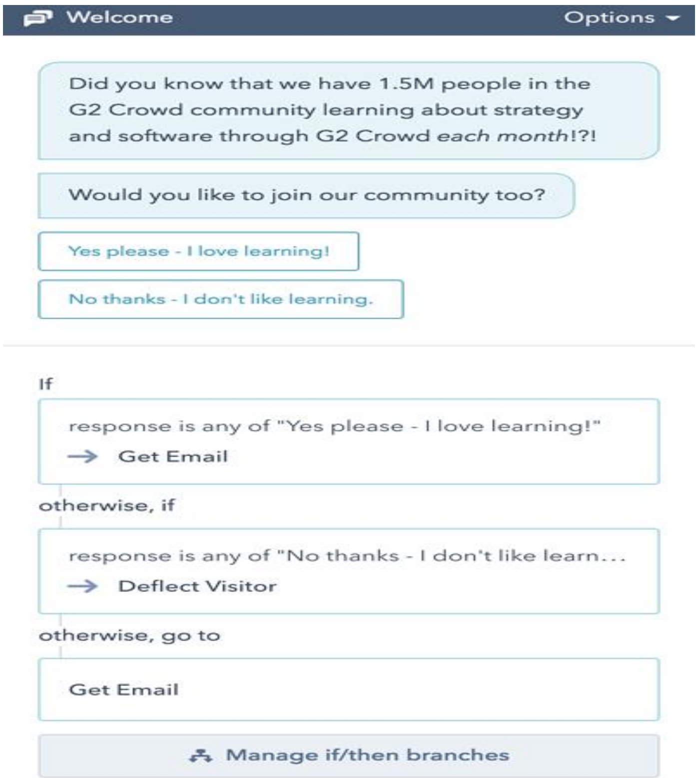
2 Results and Discussion

Chatbots are still relatively new, but they're becoming extremely popular amongst businesses looking to automate customer service, marketing, or sales. We know chatbots are meant to solve questions and support multiple teams, but what exactly powers them? Well, there's actually a few ways a chatbot can be built.

Rule-based chatbots

The first and perhaps most simple bot are rule-based chatbots. These bots are the most common, and many of us have likely interacted with one either through live chat features, on e-commerce sites, or on social media.

Fig. 1 How rule-based chatbots work



Source: https://learn.g2.com/chatbot

Rule-based chatbots are able to hold basic conversations using something called “if/then” logic. A human operator – typically a digital marketer – will map out the bot’s conversation using logical next steps and clear call-to-action buttons. How rule-based chatbots works is shown in figure 1.

AI chatbots

Bots powered by artificial intelligence software (AI) are more complex than rule-based chatbots. These bots are dynamic and don’t rely on call-to-action buttons to map out conversations with their visitors. There are actually two types of AI bots.

Natural language chatbots

The first type of AI bot relies on natural language processing (NLP) to understand the visitor’s context and intent – something machines generally struggle with. As far as machines are concerned, humans don’t speak in logical ways. We use idioms, slang, sometimes misspell words, and express ourselves differently. Machines, on the other hand, require structure, detail, and process.

NLP basically assists machines with understanding human language.

Machine learning chatbots

Machine learning chatbots are similar to NLP bots, however, they’re optimized for learning about the visitor, retaining information on them, and predicting a conversation’s next steps.

These bots utilize artificial neural networks, which acts as an artificial brain to feed large sets of data. In regards to chatbots, these datasets are typically previous conversations and questions that can help the bot learn.

Like NLP bots, machine learning chatbots create a personalized experience for the visitor. Both bots are commonly referred to as “smart bots.”

Chatbots aren’t just useful for website visitors, app users, and customers, but businesses as well. Here are a few reasons why:

People are in front of their computer and phone screens now more than ever, so it only makes sense to provide them with a service they can access with their fingertips.

Chatbots provide 24/7 service - another benefit chatbots provide is instant service anytime, anywhere. Remember, bots are not constrained to traditional work hours or time zones. So, if a customer approaches the bot with a basic issue at 3 a.m., it can be resolved within minutes. (Pickel 2019)

Research shows us that chatbots are on pace to save businesses around $8 billion in productivity by 2022. That alone is enough reason to consider chatbots.

Chatbots are great at acquiring customer information - this benefit applies more to chatbots used for marketing or sales purposes. Chatbots can be used to sign visitors up for marketing newsletters, webinars, schedule appointments, and even guide customers to a landing page or e-commerce site to finalize transactions. (Andacký 2017)

But for a visitor to tap the benefits of a chatbot, they’ll need to provide some basic information like name and email address, and sometimes phone number and location. This information is then automatically stored in an internal database, and the customer can be retargeted at any time.

Nowadays, Chatbots represent an absolute trend in customer communication. Chatbot works by a computer program that simulates human conversation or chatting through artificial intelligence. We can find the use of chatbots in applications like Messenger, call centers, e-shops and other business websites. (Maťová and Dvořáček 2004) Nowadays, travel agents have also begun to use Chatbots to reduce their costs, recognize the customer through live chat communication, gain a competitive advantage and improve customer communication through artificial intelligence. Chatbot can communicate with an unlimited number of customers at once. Chatbots do not require any installation and logging in, are quickly created and are a relatively cheap and flexible way to communicate online. A prerequisite for successful chatbot communication is to maintain a coherent and understandable communication that makes sense.

Chatbots are designed to respond immediately and their ultimate goal is to increase customer satisfaction. When creating a chatbot, customer key questions are predefined in advance by keyword, and when the customer reaches the bot, they receive an instant automated response. With the keywords and terms you enter, you can create a very advanced help not only for customer support but also for other features. For example, to collect e-mail addresses and customer data that can be used in a CRM system, purchase assistance - bot asks the customer questions based on pre-prepared scenarios and then offers the most relevant product or service according to responses.

In the online space, it is important for the customer to make the business accessible nonstop. In this case, chatbot offers not only customer assistance but also a better and faster way of interaction. It helps build a better customer relationship and, as it is an innovative approach, the company will also provide a strategic competitive advantage. (Novacká et al.2014)

Chatbots allow you to program Skype, Telegram, Slack, or Google with the Allo communication platform. From 2016, it is also Facebook, which has made Messenger bot available to independent developers to create their own chatbots. (Tiwari 2017) Most websites start with online chat and create chatbot after some time. An online chat works during business hours when a company employee writes with a customer and gives him information. In the online chat order mostly operators who are also in charge of the call center for telephone advice. In both cases, it is the operators' duty to know the characteristics of the company's products and services, as their job is to provide the best possible customer support.

Using chatbot flawlessly works in most cases with simple products and services when there is a limited number of questions a customer may ask. In more complicated cases, it is advisable to have the possibility of communicating with a person in reserve.

Reservations can be a good example of customer service via chatbot. This is the area in which chatbot can be better than human because it is available non-stop and is able to get user information like name, birth date, contact information and more. The advantage of a booking chatbot is also that the bot can notify the customer of the upcoming booking date. (Payne and Frow 2005) An example of such a bot was aunt Tyršová, who was in charge of reserving playgrounds at Magio Beach. Examples of chatbots are discussed in the next section.

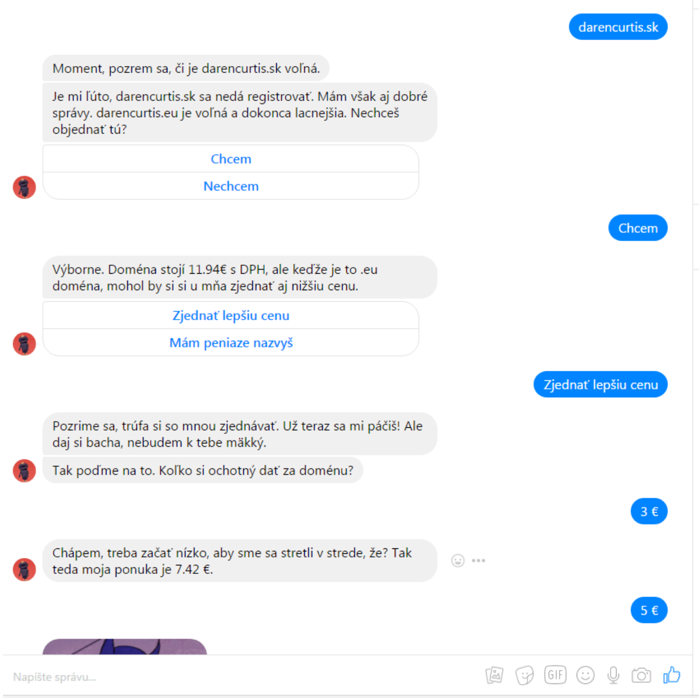
2.1 Examples of chatbots

The first Slovak bot from WebSupport

Since 2016, when Facebook officially introduced Messenger Bot, the artificial intelligence of interactive character in the world has gained enormous popularity. Two months later, the Slovak Internet Space Provider, WebSupport, brought a unique technological innovation, the first Slovak commercial Messenger Bot called OverBot. The first Slovak chat bot specialized in free domain verification and .eu domain pricing. If a user wants to register a domain but does not match the price, Overbot can suggest an acceptable discount. In this way, you can also save by using Overbot. In addition to offering domains, his intelligence allows him to help customers and others with creative and funny names for the domain. With Overbot, you can communicate with Facebook

Messenger for smartphones or by entering a unique address m.me/overbot. (Fabová, 2016)Boot Conversation is shown in Figure 2.

Fig. 2 OverBot conversation

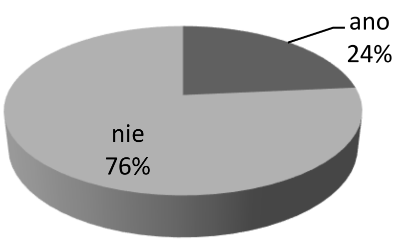


Source: https://darencurtis.sk/blog/online-svet/messenger-chatbot/

2.2 Awareness of chatbot among Hydrotour travel customers

In the survey conducted in cooperation with the travel agency Hydrotour we focused on determining the level of awareness about communication through chatbot. We asked clients of the Hydrotour travel agency whether they knew the term chatbot. From the 102 respondents surveyed, 63 respondents have already met this term, which is 62%. 39 respondents, it is 38%, did not hear about chatbot yet.

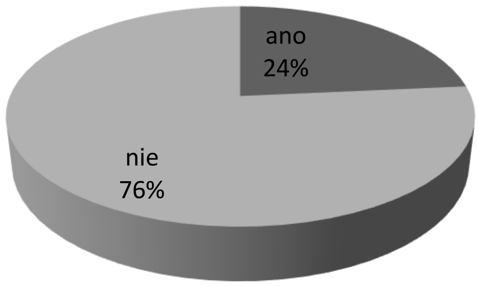
Graph 1 Awareness about communication through chatbot



Source: own processing

On the next question, we asked respondents whether they had a chatbot experience. The results found that the vast majority, 72% of respondents still had no chatbot experience. 28% of respondents told us they had already tried online communication based on artificial intelligence. Experience with chatbot has yet few people because these tools have only appeared in recent years, and many companies are only planning to introduce communication through artificial intelligence. Nowadays, chatbots are particularly popular in the field of tourism abroad. This tool is used by many airlines, airline search engines and lodging companies. In Slovakia, tourism facilities are also beginning to recognize the positive features of chatbots and are expected to be used in travel agencies as well.

Graph 2 Chatbot experience



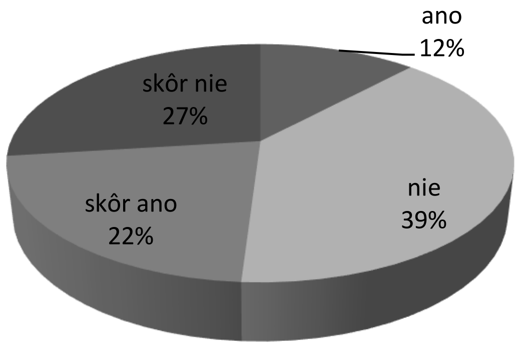
Source: own processing

We also wondered if the interviewer liked chatbot communication. We wanted to find out how they perceive communication with the robot. It is clear from the results that most of the respondents prefer to communicate with a person and do not like chatting with a robot. We received this response from 39% of the survey participants. A further 27% of people who said "not rather" said the negative answer.

On the contrary, "rather yes" was identified by 22% of respondents who like this form of communication. 12% of respondents think that communication with bot is a fast and efficient way of communicating and they like it very much. The results show that in most cases people do not trust chatbots and prefer to communicate with people.

The reason may be that they have not yet had the opportunity to try such a communication. In general, the younger generation uses more online communication tools while the older generation needs personal contact when buying a trip. In most cases, the higher age category answered this question that they do not like artificial communication intelligence and prefer communication with man. We assume that in the future, confidence in the fourth industrial revolution technology, including the use of bots, will grow, as more companies start to work with them.

Graph 3 Popularity of chatbots



Source: own processing

Conclusion

Some of the experts say that bots are poised to be at the center of a crucial paradigm shift in how we think about using the Internet. While a Web browser might once have been our front door to the Internet and apps often play that role today, experts say that bots could soon become our primary digital gateway.

The development of artificial intelligence in the 1970s and 1980s focused mainly on speech, text, image and voice recognition methods. Nowadays, these technologies are widely available in programs and applications. The development is now focused on machine learning, autonomous decision making, processing and exploitation of knowledge. Programs are also being developed that are capable of learning through ongoing communication. Chatbots are not new. Apple's Siri and Microsoft's Cortana are bot-powered and have essentially paved the way for the full-on bot revolution as leaps in natural-language processing and artificial intelligence enable the next iteration.

Chatbots are extremely valuable for businesses and this value will only increase as time goes by. On obvious area of chatbot implementation is customer service. Bots are invaluable here. Waiting on hold may soon be a thing of the past as they become advanced enough to deal with basic level customer service queries, and this is already being used by a lot of companies worldwide. It's no secret that this has resulted in significant cost reduction.

The results of our short survey pointed out that although most people have heard about chatbot, but they do not have experience with communication based on artificial intelligence. Furthermore, we found that people prefer to communicate with a person rather than a robot. The reason may be the fact that tourism facilities uses chatbot quite little and potential clients have not yet had the opportunity to try this form of communication.

The further development of artificial intelligence will depend on the performance of computers.

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Positive and Negative Aspects of Work in Knowledge Intensive Business Services

Miroslava Prváková[1]

Abstract

Companies providing knowledge-intensive business services (KIBS) play an important role in value creation process in the national and international economy as well. KIBS dependent on a high level of knowledge sharing, collaboration and, above all, on human factors. Nowadays, it is an increasing problem for employers to find the right employees and even more to keep them. The chosen company KIBS defined, that one of its biggest problem is a high workforce fluctuation. The main goal of our work is to explain the concept of KIBS, to identify the positive and negative aspects of the work environment in KIBS as well as to identify the main reasons for the workforce fluctuation in the selected KIBS company. We have achieved results primarily through a primary quantitative survey using the inquiry method. Inquiries were conducted online and attended by 200 respondents (employees). After evaluating the results, this paper includes suggestions for improving the work environment for selected KIBS company. The proposals were presented in front of the selected company and based on positive feedback they will be further examine and partly included in the HR strategy.

Key words

knowledge-intensive business services, labor market, workforce, work environment

JEL Classification: M50, M59

Introduction

In the spite of the huge increase in knowledge intensive business services (shortcut KIBS), a literature review has revealed that there has not been much attention paid to examining this issue. For example, KIBS includes companies providing services such as audit, tax, consulting, law, marketing, and the like. According to Kubičková and Olexová (2014), with the rapidly changing industry dynamics, thanks to the Internet and the availability of knowledge for everyone on the planet, the KIBS area is becoming increasingly interesting.

With the participation of foreign direct investment, KIBS has grown very rapidly in recent years. They are mainly large business centers that are subsidiaries of both foreign and domestic businesses that perform in-house services for their parent and sister companies, or for third parties in finance, IT services, customer service, human resources support, finance, sales, and the like. These branches have been increasingly occurring in Slovakia in recent times for several reasons. According to the Ministry of Economy of the Slovak Republic (2016), the competitive advantage of Slovakia is mainly in economic and political stability, but also due to the geographical position of the country, skilled workforce or common currency using in all EU member states.

In most of these companies, work processes are divided into well-defined standardized tasks that represent a set of workflows that set the best and most reliable methods for each process. The most common problem that these companies face is the high fluctuation of their employees. As KIBS is dependent on a high level of knowledge sharing and thus on collaboration, it is very

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important to clearly define the positive and negative aspects of this working environment. Nowadays, it is a big problem for employers to find the right employees and even more to keep them. *What are the main factors in the decision-making of the workforce to work in this type of company? What are the most common reasons for leaving employees from KIBS company*? In our paper we address the answers to these questions as well as the suggestions for improving this environment, based on a primary survey conducted in the selected KIBS company.

1 Methodology

The impulse to compile this paper was based on the author's collaboration in teaching process with one of the KIBS company in Slovakia as well as the conjunction of this topic with her dissertation theses. The KIBS company has set a problem: high fluctuation of employees. The basic method by which we reached the results was the realization of a primary survey in this company as well as a secondary survey of foreign and domestic professional literature, focusing mainly on the concept of KIBS. Based on the collectivization of acquired information, we pointed out the importance of KIBS companies operating in Slovakia. With primary survey we examined the work environment in the selected KIBS company. The main objective of our work was to explain the concept of KIBS and to identify the positive and negative aspects of the KIBS working environment as well as to identify the main reasons of high fluctuation of employees in the selected KIBS company. In this paper we proceeded from generally focused facts in the context of KIBS to the evaluation of the primary survey in the selected company. The primary survey was conducted on a sample of 200 respondents (employees of the selected KIBS company) using the online inquiry method. Based on the analysis and summarization of the information, we have reached conclusions which we will comment on in the following part of this paper.

2 Results and discussion

One of the first definitions of the term KIBS is associated with Davis and Botkin in 1994. Their definition was based on a common characteristic of enterprises with a high level of knowledge use. This characteristic determines that within KIBS it is the clients who play a decisive role in the value creation of service solutions. According to Doloreux and Laperrière (2014), KIBS are one of the service subsectors involving activities that are highly dependent on human capital, knowledge and professional skills. They rely heavily on mobile and intangible resources that are incorporated into their human capital. According to Nählinder (2005), KIBS are operations of services and businesses which are highly dependent on proficiency. They mainly focus on providing knowledge support to business processes of other organizations. As a result, their employment structures are formed for scientists, engineers and other professionals. The author distinguishes between:

- T-KIBS, which are technologically oriented, with a high level of scientific and technological knowledge - R&D services, engineering services, computer services etc.
- P-KIBS, which are professionally oriented, including many management, consulting and marketing services.

KIBS companies either deliver services that are the primary sources of knowledge themselves or use their expertise to deliver services that facilitate their clients' own business. As a result, KIBS usually has other firms (private sector) as its main clients, although the public sector and sometimes volunteer organizations may be important customers. In some cases, they also have final consumers as a consumer, for example in legal and accounting services.

The European Change Monitoring Center (2005) has published several reports and studies on KIBS. In their view, KIBS are often seen as one of the hallmarks of the knowledge economy. The KIBS area consists of companies that have been set up to help other organizations address issues for which external sources of knowledge are needed. At the same time, their importance increases from qualitative points of view because they are becoming an important source and channel of new knowledge. KIBS performance affects the performance of those organizations that are their clients, and so the dynamics of KIBS industry affect the entire economy. In the statistical classification of economic activities NACE rev.2, according to the author of Skórska (2015), most of the KIBS are in section M (professional, scientific and technical activities) and in section J (information and communication activities).

KIBS in Slovakia

The most important actors in KIBS in Slovakia are Business Services Centers (BSC). According to the Ministry of Economy of the Slovak Republic (2016), the centralization and outsourcing of business services is a worldwide growing trend, showing this industry enormous potential. If the conditions for BSC are favorable in Slovakia, up to 20,000 new jobs can be created in this area by 2020. BSC are companies that provide business process services. Centers contribute to the stabilization of foreign companies and to their added value. They have a positive impact on the professional employment and qualifications of young people. KIBS helped Slovakia to show the its potential also in the financial services, IT or innovation, despite of strong industrial tradition. On July 7, 2016, the Government of the Slovak Republic adopted Resolution No. 287/2016 on the Concept of Support for Business Services Centers in Slovakia, which points out a set of measures aimed at facilitating the activities of the Centers and strengthening Slovakia's position as the preferred destination for this type of investment. In terms of customer relationship, there are two types of corporate service centers in Slovakia:

- Shared Service Centers (SSCs) that implement specific in-house processes to support the core activities of both parent and sister companies.
- Business Process Outsourcing (BPO) centers that provide business process services to third parties, not to parent or sister operations.

The first centers of shared and business services (SSC and BPO) began to appear in Slovakia at the beginning of the new millennium. Since then, more than 40 SSC and BPO have become part of the emerging community. According to the Slovak Investment and Trade Development Agency (2016), it is SSC and BPO that until now created jobs for more than 30,000 workers, thereby they significantly influencing Slovakia's economy. The centers employ many young people with a total annual increase of up to 10% new employees. The most well-known brands in this area of services are IBM, AT&T, Dell, Henkel, HP and many others. Table 1 gives an overview of these centers in terms of location and frequency.

Tab. 1 SSC and BPO in Slovakia

Location	**Frequency**
Bratislava	32
Košice	9
Banská Bystrica	3
Nitra	2

Žilina	1
Trenčín	1
Topoľčany	1
Piešťany	1
Nové mesto nad Váhom	1
Nové Zámky	1
SUM	**52**

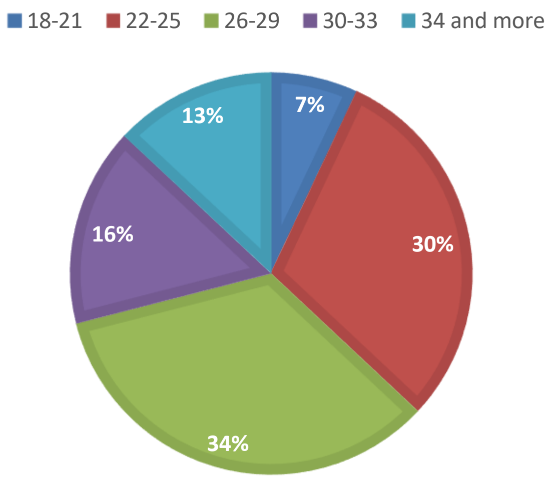
Source: Sario, 2016

Primary survey in a selected company KIBS

As mentioned above, work processes in individual companies of this kind of services are mostly divided into standardized processes to ensure the highest possible efficiency at work. The following section describes the results of the primary survey. Employees of the selected company were asked 7 questions from the online questionnaire, of which 3 were for the sample categorization and 4 were focused on evaluating work aspects in the company. 200 respondents (employees) participated in the survey. The questionnaire was in English language as it is an international company that employs people from different countries around the world.

The major of respondents (employees) were women, up to 56%. Men account for the remaining 44% of the company's employees. The respondents' age structure is shown in Graph 1. The largest proportion of respondents, representing 34%, are employees aged between 26-29, followed by employees aged between 22-25 who make up 30%. Another 16% is represented by employees from 30 to 34 years. Employees aged 35 and over make up 13% of the total. The smallest representation, 7%, are employees from 18-21 years.

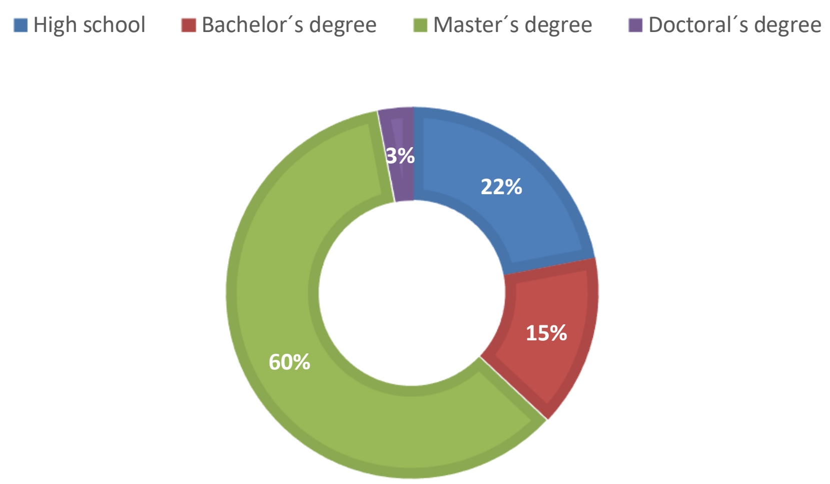
Graph 1 Age structure



Source: own processing

Graph 2 follows the highest achieved education of the company's employees. Up to 60% of respondents achieved a Master´s degree. They are followed by 22% of employees with their highest education level from High school. A further 15% of the respondents reached the Bachelor´s degree. Next 3% of the respondents have reached the highest education at the Doctoral´s degree.

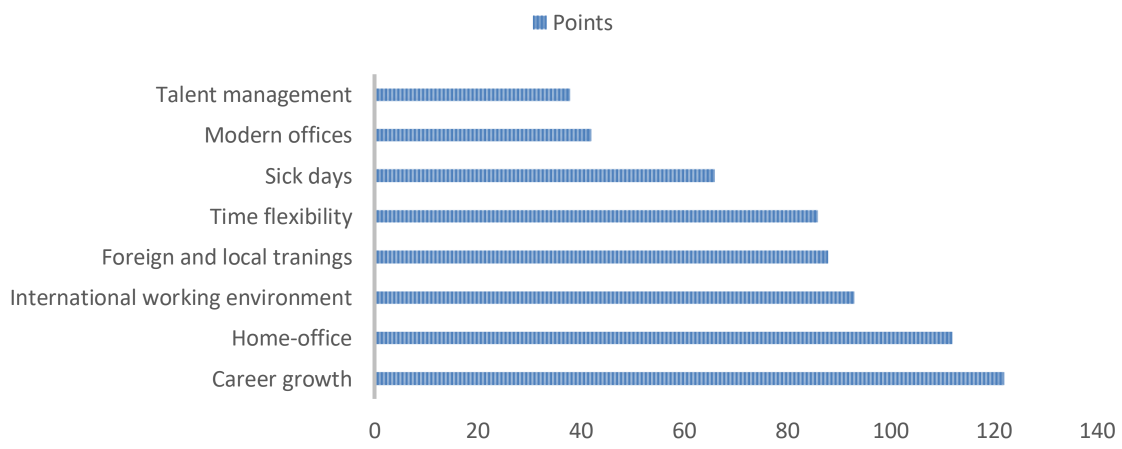
Graph 2 Highest achieved degree of education



Source: own processing

Graph 3 shows the answers to the question: *What do you consider as positive aspects of working for the company?* Respondents could mark a maximum of 4 options (4 or less). The strongest positive side of working in the company from the perspective of employees is the possibility of career growth, which has gained up to 122 points, followed by home-office option, which had 112 points. The third place has (93-point) an international working environment. Followed by foreign and local training (88 points), time flexibility (86 points), possibility to use sick day (66 points), modern office space (42 votes) and talent management (38 points).

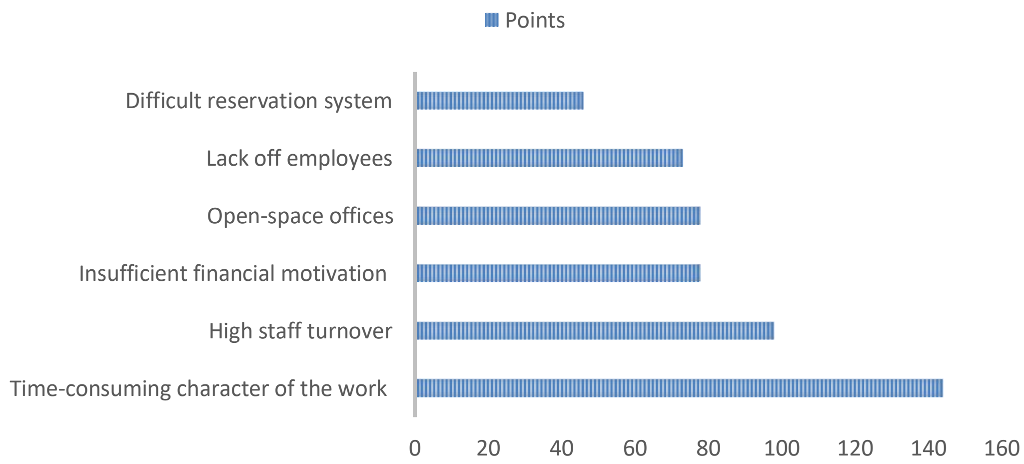
Graph 3 Positive aspects of the work



Source: own processing

The following Graph 4 shows the rated answers to the question: *What do you consider as negative aspects of work in this company?* Respondents could mark a maximum of 4 options (4 or less). Employees marked the time-consuming character of the work to be the biggest negative aspect, this response has been recorded up to 144 times. Another negative aspect is high staff turnover, which was marked 98 times. Insufficient financial motivation and open-space offices were placed in the same spot with 78 points. The lack off employees was marked by 73 points. The other 46 points were assigned to the difficult reservation system.

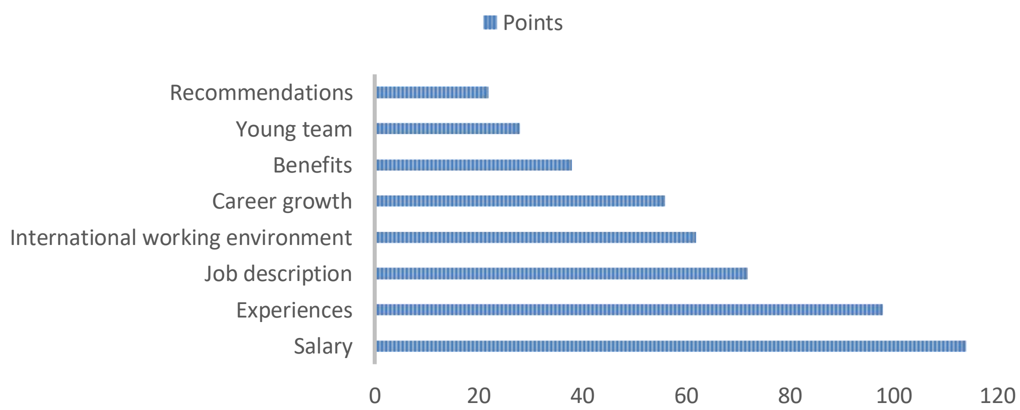
Graph 4 Negative aspects of the work



Source: own processing

Graph 5 shows the answers to the question: *What were the most important factors that influenced you when choosing this company as your employer?* Respondents could mark 3 factors (3 or less). According to the respondents, salary was the most important factor, with 114 points. Another factor was the experience they gain in the company, with 98 points. An interesting job description as a factor reached 72 points. It was followed by an international work environment (62 points), career growth opportunities (56 points), benefits (38 points), young team (28 points), and recommendations from friends (22 points).

Graph 5 Factors of choosing the employer



Source: own processing

Table 2 shows how employees answered the question: *What could be the reason for leaving your work?* This question was without the choice of answer, so the employees were not affected by the prescribed answers. They stated their own opinion on the question, which we summarized and evaluated to units.

Tab. 2 Reasons for leaving the company

Reason	Points
Time-consuming character of the work	66
Insufficient financial motivation	34
Better job´s offer	28
Conflicts in work/ communication problems with managers	24
Inability to have a career growth	20
Missing work-life balance	18
Working time	8
Stress	6
Attitude of managers	6
Untrustworthy management	4
Unsatisfaction with working tasks	4

Source: own processing

From analyses of reasons why would employees leave company as well as from identification of negative aspects of work in the company, we suggested the following recommendations:

• Effective financial motivation - when the condition for rising salary could be years of work for the company, it could satisfy employees and, in the same time, it could rise engagement and loyalty of the employees. This could also eliminate staff turnover, which is problem in the company.

• Good team and communication - Employees must feel that they can rely on the people they work with. By organizing various trainings focused on teamwork and communication, employees would learn how to get along, how to solve problems in team and to cooperate better. They may also meet at least once a month for a breakfast or organize common lunches at more frequent intervals within their department colleagues.

• Better redistribution of work – Time-consuming character of the work was the most common response to job dissatisfaction in this company. A part of the tasks could be distributed by individual preferences and potential of the employees. This could have positive effect on employees and rise their productivity. Therefore, managers should discuss the redistribution of projects with the employees themselves to determine their potential and preferences.

• Involvement - Many employees would appreciate stronger management support, as well as the realization of the value of employees from employer viewpoint. It could be solved by involving employees in decision-making processes instead of making employees aware of the decisions without any possibility of participation. No one in the management should take the feedback from employees only lightly. Feedback system and evaluation talks should be at least 2 times per year and employees would have to see the sense of it. It could be reached by implementing concrete suggestion from employees and co-operate with them on it.

• Working balance and work agreement – employees would like to have more option of work agreement than full-time. Variety and flexibility in this case start to be an important factor in choosing employer. Other suggestion is to create more flexible working hours, for example fixed working time could be between 10.00 - 15.00, the rest of it could be flexible. This would improve the balance between private and work life.

• Increasing the number of employees – The situation on labor market is showing decreasing amount of working force. The company should find a way how to be more attractive for young work force, therefore it is important to cooperate with education institution and communicate or cooperate with student before they leave the school. It could be done by mentoring their final papers for Bachelor´s or Master´s degree or offering them internships.

Conclusion

Nowadays, there is an interesting phenomenon within the KIBS workforce. On the one hand, there is a growing interest in working in such companies, but on the other hand, companies are worried about high turnover, especially among young people. A positive fact is the finding from our secondary survey in terms of increasing number of jobs as well as KIBS companies in general. One of the reasons for using those services by other companies is that they are highly professional, companies are outsourcing them. This means that companies do not have to employ people who specialize in this job, as it would not be economically efficient for them, especially if they are small or medium-sized businesses.

Since the characteristics of individual generations and their motivation in the workplace show, it is the young generation (generation Y) who can handle new knowledge very easily and solve complex problems using modern technologies, what is essential in working in KIBS – sharing knowledge mainly with using technologies. There are increasingly need for knowing more about viewpoints of this generation by their potential employers. As the demography trends show, there will be less and less work force on the labor market, while the society is ageing. Companies should take good care of their employees and find way how to satisfy their need and use their potential fully. To find out the positive and negative aspects of working in KIBS companies by their employers are first step how to hold work force and support them to working effectively.

The main aim of the paper is to explain the concept of KIBS, to identify the positive and negative aspects of the KIBS work environment as well as to identify the main reasons for leaving the company by their employees. We conducted a survey among 200 employees of the selected KIBS company and subsequently identified the most important factors affecting employees' work in terms of their positive and negative aspects. This survey was conducted in the form of the anonymous online questionnaire sent to the company's employees via e-mail communication in English language. Based on the acquired knowledge, suggestions to satisfy workforce need and decrease fluctuation based on matching employees need were created. The results and suggestions were presented to the key workers from HR department of the company. In the following period (beginning in September 2019), 4 of our proposals will be elaborated more in depth and subsequently incorporated into the company's long-term human resources strategy with a focus on improving working conditions as well as eliminating high fluctuation of employees.

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Evaluation of the Impact of the Free Trade Agreement between the EU and the Republic of Korea and its Impact on Foreign Trade of the Slovak Republic [1]

Viera Ružeková[2]– Simona Krivosudská[3]

Abstract

The EU is a major trading partner for several Asian countries. The objective of submitted research is to assess the impact of the Free Trade Agreement between the EU and the Republic of Korea entered into force in 2011, and its impact on the foreign trade of the Slovak Republic. On the example of this agreement, we will assess the economic effects of liberalization activities on the Slovak economy and the mutual exchange of goods. The Research is primarily focused on assessing changes in realized export and import volumes between the two economies, changes in the commodity structure of trade and FDI flows. The authors examine / analyze this issue with using of statistical methods of foreign trade development between the Slovak republic and the Republic of Korea, FDI flows, and the one-factor competitiveness indicator of Grübel-Lloyd index, as a measure of intra-industry trade between two countries. Based on Grübel-Lloyd index calculations, in conclusion the authors predict the prospective commodities for the realization of goods flows between the SR and the ROK.

Key words

EU, foreign trade, Free Trade Agreement, Liberalization, ROK, SR

JEL Classification: F10, F14, F15

Introduction

A major challenge for the European Union is the develepment of relations with a dynamically progressing Asia. For several Asian countries, the EU is a major and reliable trade partner (European parliament, 2018). It is not easy for the EU to maintain a leading and competitive position with rapidly progressing Asian economies. The main task for the EU is looking for ways to streamline and deepen the cooperation. In times of increasing competitiveness in world markets, the path of trade liberalization seems to be an effective way of economic growth, deepening trade and investment flows, GDP growth and increasing employment. The current liberalization processes of international trade are increasingly moving in quantitative terms beyond the original regional free trade agreements. Their scope extends to the most dynamic areas of international economic relations as services, investment, and intellectual property. We are talking about so-called comprehensive free trade agreements, also addressing issues for which no solution has been found at the multilateral level within the WTO yet. There are currently only a few comprehensives free trade agreements in force in the world economy. Examples include the EU-Korea Free Trade Agreement, the EU and the EFTA countries, and the EU-Canada Comprehensive Economic and Trade Agreement. The objective of

[1] This paper is a part of a research project of the Ministry of Education, Family and Sports of the Slovak Republic VEGA (in the period 2017 - 2019) No. 1/0897/17: "The Importance of European Energy Union Project for Strategic Interests of This Grouping in the Context of the Enhancement of Competitiveness of the Slovak Republic.

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our research is the first-mentioned agreement - Free trade agreement between the EU and the Republic of Korea which is the basis of deep and broad liberalization as it addresses issues beyond the rules agreed in the WTO. For a relatively complex scope is called the new generation agreement because it aims to areas not covered in traditional free trade agreements. In addition to eliminating tariff barriers, it also eliminates non-tariff barriers of trade (regulating dumping, unification of standards and norms of product quality) and additionally covers liberalization in the national economy sector, including services, public procurement, intellectual property rights, labor movement.

The authors of the present study set out to evaluate the impacts of the aforementioned Free Trade Agreement on foreign trade of the Slovak Republic. Therefore, in the following section we will assess these impacts with using the statistical indicators of foreign trade development of the Slovak Republic and the Republic of Korea, FDI flows, and the one-factor competitiveness indicator of the Grübel-Lloyd index as a measure of intra-industry trade between two countries. On that basis, we will try to predict commodities for realization of goods flows between the Slovak Republic with the Republic of Korea.

1 Methodology

As mentioned above, the objective of our research is to *evaluate the impact of the Free Trade Agreement between the EU and the Republic of Korea (hereinafter referred to as ROK),* in force since 2011, on the foreign trade of the Slovak Republic (hereinafter referred to as SR). On its example, we will evaluate the economic impacts of liberalization activities on the Slovak economy and bilateral goods exchange between the ROK and the SR focusing primarily on assessing changes in the realized volumes of exports and imports between the two economies, changes in exports and imports of commodities by selected commodity groups of the Harmonized System customs Tariff (hereinafter referred to as HS), but also on changes in FDI inflows and their impacts on the Slovak economy. We will also try to estimate the perspective areas of future goods exchange.

Considering of the stated objective, we used several common methods of research - induction, deduction, selection, comparison, analysis, but above all we worked with mathematical-statistical methods and the one-factor competitiveness indicator of the Grübel-Lloyd index of intra-industry trade (IIT – Intra-Industry Trade Index), which measures the value of trade between countries with products that are similar or slightly different (Grübel and Lloyd, 1975). The IIT compares exports and imports of the same goods or the same industry between two countries or regions, distinguishing between horizontal and vertical trade in the calculation. At the international level, the mutual trade exchange in this sector divided into inter-industry trade and intra-industry and tells if a country is a net importer or exporter, or whether there is an intra-industry trade between two countries. In a globalized economy, this index is gaining in importance as it follows from the principle of the exchange of similar products. Other economists, elaborated the Intra-industry trade theory such as Havrylyshyn and Kunzel (1998), who perceived it as a measure of diversity at the level of specialization or through the state of industrial progress of the country. Therefore, this index is used as a measure of a country's ability to cope with competition in a changing environment (Havrylyshyn, Kunzel, 1988). It is expressed as a share of the values of export and import of commodity groups in total exports.

$$GLij = 1 - \frac{(Xij - Mij)}{(Xij + Mij)} \tag{1}$$

where Xij is the value of exports of commodity group i to country j,

Mij is the value of imports of commodity group i from country j.

The index can range from 0 to 1.

If GL = 0, it means that the concerned country is a net exporter of the commodity and there is no intra-industry trade.

If GL = 1, it means that the intra-industry trade between countries exists and the country exports the same quantity of goods as it imports (Černoša, 2012).

An increase or decrease in the index value often reflects the dynamics of the competitiveness development between the two countries. Therefore, we applied it in our research to evaluate the impacts of the EU-ROK Free Trade Agreement and its impact on changes in the Slovak economy and foreign trade between SR and ROK (Lukáčik a kol., 2011).

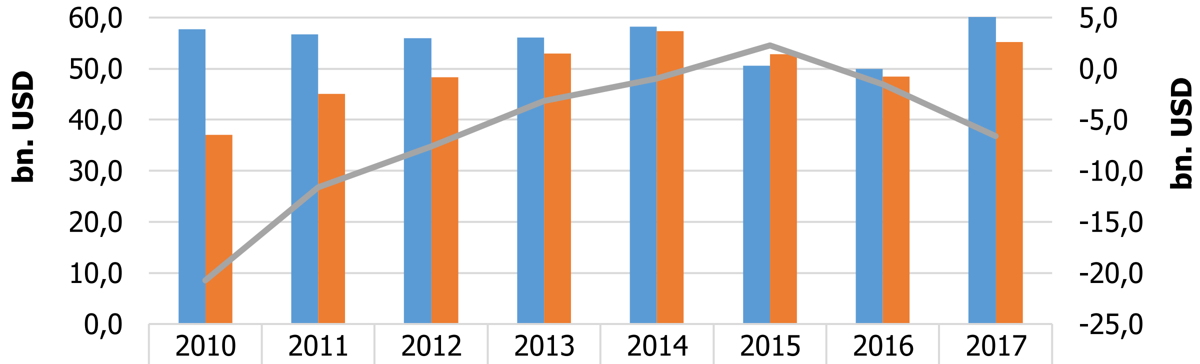
2 Results and Discussion

2.1 Liberalization of EU-ROK trade

Foreign trade relations between the EU and the ROK, based on the principle of liberalization, began to develop early 60s of the 20th century, when ROK began to apply the principles of market economy and the recognition of democratic values. Both countries sought to find a legislative framework for economic and trade relations which would help them to deeper liberalization of mutual trade. In 1997 was the signing of the Agreements on customs co-operation and mutual assistance in customs matters. Under the influence of growing trade flows, a Framework Agreement on Trade and Cooperation was concluded in 2001, which created the improving conditions for cooperation not only in the fields of transport, energy, science and technology, industry, environment, but also foreign trade and culture (Kašťáková, Ružeková, 2014). This agreement has contributed to intensifycation of economic deepening and trade relations. The current Free Trade Agreement (FTA), which entered into force on 1 of July 2011 after several rounds of negotiation, approval and ratification, represents the most comprehensive free trade agreement ever concluded by the EU. This agreement is because of its broad scope a new generation of agreements by eliminating tariff and non-tariff barriers to liberalize trade in goods, services, government procurement, regulates provisions on investment, protection of intellectual property rights and on competition policy (Kašťáková, Ružeková, 2014). In the first year of entry into force of the Agreement, customs tariffs were eliminated at the point of 94% of customs tariff products and related to around 90% of the value of Korean exports to the EU. In case of the ROK were eliminated customs tariffs on almost 80% imported goods from the EU. By 2031, it is expected that the mutual trade will be liberalized at the point of 99,9% (Drieniková, Zubaľová, 2013). The undisputed fact is that by signing the new agreement, both countries have gained cooperation at a qualitatively new level that allows companies to easier penetration of markets and increased competition in domestic markets, expanding the supply of goods and services and bringing lower prices for consumers (Businessinfo, 2018).

The impact of the agreement on the EU and the ROK can be assessed on their foreign trade development between 2010 and 2017. According to the statistical data presented in Graph 1, the foreign trade turnover has growth from the 94,7 billion USD in 2010 to 117 billion USD in 2017 and 50% increase in EU exports to the ROK (2017/2010), which contributed to 68% reduction in the EU trade deficit (from 20,7 billion USD in 2010 to 6,6 billion USD in 2017). From the EU's perspective, the agreement may be assessed positively. Export growth from the ROK to the EU was at the level 7%.

Graph 1 Foreign trade development between the EU and the ROK between 2010 – 2017 (after the conclusion of the FTA, in billions of USD)



	2010	2011	2012	2013	2014	2015	2016	2017
Import	57,7	56,7	56,0	56,1	58,3	50,5	50,0	61,8
Export	37,0	45,0	48,4	52,9	57,3	52,8	48,5	55,2
Balance	-20,7	-11,6	-7,6	-3,1	-1,0	2,3	-1,5	-6,6

Source: Processed by authors according to International Trade Centre. Trade map – International trade statistics. [online]. 2019. Available from: https://www.trademap.org/tradestat/Index.aspx.

The reason for only a slight increase in Korean exports is the fact that due to the free trade agreement the Korean companies have relocated their production to EU countries, so they substituted direct exports for FDI inflows. Their FDI increased by up to 46% between 2010 and 2016 and went to sectors with high added value and technologically demanding industries such as machinery and transport equipment, telecommunications equipment and chemicals.

2.2 Evaluation of the impact of the Free Trade Agreement between the EU and the ROK on the economy and foreign trade of the SR

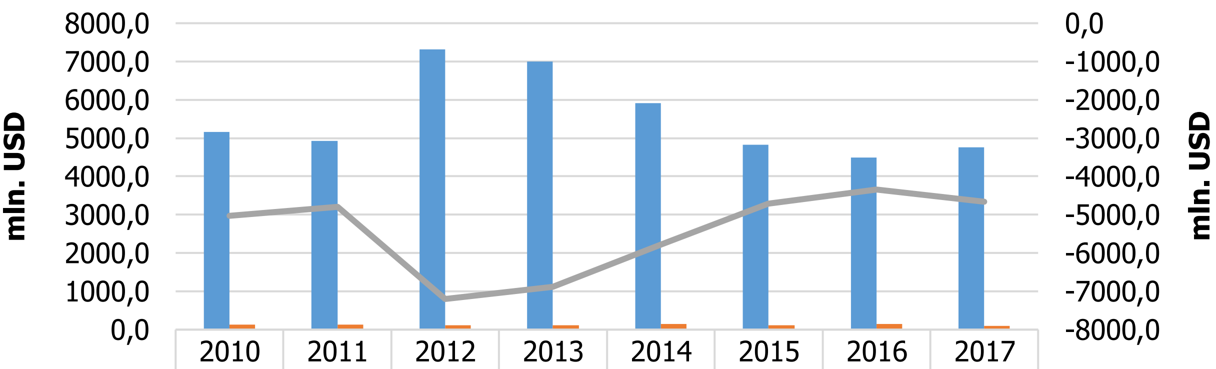
From the foregoing, when assessing the effects of the comprehensive EU-ROK Free Trade Agreement is clear that the agreement has had a positive impact on the economies of both countries, as well as the EU and the ROK. In the following part of our research, we will try to evaluate the impact of mutual economic and trade cooperation of this agreement on the Slovak economy.

The ROK is one of the major non-European trade partners of the SR, which is confirmed by a number of bilateral agreements concluded in various areas of international trade.[4] According to

[4] Agreements concluded include, for example Agreement on the establishment and operation of air services, Agreements on Mutual Visa Exemption, Agreement on Avoidance of Double Taxation and Prevention of Tax Evasion, Agreement on the mutual protection and promotion of investments, Agreement on Cooperation in the Field of Education, Science and Culture, The Agreement on Social Security, which should contribute to the creation of more

the statistics of the International Trade Center, the application of the new trade policy resulting from the free trade agreement into practice has a significant impact on the Slovak economy. Changes were reflected in the volume of imports, exports, commodity structure of mutual trade, but mainly in the inflow of Korean FDI. Nowadays is Slovakia the fourth most important market in the EU - after Germany, the Netherlands and the United Kingdom. Over the last decade, the exchange of goods has increased by almost 10 times[5], mainly due to Korean exports, in which dominated sophisticated technological equipment, equipment and other subcontracts necessary for Korean investments in Slovakia, especially in the field of automotive manufacturing and consumer electronics (MZVaEZ SR, 2018). Graph 2 shows that one year after the entry into force of the agreement there was a year-on-year increase in imports from the ROK by up to 48,5%. Subsequently the Korean imports began to decline, due to a change in ROK trade policy, because of the growth of FDI. On the other hand, Slovak exports to the ROK are characterized by considerable fluctuations and the effects of this comprehensive free trade agreement on our direct exports to the ROK don’t have a major impact.

Graph 2 Foreign trade development between SR and ROK between 2010 - 2017 (in millions of USD)



	2010	2011	2012	2013	2014	2015	2016	2017
Import	5153,2	4925,1	7317,9	6992,0	5920,1	4827,6	4491,6	4759,2
Export	122,6	137,4	117,6	110,9	144,4	121,3	148,3	103,5
Balance	-5030,5	-4787,7	-7200,4	-6881,1	-5775,7	-4706,2	-4343,3	-4655,7

Source: Processed by authors according to International Trade Centre. Trade map – International trade statistics. [online]. 2019. Available from: https://www.trademap.org/tradestat/Index.aspx.

The positive effect of this agreement for the Slovak economy lies mainly in the growth of Slovak exports to third countries and in the surplus's increase with third countries, especially within the EU, as a result of massive Korean FDI in Slovakia. Since the conclusion of the free trade agreement, Korean FDI has increased by almost 80%. ROK is the largest Asian investor and the fifth largest investor in Slovakia. The first massive wave of FDI inflows from ROK took place in 2005 – 2008, when the largest Korean companies entered the Slovak market and their investments were directed mainly to the electrical and automotive industries. The largest and the most important Korean companies are Kia Motors and Samsung Electronics. The second big wave of FDI inflows was in 2011, when the year-on-year FDI inflow from the ROK increased by more than 32%. In 2017

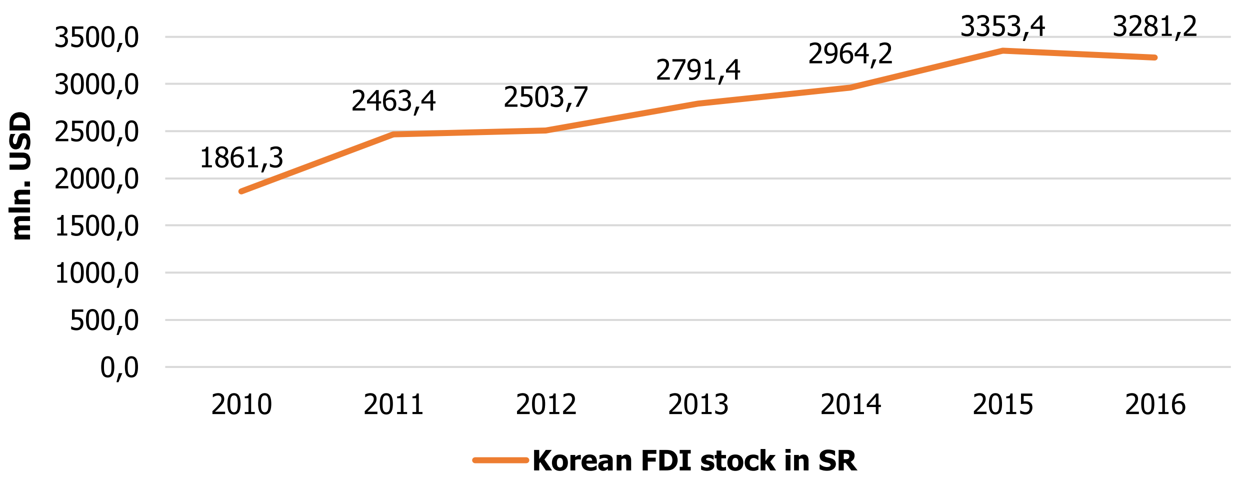
favorable conditions for Korean investors in the Slovak Republic, Agreement for scientific and technological cooperation, Agreement on economic cooperation between the Government of the Slovak Republic and the ROK. Note by authors.

[5] Foreign trade turnover in 2007 was at the point of 2,44 bn. USD. In 2017 reached the value of 4,86 bn. USD. Note by authors.

Kia Motors invested over 113 mln. USD*[6] in the Slovak Republic for modification of production lines and production of a new model and in 2018 another 226 mln. USD*[7] (MZVaEZ SR, 2018).

In Slovakia are located over 100 Korean companies, which see our investment attractiveness mainly in the euro's introduction, high labor productivity and in a less complicated process of completing formalities, for example with visas. In particular, there are weaknesses in the poor diversification of industry, lengthy and complicated administration and language barriers (Kašťáková, 2018). The SR sees strong potential in an influx of Korean FDI for cooperation in research and innovation. Graph 3 shows a detailed overview of the development of Korean FDI in the SR between 2010 – 2016.

Graph 3 FDI inflow development from ROK to SR between 2010 – 2016 (in millions of USD)

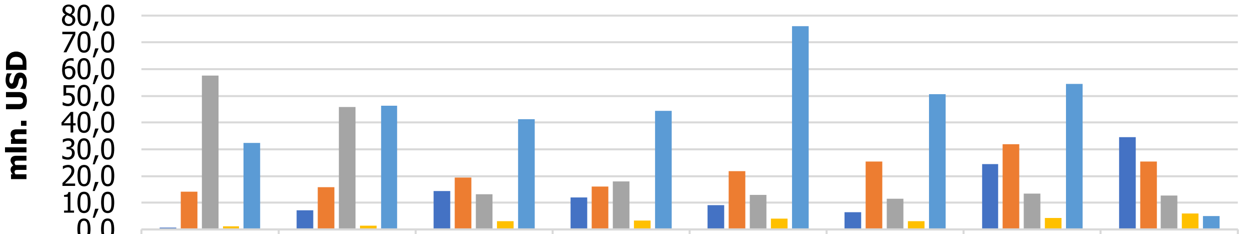


Source: Processed by authors according to Národná banka Slovenska. *Priame zahraničné investície.* [online]. 2017. Available from: https://www.nbs.sk/sk/statisticke-udaje/statistika-platobnej-bilancie/priame-zahranicne-investicie.
(* data converted from EUR to USD with a rate of ECB up to date 22.03.2019 – 1,1302 USD)

By assessing the mutual commodity structure of foreign trade, we can see the changes in export, import, volume and order of goods chapter in the period 2010 – 2017. While in 2010 the largest volume in Slovak export to ROK was realized in the goods chapter HS85 – Electrical machinery and equipment and parts thereof, in 2017 they decreased by up to 80% to the base year 2010. The same situation can be seen in the goods chapter HS87 – Vehicles; other than railway or tramway rolling stock, and parts and accessories thereof, whose export between 2017/2010 also recorded a decrease of up to 85%. On the other hand, goods chapter HS84 – Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof grew by over 80% and export of goods chapter HS40 – Rubber and articles thereof grew more than 57-times. Export of goods in chapter HS39 – Plastics and articles thereof increased by 5,5-times.

[6] Data converted from EUR to USD with a rate of ECB up to date 22.03.2019 – 1,1302 USD.
[7] Data converted from EUR to USD with a rate of ECB up to date 22.03.2019 – 1,1302 USD.

Graph 4 Export development of the most important commodities from SR to ROK between 2010 – 2017 (by HS2, in millions of USD)

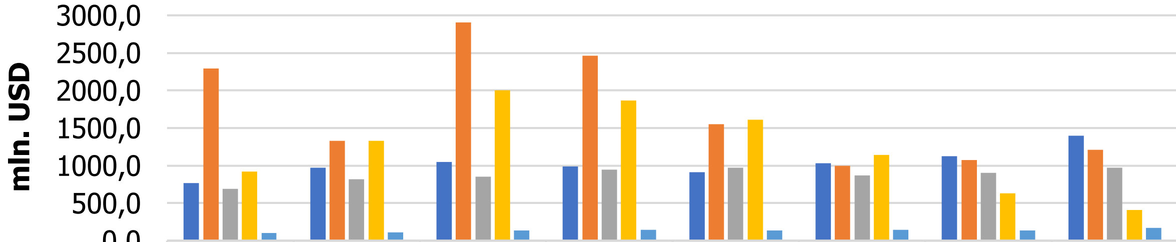


	2010	2011	2012	2013	2014	2015	2016	2017
40	0,6	7,1	14,3	12,0	9,1	6,4	24,3	34,4
84	14,1	15,7	19,5	16,0	21,7	25,4	31,9	25,4
85	57,5	45,9	13,1	18,0	12,8	11,4	13,3	12,7
39	1,1	1,5	3,2	3,3	3,9	3,1	4,2	6,0
87	32,5	46,2	41,3	44,3	76,0	50,7	54,5	4,9

Source: Processed by authors according to INTERNATIONAL TRADE CENTRE. Trade map – International trade statistics. [online]. 2018. Available from: https://www.trademap.org/tradestat/ Index.aspx.

Analysis of Korean import to the SR, there were noted significant changes in the order of goods chapters as well as in volume of realized production. While in 2010 the largest import goods chapter was HS85 – Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles, in 2017 this goods chapter decreased by 47%. Import in goods chapter HS90 – Optical, photographic, cinematographic, measuring, checking, medical or surgical instruments and apparatus; parts and accessories was also decreased more than half. The increase in import were recorded in the goods chapter HS84 – Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof by almost 82% compared to year 2010, also in the goods chapter HS87 – Vehicles; other than railway or tramway rolling stock, and parts and accessories thereof by almost 42% and HS72 – Iron and steel by 74%. (see Graph 5)

Graph 5 Import development of the most important commodities from ROK to SR between 2010 – 2017 (by HS2, in millions of USD)



	2010	2011	2012	2013	2014	2015	2016	2017
84	768,2	973,7	1051,8	986,9	909,8	1033,8	1121,1	1396,1
85	2290,6	1326,9	2902,1	2458,4	1554,6	999,0	1077,3	1213,3
87	686,8	814,8	850,6	942,6	972,0	872,1	907,0	974,5
90	917,8	1333,1	2006,2	1861,9	1608,4	1140,4	626,4	408,0
72	98,7	112,4	136,7	143,3	139,7	140,3	134,7	171,8

Source: Processed by authors according to INTERNATIONAL TRADE CENTRE. Trade map – International trade statistics. [online]. 2018. Available from: https://www.trademap.org/tradestat/Index.aspx.

The previous data shows that despite the high passive trade balance, which the SR and the ROK have, the free trade agreement has had a very positive impact for the Slovak economy. This fact was reflected in an almost 80% increase in the influx of Korean FDI, GDP growth and employment. However, the high passive trade balance with the ROK is reflected in the increased export of production commodities. It results from Korean investments in third countries, with which we have on the contrary an active trade balance, in particular with the EU countries, where the most of this production is directed.

2.3 Perspective for future cooperation between the SR and the ROK

For a deeper analysis of our research, we assessed the perspective of future cooperation between the SR and the ROK. For this purpose, we used the Grübel-Lloyd index of intra-industry trade, with which we can quantify prospective commodities for the realization of our foreign trade with ROK. The interval of the results is in the range of <0 – 1>, where 0 means complete inter-industry trade and 1 means complete intra-industry trade. Based on our Grübel-Lloyd index calculations, we can conclude that there is intra-industry trade in the goods chapters between the SR and the ROK. In Table 1 are shown the first 5 goods chapters in which the GL index reached the highest values, means where the value is close to 1.

Tab. 1 Results of intra-industry trade calculations between the SR and the ROK

Code HS2	Commodity description	GL (SR)
40	Rubber and articles thereof	0,94
83	Metal; Miscellaneous products of base metal	0,87
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	0,86
87	Vehicles; other than railway or tramway rolling stock, and parts and accessories thereof	0,82
60	Fabrics; knitted or crocheted	0,79

Source: Processed by authors according to INTERNATIONAL TRADE CENTRE. Trade map – International trade statistics. [online]. 2018. Available from: https://www.trademap.org/tradestat/Index.aspx.

Based on our analysis, we found out that the ROK, as a country of destination for Slovak exports, is promising and suitable. The ROK market represents great potential. Perspectives are mainly in the chemical and manufacturing industry, mainly in export of rubber and articles thereof, where the GL index reached a value of 0.94. The value is close to 1 indicating that the intra-industry trade between countries exists in the chemical and manufacturing industry. High values of the GL index were also recorded in the metallurgical industry in goods chapter HS83, in the printing industry in goods chapter HS49 and in the sector of automotive and woodworking industry.

However, when we evaluated prospective sectors based on the volume of exports from the SR to the ROK, we found out that the Rubber and articles thereof has the largest volume of export to the ROK in the amount of 34.45 mln. USD from the chemical and manufacturing industry. Our calculation of GL index also confirmed that. In the engineering industry are the most exported compressors for refrigeration equipment, gears and gearboxes for machines. In the electrical industry, these are electronic integrated circuits, such as processors and controllers, combined with memories, suitable for use mainly with television cameras. Prospective is also the export of brakes and servo-brakes, their parts and components in the automotive industry. Iron and steel products have a high potential too.

The analysis of the Ministry of Foreign Affairs of the SR, which evaluated the comparative advantages of Slovak exports, shows potential in other sectors. In addition to the aforementioned sectors, they see perspectives in the food industry and agriculture, such as milk and dairy products, natural honey, fruit and nuts, coffee, tea, maté and spices, cereals, soft drinks and alcoholic beverages like beer.

Conclusion

The free trade agreement with the ROK, referred to as a strategic partner in the EU strategy, has entered into force since 2011 and is the most comprehensive free trade agreement ever concluded by the EU. It constitutes a new generation agreement that liberalizes trade in goods, services, government procurement through the elimination of tariff and non-tariff barriers, regulates the provisions on investment, protection of intellectual property rights and competition policy. The positive effects of the agreement were evident from the outset. By increasing exports, the EU gradually reduced trade deficit with the ROK. Due to the agreement, there was no rapid increase in Korean imports. The ROK moved part of its production to the EU, thereby replacing direct exports and contributing to the growth of production in several EU countries.

The consequences of this agreement have an impact on the Slovak economy, and we can say in a very positive way. This applies in particular to the inflow of Korean investments into the SR, which account for half of all investments coming from third countries (non-EU). The ROK is the largest Asian investor and the 5th largest investor in Slovakia at all. Over the period 2010 – 2017, Korean investment in the SR increased by 77%, with the largest inflow recorded in 2011, one year after the agreement entered into force. At first glance, the high deficit trade balance of the SR to the ROK may appear to be a disadvantage. It's caused because of the massive influx of Korean FDI, accompanied by the import of high-tech equipment, technologies and other subcontracts needed for the automotive industry and consumer electronics. Subsequently, Korean investments accelerate Slovak exports to third countries, thereby contributing to an increase in the positive trade balance of the SR with third countries and Slovak GDP growth. In recent years, from the three largest Slovak exporters are just two South Korean companies, Kia Motors Slovakia and Samsung Electronics. There is also a strong potential in cooperation in the area of research and innovation, which corresponds to the objectives of the pro-export policy of the SR.

In the light of the above mentioned, we can conclude that the Free Trade Agreement between the EU and the ROK has a positive impact on the Slovak economy and its foreign trade. It manifested mainly by the large inflow of FDI, changes in commodity structure of export and import. In the import dominates the highly sophisticated equipment and technologies into production and they support Slovak exports. The liberalization of bilateral trade has contributed to the growth the competitiveness of our products in foreign markets, increased labor productivity, GDP growth, employment and to increased the positive trade balance with third countries.

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The importance of the choice of the suitable music production for the retail and service facilities

Roman Staňo[1] – Juraj Litomerický[2]

Abstract

The authors propose the principles of the suitable music production for the retail and service facilities in relation to the character of the offer of goods and services, realized activities, client segmentation and location of the facility. The right choice of the music production has a positive influence on the decision making of the customers.

Key words

music production, customer, business and service facilities, volume balance, rhythm, survey

JEL Classification: F19

Introduction

The article is concentrated on the creation of the suitable music for the retail and service facilities by the acceptation of the features of the facility, client segmentation and location of the facility.

In relation to the reality that the owners of the facilities make not sensitive decisions for the music which is a tool for the creation of the positive atmosphere for the clients. The article gives advice which are the criteria for suitable music choice.

1 Methodology

We search the music production in retail and service facilities and make our evaluation of these music productions by the method of the observation. There were processed opinions of 153 respondents (clients of the choice facilities). The conclusions and recommendations (method of the deduction and synthesis) are presented in this article.

2 Results and Discussion

We absorb approximately about 11% senses by audio. The music is important part by the whole atmosphere of the retail store. (Bohm – Klein, K., 2016)

The retail stores can be concentrated on the goods:

a) Food

b) Non – Food (Textile, sport items, music instruments, household items)

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The service facilities ca n offer accommodation, catering, transport, supplementary,cultural, financial, insurance, medical, law, relax and rehabilitation services. etc.

The choice of the suitable music does not depend on what sort of the service it is but what type of the retail facility it is. (Outdoor facility, Indoor facility).

The client segmentation is important. The location, seasonality, service, selfservice.

As for the choice of the suitable music for car and driver we need to make sophistically so we need to make sophistic decisions for retail or service store. The music production has influence for time of the stay of the customer in retail or service store.

The music production in retail and service stores we can divide to this sort:

a) Instrumental with vocal
b) Language – Slovak, Czech, Foreign
c) Comfortable, Aggressive
d) Fast, Slow
e) Dance music (regular, irregular rhythm)

The music for the car, driver has not to be aggressive, because it has influence on driver behavior.

There is not suitable that the car music will be monotone, because it can affect that the driver will be sleepy. What can have influence on the traffic accident of the driver.

The important factor of the realized music production is the volume of the music. Although the wonder full music will be not attractive when it will be realized in high volume.

There is a high concentration on exterior and interior look of the retail and service stores in present time. We cannot forget to be concentrated om the suitable music production. The choice of the music depends on style and taste of the owner of the store.

The art of the music production is defined by foreign retail stores chains. Our research was realized by 153 respondents (retail stores and retail services). The value of the answers was presented that 73% of the respondents were not satisfied with the music production in the retail stores and retail services. The research presented that the age of the customer is not so important. The important factors were:

a) The time of stay of the client in the choice retail store or retail service.
b) The frequency of the visits in the choice retail store or retail service.
c) The type of the choice retail store or retail service

The fitness and gym centers were very critically evaluated in relation to the realized music production which has periodical and rhythmical character. There is a idea if the fitness and gym centers need music production. The possibility that these facilities will be without music or the music will be rhythm blues.

The other facilities are without any music production. Our survey presented that about 17% of the respondents are missing music in these stores. The valuable opinion of the research of our respondents was presented in relation to the financial institutions especially banks. The music production in the bank creates comfortable atmosphere for the clients who are waiting for the bank services. The discussion between the client and the bank employee is more personal by the influence of the music production.

The choice of the adequate music production for special institution is influence not by the virtuosity of the interpret, but more by the simplicity which is missing extremes or difficult instrumental solos.

The most criticized was the choice of the music production by the retail stores with the textile, especially

Retail stores chains Pull and Bear, ZARA, or Caliope or Terranova. The clients are suffering in the cabins by some art of the music production in the retail textile stores.

The other criticized example was the music production in the public transport: bus, tram, trolleybus.

The public transport driver choice the music by their own decision and style. They are satisfied but they do not think if the public transport clients are satisfied with their choice.

Other example is the canteen of the University of Economics, Bratislava – Petržalka when approximately about 2 pm the canteen employees start to play music production loud and aggressive.

The retail stores and retail services operators accept that the clients in their facilities have possibility to communicate and hear each other during the visit of their facility in the relation to the realized music production. When the customer is not able to communicate by phone because there is high loudness of the music production in the retail store or retail service and it is necessary to leave the store there is a possibility that he will not return.

The client sometimes is not able to evaluate the situation in the store in relation to the music production immediately. The decision of the client will come after the visit of the store later.

The often citated survey form the year 1993 (Areni, Kim – The Influence of Background Music on Shopping Behavior: Classical Versus Top-Forty Music in Wine Store) search the influence of the music production on the customers in the wine stores. The classical music has influence on customers that they buy more expensive sorts of wines. The popular music has influence on the customers that they are buying cheaper wines. The client combines the influence of the music and wine choice in relation to his mind. This effect is known as the musical fit. The effect on the client has a fragrance in the store. Mattila and Wirtz (2001) research that the lavender fragrance with slow music has effect of the client satisfaction. The Grapefruit fragrance is suitable to combine with the art of the faster music. The suitable combination of the music production and fragrance creates the highest satisfaction of the clients. (Turzo, J., 2018)

The sound in the retail store or retail service need to have good quality. The clients crate their identification of the retail store or retail service with the music production.

The question if the music production is suitable. The answer is easy. When there is no music production pressure on the client than it is good. The principle is the same when long years active professional pedagogue will not forget the face or name of his student. The reason is simple student was extremely good or extremely bad.

The advice for the good choice of the music production we want to offer some interprets and music compositions. Into index of suitable music production for the retail store we make a proposal: Kenny G., Anya, Shadows, Secret Garden(music composition: Hymn to Hope) or Rondo Veneziano, Mike Oldfield instrumental music compositions(Voyager), guitarist Earl Klug, pianists Rudolf Rokl, Jiří Malásek or violinist David Garett ,some slow instrumental compositions.

The music bands ABBA, Beatles, Bee Gees, Chicago or wonderful songs “Fragile” or “Shape” of my Heart” by Sting. The songs by Elton John, Chris de Burgh, Chris Rea, Richard Marx, Robbie

Williams, Charles Aznavour. The Czech interprets the formation Brontosauři, Honza and František Nedvěd, Karel Plíhal, Stanislav Wabi Daněk, Jaromír Nohavica, Petr Muk, Karel Zich, Waldemar Matuška, Karel Černoch, Daniel Hulka, Petr Hapka and other.There is choice of Slovak interprets (Desmod, Žbirka, Elán, No Name, Čírová, Martausová etc.).

The universal music genres are for example: Folk, Country, Chanson or Blues. Jazz can be interesting but not for the major part of the clients. The same situation is with the Techno music, House music, Rap music. The folk music is in the same. The operator can offer the classical music. The right choice from the creations of Mozart, Vivaldi, Johann Strauss, Antonín Dvořák, Ennio Morricone or Karel Svoboda will be suitable music compositions from the side of listeners – clients.

The special case is the retail store center Cubicon in Slávičie údolie Bratislava. The music production is concentrated on French "Middle Stream" music. They play it always. We never had the feeling that they need to change this genre.

The inappreciable reality is the time of the realized music production. The people are fresh in the morning than in the afternoon. The location of the store is important.

The catering facilities (cafes, restaurants, bars) need to decide if the music production will be in the interior or exterior and if it will be recorded music or live music (pianist for example). We need to accept the factor if the catering facility has space for the dance.

The acceptation of here mentioned is an advice for music production in retail stores. The satisfaction of the customers with the music production is the result of the continual research.

Conclusion

The research realized on 153 respondents – presented results:

- The choice of the music production in the retail store or retail service depends on its features, goods, services (interior, exterior, open closed)
- Location
- Clients
- Open time
- Seasonality
- Service-Self service
- Music genre – Store, Service (73 % clients are not satisfied from 153 respondents)
- Music Loudness
- Music – Age relation is not important for the music production
- Time of the stay of the client in the store is important
- Frequency of visits
- The simplicity is right way for the choice of the music production in the store
- The choice of the music is right when the client feels comfortable in the store
- The necessity of the change of the repertoire of the music production
- The main complaints on the music were in the textile stores
- The second place took the public transport (buses, tams, trolleybuses)

- The waiting in queue is more comfortable by hearing pleasant music

The modern technologies applicated in retail stores and retail services offer an amount of information about the customers. The one of the simple applications is to use suitable music production in the store for the comfort of the customer.

In some countries exists the profession Audio architect. The man who creates the music production (playlist for segmented clients) for the retail store or retail service. The criteria are:

- Goods assortment
- Services assortment
- Customer segmentation
- Location
- Season
- Opening hours

The music is crated for special zones in the store in Japan. But is not only music. It can be sound running water, blowing wind, or birds singing. The Retail Institute Sweden in cooperation with start-UP Soundtrack Your Brand made research results that good targeted music compositions increase the turnovers of the restaurants about 9.1%. (Turzo, J., 2018)

But if we are not sure that the music production in our store is comfortable for our customers, we can have silence. This alternative in our hectic times could be welcomed and we will save fees for SOZA.

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Corruption perception and Hofstede's cultural dimensions[1]

Dušan Steinhauser[2]

Abstract

Present article is a follow-up to previous research which examined the relationship between corruption and culture in OECD countries. Corruption was measured using The Transparency International Corruption Perception Index from 2018. Culture was quantified using Hofstede's cultural dimensions. Based on correlation and multiple-regression analysis, we can conclude that in cultures dominated by Individualism, Long Term Orientation and Indulgence, is expected a lower level of corruption perception. Countries with higher value of Power Distance and Masculinity have statistically higher level of perceived corruption. The Human Development Index has been added as a control variable (negative correlation with corruption). The main contribution of the article is to update the data and prove the stability of results over time. For further research, we recommend, especially in the field of sociology, to explain the empirically measured relationships, regarding new variables, such as Indulgence.

Key words

Corruption, culture, Corruption Perception Index, Hofstede, analysis

JEL Classification: D73, B25

Introduction

In the field of corruption and cultural research were published numerous studies. This article contains an update and supplement of Z. Kittová and D. Steinhauser's (2018) research. Using correlation and multiple-regression analysis, authors quantified relationship between Hofstede's cultural dimensions and the Transparency International Corruption Perception Index of 2016. Then they demonstrated a statistically significant relationship between Power Distance, Masculinity, Indulgence, partial Individualism, Long Term Orientation and Corruption Perception Index (CPI). Article also contains a literature review and a comparison of the results with other studies. In a similar way, D. Steinhauser (2015) elaborated theoretical aspects of corruption and culture and quantified corruption with simple quantitative methods based on data from the Ernst & Young survey. Author proved that with increasing of Power Distance increase corruption perception and by increasing of Individualism decreases perceived corruption (moderate / weak correlation coeff.).

While our article is based on previous studies, we selected three more papers from the wide diapason of relevant scientific literature. M. V. Achim (2016) applied ordinary least squares multiple-regression analysis on CPI from 2014 and six Hofstede's cultural dimensions on 175 countries sample. She proved direct correlation between Power Distance and corruption level. She mentioned, that societies with higher Power Distance value are characterized due to hierarchical structure creations with higher corruption level. On the other hand, dimensions Individualism and Long-Term Orientation show opposite correlation to corruption perception as Power Distance: "[…] *a network of friends and family creates lasting relationships which could stimulate corrupt*

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[1] Author dedicates article to deceased head of the Dep. of Int. Trade - prof. Ing. Peter Baláž, PhD. (RIP and Jesus, mercy!). Author is thankful to Ing. Zuzana Borovská for language check.

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behaviors. […] *a short-term orientation culture is concerned with the need to ask for favors and gifts in order to get immediate benefits*." A remarkable study was published by D. Mornah and J. Macdermott (2018). Using advanced econometric methods, authors analysed inter alia corruption, quantified from three sources and Hofstede's cultural dimensions. They evaluated panel data of 80 countries and a time series of 15 years. Authors proved positive relationship between Power Distance, Masculinity and corruption and negative linkage between Individualism, Long Term Orientation, Indulgence and corruption. Uncertainty Avoidance was statistically insignificant. Authors also stated the importance of examining the relationship between corruption and culture for international business: "*In an internationally competitive market for foreign direct investment and trade opportunities, countries can increase their competitiveness by decreasing corruption*."

J. M. Díez-Esteban et al. (2018) brought research in a similar spirit to our topic. Collective of authors analysed relationship between corporate risk-taking and culture based on sample of 6755 companies from Thomson One Banker databank (time period from 2007 to 2015). Risk was quantified by two indicators: "*More precisely, firm's risk can be proxied by the variance of daily returns. Therefore, corporate market risk (CMR) variable is defined as the standard deviations of daily stock returns of the company for each year*." Authors observed higher corporate risk-taking in societies with higher value of Power Distance, Individualism and Masculinity. On the other hand, Uncertainty Avoidance negatively correlates with risk-taking.

1 Methodology

Our main aim is to quantify relationship between corruption and culture. Corruption (dependent variable) is measured by Transparency International Corruption Perception Index (abbr. CPI, higher value means less corruption perception) from 2018 and cultural independent variables are expressed in The Hofstede National Culture Dimensions (higher values indicate prevailing cultural characteristics of the countries listed in the variable label). As control variable was used Human Development Index (abbr. HDI) of United Nations Development Programme (abbr. UNDP). In order to achieve the main aim and based on previous works in this field (Kittová & Steinhauser, 2018), we set following hypothesis:

H1: Corruption will proportionally increase with increasing of Power Distance, Masculinity and Uncertainty Avoidance in OECD member countries.

H2: Corruption will unproportionally increase with Individualism, Long Term Orientation and Indulgence in OECD member countries.

H3: Corruption will unproportionally increase with Human Development Index in OECD member countries.

Our three hypotheses in one numeric variant have form (u means additive random component, see e. g. Lukáčik, et al., 2011):

$$CPI_{2018} = \beta_0 - \beta_1 * PD + \beta_2 * Ind - \beta_3 * M - \beta_4 * UA + (-)\beta_5 * LTO + \beta_6 * I + \\ + \beta_7 * HDI_{2016} + u \quad (1)$$

In order to verify our hypotheses, we used quantitative methods of scientific work. First, we described the dataset using descriptive statistics, then we verified the normal distribution of variables, finally we found the relationship, direction and power of the linkage between variables by correlation and multiple-regression analysis. We used scientific literature (Lukáčik, et al., 2011; Hanák, 2016) and statistical software – GRETL 2019a, PAST 3.24 and PAST 3.25. In Tab. 1 we can observe descriptive statistics. Interpretations of coefficients is to find in statistical literature (e. g. Pacáková, et al., 2009).

Tab. 1 Descriptive statistics

	CPI_2018	Power Distance (PD)	Individualism (Ind)	Masculinity (M)	Uncertainty Avoidance (UA)	Long Term Orientation (LTO)	Indulgence (I)	HDI_2016
N	36	36	36	36	36	36	35	36
Min	28	11	18	5	23	21	13	0,77
Max	88	100	91	100	100	100	97	0,95
Mean	68,03	46,36	60,44	47,69	67,17	52,97	51,23	0,89
Std. error	2,47	3,26	3,25	4,25	3,47	3,60	3,42	0,01
Stand. dev	14,80	19,55	19,53	25,52	20,80	21,59	20,23	0,04
Skewness	-0,71	0,47	-0,59	0,02	-0,28	0,32	-0,14	-1,06
Kurtosis	-0,02	0,26	-0,38	-0,74	-0,86	-0,98	-0,59	0,90

Source: Own processing with software PAST 3.4 based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

According to R. Hanák (2016), before correlation analysis, it is important to verify the normal distribution of variables (Tab. 2). After testing and evidence of non-normal variable distribution it should be applied Spearman´s correlation coefficient instead of Pearson's linear correlation coefficient. In our case, non-normal distribution was diagnosed by CPI from year 2018 (Shapiro-Wilk´s test) and HDI from year 2016 (Shapiro Wilk´s; Anderson-Darling´s and Jarque-Bera´s test of normal distribution). For this reason, we decided to publish results of both coefficients.

Tab. 2 Normality tests

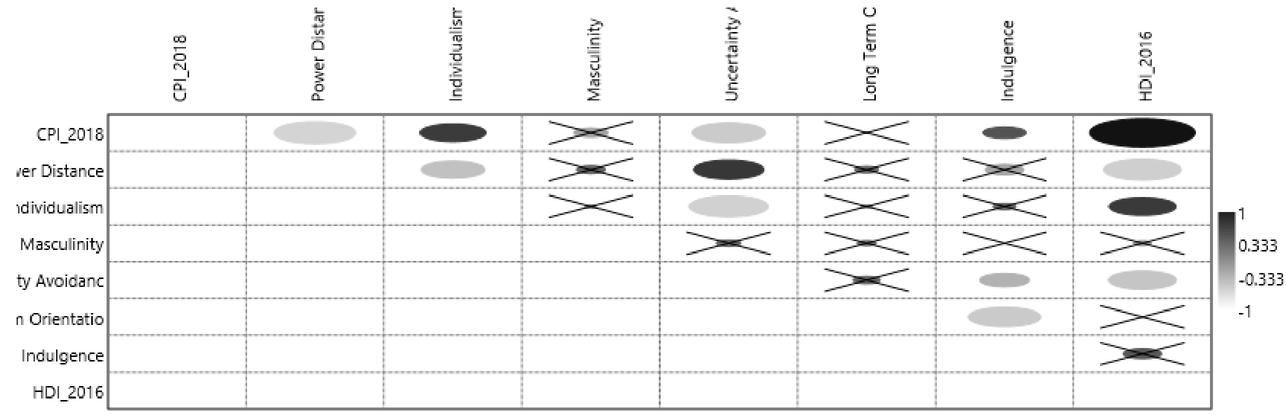
P(normal)	CPI_2018	Power Distance	Individualism	Masculinity	Uncertainty Avoidance	Long Term Orientation	Indulgence	HDI_2016
N	36	36	36	36	36	36	35	36
Shapiro-Wilk W	**0,04**	0,42	0,07	0,31	0,18	0,11	0,19	**0,01**
Anderson-Darling A	0,06	0,31	0,06	0,36	0,17	0,13	0,09	**0,02**
Lilliefors L	0,09	0,14	0,12	0,61	0,09	0,05	0,19	0,05
Jarque-Bera JB	0,24	0,54	0,32	0,61	0,43	0,35	0,68	**0,03**

Source: Own processing with software PAST 3.4 based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

2 Results and Discussion

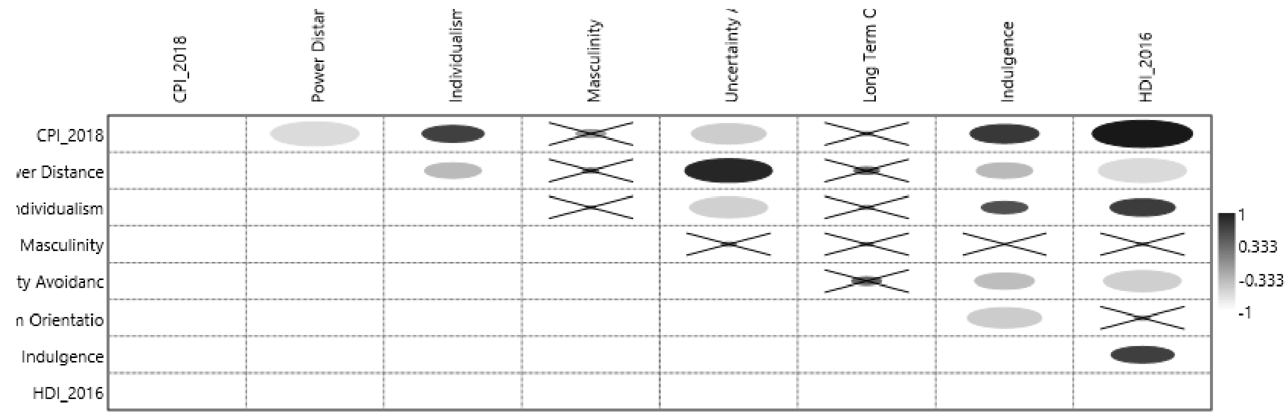
Graph 1 displays correlation matrix of Pearson´s linear correlation analysis and in Graph 2 is seen correlation analysis with Spearman´s variant (coefficients with a low probability are crossed). For our purposes, interesting is only first row of graphs. Both variants are in these cases similar.

Graph 1 Correlation Matrix – Pearson´s linear correlation coefficients (r)



Source: Own processing with software PAST 3.5 based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

Graph 2 Correlation Matrix – Spearman´s correlation coefficients (rs)



Source: Own processing with software PAST 3.5 based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

Correlation analysis proved proportional relationship between Individualism, Indulgence, HDI and CPI. This means, that individualistic and indulgent nations with higher live quality measured by HDI achieve less corruption (perception). On the other hand, countries with more Power Distance level, Uncertainty Avoidance are more corrupt.

In the next step we will quantify linkage between corruption, cultural dimensions and HDI. We generated ordinary least-squares multiple-regression analysis between variables with absolute values of variables. Unfortunately, only constant, Power Distance and HDI were statistically significant. We searched for reason and we found it in the marginal possibility of the occurrence of a heteroscedasticity error. Possible causality can be found in non-normal distribution of variables (Tab. 2). On the other hand, the presence of this error showed only a negative result of Breusch-Pagan test for heteroskedasticity (robust variant, or Koenker´s test) and borderline positive result of White´s test (p-value P(Chi-square(14) > 23,5167) = 0,052). For this reason, we will show heteroskedasticity-corrected model of variables with absolute values (Tab. 3), but we will explain only one of the functional models.

Tab. 3 Model – heteroskedasticity-corrected, absolute values of variables

Model: Heteroskedasticity-corrected, using observations 1-36 (n = 35)
Dependent variable: CPI_2018

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	−117,009	19,5854	−5,974	<0,0001	***
Power Distance	−0,129711	0,0394459	−3,288	0,0028	***
Individualism	−0,00299039	0,0614809	−0,04864	0,9616	
Masculinity	−0,0639258	0,0311892	−2,050	0,0502	*
Uncertainty Avoidance	−0,110852	0,0585383	−1,894	0,0690	*
Long Term Orientation	+0,106872	0,0555448	1,924	0,0649	*
Indulgence	+0,149982	0,0568111	2,640	0,0136	**
HDI_2016	+211,460	22,7580	9,292	<0,0001	***

Statistics based on the weighted data:

Sum squared resid	58,07245	S.E. of regression	1,466571
R-squared	0,984433	Adjusted R-squared	0,980398
F(7, 27)	243,9272	P-value(F)	1,03e-22
Log-likelihood	−58,52386	Akaike criterion	133,0477
Schwarz criterion	145,4905	Hannan-Quinn	137,3430

Statistics based on the original data:

Mean dependent var	68,22857	S.D. dependent var	14,96287
Sum squared resid	1568,083	S.E. of regression	7,620835

Test for normality of residual - Null hypothesis: error is normally distributed
Test statistic: Chi-square(2) = 0,816789 with p-value = 0,664716

Source: Own processing with software GRETL 2019a based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

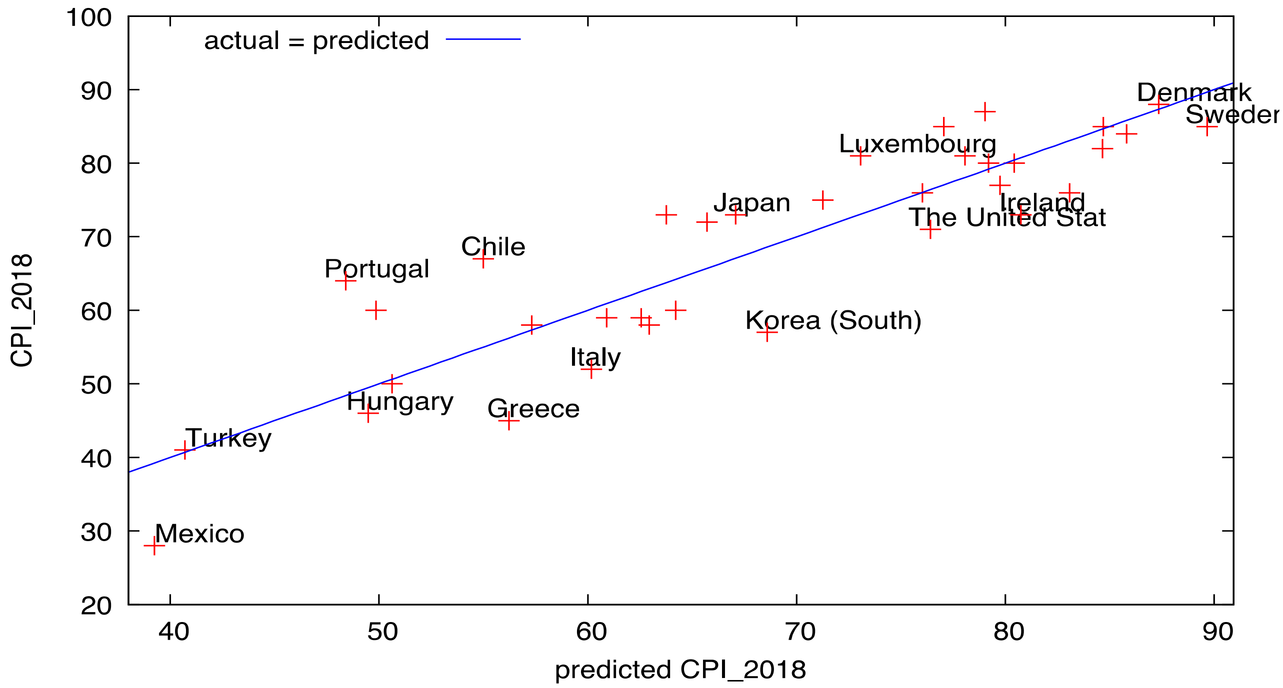
Model in Tab. 3 is interesting, becasue only Power Distance, Indulgence and HDI are statistically significant on 99 %, or 95 % probability (p-values). Masculinity, Uncertainty Avoidance, Long Term Orientation are estimated only with 90 % probability and Individualism is insignificant. On the other hand, R-squared and F-statistics are highly positive, and residual is normally distributed.

We can use this model for control of extreme observations, on Graph 3 it is to observe relation between actual and predicted values of independent CPI variable from 2018. We used only subjective graph observation method and we do not detect significant extreme observations. We must especially remember that we are interested in direction and statistical significance of the relationship between variables. For this reason, we have not used any statistical tool to find extremes except Graph 3.

In next steps we generated model between variables in logarithmic form (both sites). Ordinary least-squares method (OLS) exhibits heteroskedasticity error (White's test for heteroskedasticity: P(Chi-square(14) > 23,8708) = 0,0474), because of this reason, we prepared heteroscedasticity-corrected method. This model have non-normal distributed residual (Test for normality of residual:

Chi-square(2) = 7,48779 with p-value = 0,02). Therefore we chose to interpret functional model with dependent variable with absolute value and independent variables in logarithmic form (Tab. 4; again OLS method – heteroskedasticity error presence: White's test: LM = 24,2365 with p-value = P(Chi-square(14) > 24,2365) = 0,043).

Graph 3 Actual and predicted values from model in Tab. 3



Source: Own processing with software GRETL 2019a based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

Tab. 4 Model – het.-corr., dependent var. absolute value; indep. variables logarithmic form

Model: Heteroskedasticity-corrected, using observations 1-36 (n = 35)
Dependent variable: CPI_2018

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	65,6583	24,3216	2,700	0,0118	**
l_Power Distance	−9,73922	2,10318	−4,631	<0,0001	***
l_Individualism	6,34340	3,58973	1,767	0,0885	*
l_Masculinity	−1,76059	0,904986	−1,945	0,0622	*
l_Uncertainty Avoidance	0,465804	1,88207	0,2475	0,8064	
l_Long Term Orientation	5,77607	2,55877	2,257	0,0323	**
l_Indulgence	3,97232	1,78487	2,226	0,0346	**
l_HDI_2016	175,085	22,5538	7,763	<0,0001	***

Statistics based on the weighted data:

Sum squared resid	49,41965	S.E. of regression	1,352907
R-squared	0,972846	Adjusted R-squared	0,965806
F(7, 27)	138,1900	P-value(F)	1,84e-19
Log-likelihood	−55,70035	Akaike criterion	127,4007
Schwarz criterion	139,8435	Hannan-Quinn	131,6959

Statistics based on the original data:

Mean dependent var	68,22857	S.D. dependent var	14,96287
Sum squared resid	1671,978	S.E. of regression	7,869251

Test for normality of residual - Null hypothesis: error is normally distributed

Test statistic: Chi-square(2) = 3,56949 with p-value = 0,16784

Source: Own processing with software GRETL 2019a based on The Transparency International, 2019; The Hofstede Centre, 2019 and UNDP, 2019

Model in Tab. 4 is statistically significant as whole (R-squared = 0,97, Adjusted R-squared = 0,97; F-statistics 138,19>2,37) and has normal distributed residual. Equation is estimated from 35 observations, Israel was due to missing value of Indulgence-dimension omitted.

Variable Power Distance, HDI from year 2016 were estimated according to t-ratio and p-value with 99 % probability. Constant, dimensions Uncertainty Avoidance and Indulgence were computed with 95 % probability. Individualism and Masculinity were estimated with 90 % probability (p-value). Our functional form of model explains a percentual change only from site of independent variables (Lukáčik, et al., 2011). With increasing of Power Distance by 1 %, CPI decrease by 9,7 points. This means, that with increasing of Power Distance corruption perception is growing. We expect similar results by Masculinity dimension (1 % -> -1,76 points). On the other hand, with increasing of Individualism, Long Term Orientation, Indulgence and Human Development Index (HDI), corruption decreases. Uncertainty Avoidance is statistically insignificant.

Tab. 5 Comparison of results

Method	Pearson r; N=34(35)	OLS; N=34	Pearson r; N=35(36)	H.-C., Y(abs.), X(log); N=35
Variable	CPI 2016	CPI 2016	CPI 2018	CPI 2018
PD	-	-	-	-
Ind	+		+	+
M	(-)	-	(-)	-
UA	-		-	
LTO		+		+
I	+	+	+	+
HDI	n/a	n/a	+	+

Source: Own processing

In Tab. 5 we can compare our statistically significant results (regression analysis probability more than 90 %) with authors Z. Kittová and D. Steinhauser (2018). In this paper authors analysed CPI from year 2016 and Hofstede´s cultural dimensions of OECD countries. Meanwhile, Lithuania became new member states (OECD, 2019). Our hypotheses were influenced by cited paper. Authors confirmed using multiple-regression analysis and correlation analysis positive linkage between Power Distance, Masculinity and corruption (negative correlation between dimensions and CPI). Correlation analysis proved only weak proportionally relationship between Masculinity and corruption from year 2016. It was verified by the negative correlation between Individualism, Indulgence and corruption. Similar result was showed using only correlation analysis between Long Term Orientation and corruption perception.

Our new analysis (Graph 1, Tab. 4) was based on actual OECD membership and on latest dataset. We proved positive correlation between Power Distance, Masculinity (weak correlation linkage) and corruption. Negative relationship was confirmed between Individualism, Indulgence and Human Development Index as control variable. Again, result of Long Term Orientation was accepted using only multiple-regression analysis. We can also compare our results with D. Mornah and R. J. Macdermott (2018). We have demonstrated similar results by analysis of relations between CPI and Hofstede's cultural dimensions, even Uncertainty Avoidance was statistically marginal. The difference between our study and the authors' research (Mornah & Macdermott, 2018) was our application of a less comprehensive econometric method, that is easier to generate.

Conclusion

Our main aim was to quantify relationship between corruption and culture. At the same time, we wanted to build on previous research. We were able to meet the main aim as well as verify the previous scientific studies. In comparison with Z. Kittová and D. Steinhauser (2018) our analysis generated more comprehensive results. The biggest benefit of this article is statistical relation confirmation between Individualism and corruption. In addition, we achieved to incorporate control variable that have expected proportionality to the CPI. On the other hand, we consider subjectivity of corruption perception as the greatest limitation of our article and space for further studies in this field. For example, many authors confirmed unproportionally relationship between corruption and Indulgence. Maybe in more restraint societies respondents subjectively perceive corruption more than in indulgent nations. But we leave this hypothesis for further research which should be carried out mainly on field of sociological scientific discipline. We set out the following hypotheses:

H1: Corruption will proportionally increase with increasing of Power Distance, Masculinity and Uncertainty Avoidance in OECD member countries.

H2: Corruption will unproportionally increase with Individualism, Long Term Orientation and Indulgence in OECD member countries.

H3: Corruption will unproportionally increase with Human Development Index in OECD member countries.

First hypothesis was rejected as a whole because the statistical significance of the Uncertainty Avoidance is marginal. Again, we accept second hypothesis with reservation. Correlation analysis between Long Term Orientation and CPI was insignificant. Finally, we accept third hypothesis, it was diagnosed strong unproportionally relationship between HDI and corruption.

We share opinion with D. Mornah and R. J. Macdermott (2018) that relationship tracking between corruption and culture is important in many areas, including international business and competitiveness. From the theoretical point of view, this article can be assigned to a new institutional economic theory (see e. g. Liška, et al., 2011). With increasing of corruption as informal institution in society, we can expect an increasing of transaction costs level, which is a significant economic restriction. Institutional economic theory resolves issues of corruption, transaction costs and the economic system for decades. It is really a complicated and important mechanism. We give an example from abstract of M. Munger (2018): "[…] *"political Coase theorem": corruption makes bad systems more efficient. But the dynamic consequences are extremely negative* […]."

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Improving the Business Management Process with Economic Tools

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Abstract

The purpose of the article is to analyze the content of economic instruments in the business environment and their impact in terms of achieving a high level of efficiency. Their changes monitor the achievement of a high level of results, social and economic efficiency. It is the growth of GDP, the development of the inflation rate, the problem of unemployment. At the corporate level, the issue of VAT change, the wage and minimum wage problem, the issue of levies, interest, defaulted loans, goods turnover, profit and profitability. Efficiency changes are pursuing the path of positive changes in economic instruments. We used methods of economic statistics, analysis, synthesis and comparison in the time horizon. The result is a synthesis of knowledge and the possibility of its application in practice.

Key words

GDP, taxes, levies, wages, businesses, economic instruments

JEL Classification: D78, O38, P16

Introduction

Slovakia's economy requires constant attention, especially as regards economic instruments and their operation in the business environment. The efficiency of processes achieved and measured by economic instruments requires continuous work and improvement. In recent years, our economy has been characterized by frequent changes, thanks to which is effort for improvement focused on increase of efficiency.

1 Methodology

The goal that we follow by constant changes in the direction of improvement is the economic efficiency, respectively social efficiency. Its growth requires an active functioning of a set of economic instruments. Leading economists annually aim to analyze the impact of economic instruments and through changes of them they aim to achieve a high level of results. In this text, we analyze the content of economic instruments in the business environment and their impact in terms of achieving a high level of efficiency. We used several methods of economic statistics, analysis, synthesis and comparison in the time horizon.

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2 Results and Discussion

In this part we will focus on business environment, its characteristics and elements. Then we analyze several economic categories and tools and their impact on economy of businesses in Slovakia.

2.1 Business environment

Business environment is the environment surrounding every company; it is created by natural and social conditions that surround the company and in which it develops its business activities.

The main elements of the business environment are:

- the process of changes induced by scientific and technological progress;
- changes in supply and demand developments;
- the process of changes in human value structures;
- the process of subjective economic development;
- trends in business and business development;
- state participation in the business process in the broader sense. (Strážovská et al., 2016)

From this we have selected the most important economic categories in the development of companies and business and the scope of economic instruments and their impact on the economy. GDP growth, inflation, taxes, prices and other factors are significant. At the enterprise level, these are: **changes in VAT, problem of wages, levies, loans, interests, turnover, investments, profitability and efficiency.** The most important, from our point of view, are the efficiency and profitability categories, which are often misinterpreted or completely neglected in economic practice. We pay extra attention to them.

2.2 Efficiency as a strategic goal and profitability as an important economic tool in management

The key element of governance is the efficiency of the national economy, respectively business efficiency. Efficiency comes to the forefront among economic categories because it is a top economic category. It reflects the results of all other activities.

We recall that an economic category is a scientific term expressing the essential characteristics of economic phenomena.

Efficiency is a multifaceted economic category, and in this context, we can talk about multiple levels of monitoring. We are talking about efficiency at the level of the national economy, the enterprise, or the operations. In terms of processes, we distinguish between communal, economic, and social, non-economic efficiency. In line with the underlying objectives, the economic objective, i.e. satisfying consumer requirements, is distinguished. It is therefore necessary to reflect on the issues of substance and basic manifestations of effectiveness as a strategic goal of the development of society. (Strážovská et. al., 2017)

If we consider the basic features of the efficiency of the national economy, it is also necessary to comment how the way is designed by using the synthetic indicator. It seems necessary to use multiple indicators for economic processes. One or a single efficiency indicator cannot be absolute, it is advisable to use a series of sub-indicators.

According to several authors, it would be appropriate to express the efficiency of the national economy as a relationship between the needs of society and the tendencies of the development of production forces, i.e. between the actual economic development and the objective conditions in which it develops. It is a complex development of the economy, political, cultural and social. What is important, however, is that the efficiency of the national economy should also reflect the non-economic aspects, often called social, which are problematic to express quantitatively.

The aggregate criterion of the national economy could be economically expressed in terms of labor productivity growth, national income growth, but also other macroeconomic characteristics. It can be expressed as the relationship between outputs and inputs in terms of economic efficiency and this is countable. In more detail, this relationship could be expressed as a steady increase in the ratio of the effect, i.e. the utility, on the one hand, and the mass of labor involved in their production. In the older literature, we see the definition of social efficiency as the most synthetic.

At the same time, this type of efficiency is considered to be the highest form of efficiency. Social efficiency is based on the use of objective laws of nature by society and its members. It includes the effective development and use of the productive forces of the material-technical base, the economic base and the company's superstructure. The expression of these relationships is as follows:

$$E = \frac{\text{Output}}{\text{Input}} \tag{1}$$

Outputs can be defined as different forms of effects depending on the overall approach, it can be mainly profit, or similarly national income.

Inputs are defined mainly as costs incurred in order to achieve effects, or different sub-elements of live and material work e.g. number of employees, property, and others. From the point of view of the development of efficiency, mutual movement in the outputs and inputs themselves is significant. An important prerequisite for efficiency gains is faster growth in outputs than inputs.

“In economic contexts, measuring efficiency means asking whether the monetary evaluation of the inputs used to produce some goal are the minimal possible costs associated with achieving that goal. If something is called inefficient, it means that the goal could have been reached with less cost or that the goal could have been better achieved (in some monetarily measurable fashion) with the same costs.” (Britannica, 2019)

However, the efficiency also has an out-of-economic resp. social page in content.

Profitability characterizes the result of the business, the means the company uses to cover its costs and, moreover, ensures profit. Profitability is an economic category and is the most important element of efficiency. Its basic feature is the ability to express the company's economic interest in continuous growth. As an economic tool, it ensures optimum unity of company and business interests.

It expresses such a state of management, when the assets of the monitored object in the form of revenues ensure the coverage of its costs and in addition provide a certain profit effect.

Profitability is one of the factors of efficiency expressing its aspect that can be tracked using value indicators. In contrast, communal or social efficiency is often not expressed by direct economic indicators. Profitability can be monitored at both national and corporate levels and at lower levels. At the same time, it is a measure that serves to express the benefits of a company in the process of creating a social product. The most common is enterprise-level tracking where profit is a manifestation. In a broader sense, the lower limit is reached when revenues cover costs and profit is zero. It is interesting for practice to see revenues cover costs and, in addition, profit. We are talking about profitability in the strict sense.

The question is how big the profitability of a business should be. The level of profitability as an economic management tool depends largely on the economic environment and should be derived from its functions, namely:

- the function of the enterprise's material involvement;
- duty to pay issue.

State policy is also important here in terms of draining for the society in the form of taxes.

Different businesses generate a variety of profitability that can result from several factors, such as:

- performance growth;
- cost changes.

This makes profitability the most important element of economic efficiency. Profitability can thus serve as a tool of interest and the company is interested in its sustained growth.

The rate of corporate profitability is expressed in terms of the profit of the enterprise to the quantities that characterize some aspect of the reproduction process. In the management process, profitability is designed to support the rational management of the business and to incorporate the principle of harmony of society and corporate interests. Together with the efficiency category, profitability carries multiple features:

- it is a pricing factor;
- it is a qualitative synthetic indicator on economic activity;
- it is basic economic management tool.

For this purpose, we monitor profitability in the form of a rate, i.e. the ratio of profit and other quantity that best suits the needs of its functions, e.g. profitability of revenues (2), or economic efficiency (3).

$$P = \frac{\text{Profit}}{\text{Revenues}} * 100\ \% \qquad (2)$$

$$P = \frac{\text{Profit}}{\text{Costs}} * 100\ \% \qquad (3)$$

Profitability is a specific measure in business activities. Above all, we emphasize the profitability at company level. Its manifestation is profit. This makes profitability the most important element of economic efficiency as a tool of engagement serving the business as an element of sustained interest. If we evaluate economy and profitability and impact on result, we can use the following formula (4).

$$P = \frac{\text{Profit}}{\text{Margin}} * 100\ \% \tag{4}$$

It would be possible to create other measures, where we would consider e.g. property or wages, own and foreign capital and others, depending on our interest.

In the sense of monitoring the business environment, we will introduce some other tools operating within it and within the framework of efficiency.

2.3 Other elements of the business environment (tools) and their impact on efficiency

a) GDP

GDP Development (year-on-year change in 2019 versus 1Q.2008) = 9.3%

In the EU, we are among the fastest. According to National Bank of Slovakia (NBS), this year's growth of our GDP should be 3.5 percent.

The Slovak economy started in 2019 with negative prospects. Recent figures on economic developments in the first quarter showed that GDP grew by 3.7% per cent year-on-year, a tenth of a percentage point higher than in the previous quarter. However, analysts point out that better entry into the year does not mean that we will avoid this slowdown this year. (Votrubová, 2019).

Several signals, such as the confidence indicator in the industry, highlighting a decline in leading industries or planned maintenance in the refining industry, suggest that the second quarter could completely erase the stronger figures of the year. Gloomy prospects are also confirmed by falling retail sales. This suggests that households are postponing money as savings. The decline in private consumption, which is the most important component of GDP, will also be reflected in overall macroeconomic figures. The slowdown is to some extent desirable. “The growth in 2017 and 2018 was above average, and if the Slovak economy would continue, it will be seriously overheated.” (Votrubová, 2019).

b) VAT

A new reality - late payment of VAT - has emerged in Slovakia's economic practice. The most represented are joint stock companies. Every entrepreneur who has achieved a turnover of 49,790 euros in the previous 12 consecutive months has a legal obligation to pay VAT. Of the total number of registered taxpayers (211,459), the largest share (59.4%) is represented by public limited liability companies, of which 4,463 out of a total of 7,713 companies pay VAT.

The second highest share of registered VAT payers 51.73% was achieved by limited liability companies, where 138,751 companies from the total number of 268,238 are obliged to pay VAT.

The share of VAT payers in the case of sole traders is 14%. 57955 payers from the total number of 411 459 sole traders are registered to pay value added tax. (O peniazoch, 2019)

Tab. 1 VAT payers by legal forms of businesses

Legal form	All subjects	VAT payers
Ltd.	268 238	138 751

Self employed	411459	57 955
Joint stock company	7513	4463
Businessman – not registered in Commercial Register + farmers	5247	2355
Freelance + Licensed Businesses	35 842	1983
Other	96 494	5952

Source: O peniazoch (2019)

There are currently several tax-related issues in the debate (Bisnode, 2019).

- The reduction of corporate tax from the current 21% to 15% or the income tax margin will be set at 15-20%. A similar system operates in Lithuania.
- Refers to the V4 countries and Austria, which has a 25% levy on income.
- Hungary 9% (outflow of Slovak companies -in 1.Q there were 200 companies).
- Czech Republic 19%.
- Poland 19% for start-ups and low-income firms 15%.

The analyzes also show that in 2018 approx. Slovak companies.

- Taxes less than one thousand euros.
- 15,000 other companies reported zero or loss.

Bisnode (2019) also shows that:

- Nearly 100,000 low-income businesses pay low or no taxes.
- Recently, there has been an increase in the registration of Slovak companies in Bulgaria (lower tax burden, cheaper labor force)
- New businesses are growing. In 2018, a record of new business growth was recorded. The Slovak economy is thriving, the number of newly established companies is growing in 2019
- The indebtedness of Slovak companies has increased. It is said that this is due to strong domestic and foreign demand. Companies lend more than ever.

c) **Other tools** the most incremental or emerging changes in the business environment (Ministerstvo hospodárstva, 2019).

   a. **The minimum wage has increased**; 2019 to € 520 changed the hourly wage to 2,989 euros. Six levels of work intensity have been set.

   b. **Increases in social security contributions** from € 151.16 (2018) to € 158.11 (2019). Also, the contributions to the PO increased from € 63.28 (2018) to € 66.78.

c. **Staff shall receive bonuses for night work, holidays and weekends**
    i. growth for work on Saturday 25% of the minimum wage per hour to 50% of the minimum wage
    ii. growth for work on Saturday, Sunday from 50% of minimum wage per hour to 100%
    iii. night work supplements from 30% to 35% of the minimum wage of risk-free workplaces. At risk from 40% to 50% of the minimum wage

d. From 1 July 2018 to 30 June 2019, **the subsistence minimum** of a natural person changed from € 199,8 to € 205,07 per month.

e. From 1 January 2019 to 31 December 2019, the **child tax bonus** was € 22.17, **child allowance** € 24.24.

f. **non-taxable part** of the tax base for the taxpayer € 3937,35 (monthly 328,12 euro)

g. **Reduction of -10% VAT on accommodation**. From 1 January 2019, 20% applies to hotel and tourist accommodation services, camps, boarding houses and worker hostels

h. **Taxation of vouchers**. New rules from January 2019 - implementation of the European directive and harmonization of rules within the EU. Apply 10% VAT on single-purpose accommodation vouchers. But the multi-purpose voucher Czech Republic and Slovakia is subject to VAT.

i. **Tightening the rules** on real estate (amendment of the VAT Act) For the construction of flats and their sale of tax fraud (with the return of excessive VAT deduction)

j. **Taxation of virtual currency**. For the first time in Slovakia, we regulate virtual currencies. It is taxed when buying property for a virtual currency, euro exchange or other virtual currency. Revenue from the sale of a virtual currency is included in the tax base. The loss from the sale will not be tax deductible. Revenue from the sale of a virtual currency is included in the tax base. The loss from the sale will not be tax deductible.

k. **Consumer price inflation and prices**. In March, the rate of year-on-year inflation reached 2.7% while core inflation reached 2.4% and net inflation reached 2.1% (Tab.2). In this context, the price increase accelerated, the consumer price index grew by 2.7% in March compared to the previous year. It was the fastest pace of inflation in 7 months. Prices grew with fuels, alcohol, tobacco, clothing. Prices of petrol and diesel grew as well. In 2019 (January, February) prices increased, sales increased by 2.3% year-on-year. (Vo financiách, 2019)

Tab. 2 Price changes of selected items in Slovakia in March 2019 (in %)

Item	March 2019	Average for 3 months in 2019
Price inflation	2,7	2,4
Grocery store	3,1	2,4
Alcohol	4,4	3
Garments	1	1,4

Household equipment	1,6	1,5
Health services	2,1	2
Transportation	0,9	1,0
The post office services	0,8	0,8
Recreation	0,2	0,5
Education	0,9	0,9
Hotels	3,7	3,7
Miscellaneous goods	2,9	3,2

Source: Vo financiách (2019)

l. **The rate of non-performing loans** is shown in table 3. It points to the health of companies in Slovakia.

Tab. 3 Development of the rate of non-performing loans in Slovakia (in %)

Year	The rate of non-performing loans %
2008	2,50
2009	5,30
2010	5,84
2011	5,61
2016	6,50

Source: Deloitte (2019)

This is related to the negative results of companies in the hospitality industry. The loss ratio is 50.18%. 569 companies out of 1,134 ended with a negative economic result for the year 2017.

m. In the past, **tax licenses** could have affected the market, and companies in the loss had to pay them. They were introduced in r. 2014. 2018. The principle was that even companies with zero or negative results had to pay a minimum tax to the state. V r. 2018 canceled. In this tax period, licenses are last paid.

n. **Unemployment**

   i. Unemployment is falling. The rate of registered unemployment reached in March this year, a level of 5.03% compared to February 2019 (5.16%), dropped by 0.13 percentage point

   ii. The number of job seekers available at the end of March 2019 (137,962 persons)

   iii. The month-on-month decrease was 3470 persons

   iv. Year-on-year, it decreased by 15,892, which is 10.33% less.

Employment is moving in the right direction.

Conclusion

Our business environment has stagnated in recent years. This is also highlighted by the World Ranking of Doing Business, which is compiled annually by the World Bank. While Slovakia was 34 in 2015, we have only been declining ever since.

In 2018, we were ranked 42nd out of 190 countries reviewed (Ministerstvo hospodárstva, 2019). The decline in Slovakia is mainly due to improved scores of other countries and our stagnation in several evaluated areas.

Economic instruments play an important role in the business environment, fulfill and express its most important economic part. In order to grow the economy of Slovakia as part of the European Union, it is necessary to constantly improve it, refining as necessary in the management of growth, or reducing it to increase efficiency at both corporate, national and international levels. Economic instruments in Slovakia are currently fulfilling these roles, resulting in positive GDP growth and other economic variables.

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Use of National Design Award in Marketing Communication[1]

Rastislav Strhan[2]

Abstract

Design can be considered as one of crucial alternatives how company can achieve differentiation of their products. Quality of product design is typical example of information asymmetry as customers perception is individual and subjective. Design Awards and competitions can modify consumers perception toward high quality and deal as signal of quality. Use of Slovak National Award is analysed through evidence of information about Winning award available at internet. On the base of presented information about winners we were searching at internet if information about win are mentioned by official presentation of product and/ or company.

Key words

Differentiation, information asymmetry, product design, design award

JEL Classification: M37, L15, O35

Introduction

After reduction and removal of trade barriers, competitive situation on the market strengthened massively. Companies in all market economies are facing strong competition from domestic companies and rising competition from foreign companies not only from developed countries, but increasingly from developing countries as well. In that situation, the main objective that business organisation is to achieve a competitive advantage position relative to their competitors. To gain competitive advantage business organisations must understand their internal strengths and weaknesses and their potential effects on the firm's competitive advantage (Alimin et al. 2012, p. 151).

Generic strategies developed during late 80ies by Michael Porter are still considered as good way, how to identify for an organisation sources for competitive advantage. According that theory can be comparative advantage found through cost leadership, differentiation and focusing. From them, product differentiation can be considered as the most commonly used strategy (Spencer, Joiner, and Salmon, 2009). A differentiation strategy involves the firm creating a product/service, which is considered unique in some aspect that the customer values because the customer’s needs are satisfied (Durisu et. Al. 2013, p.260).

By product differentiation are for an organisation variety of instruments available to achieve the strategic goals. They have different impact and different process of implementation. For strategic decision process is important to classify instruments according they form of influence on consumer behaviour (Strhan, 2007). In paper we analyse the role of design as instrument of product differentiation and how it can product design be used as instrument of promotion.

[1] The article is an output of the project VEGA 1/0543/18 "The Importance of Product Design in Consumer Decision-Making and Perspectives to Increase the Impact of Design on Creating Competitive Position of Companies Operating in the Slovak Republic".

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1 Methodology

Although product design is commercial private activities, it is supported indirectly by public policy as well. It is connected with competitiveness and innovation, which are considered as important factors of national competitiveness. Activities that contribute to the progress or growth of design for a nation's sustainable growth' are according Sung, Song, Park and Chung (2007) defined as design promotion. They divide design promotion into mainly two functions: design enlightenment and design support and into eight categories: policy research and proposals, awards and certifications, exhibitions and events, publications and publicity, international exchanges, education and training, research and surveys, and development and aid.

Awards and certification as party of design policy leads to rise of several different schemes, which can be used by designers and companies. Demand for such schemes depends on benefits which they can offer and bring to interested organisation. Although this topic is relatively spread in practical situation, we can emphasis lack of relevant research about impact of awards and competition of organisation market situation.

Analysis of 64 of Taiwan's world-class design-award-winning projects (i.e., G-mark, iF and reddot) during the years 2005 to 2007 proved that a firm should consider the design award as a benchmark in good design practice rather than a source of creating better economic benefits. Study proved the benefits of design awards in different aspects. A world-class design-award-winning project has better performance on "company reputation" and "free publicity". Good award competition also can distinguish the best form the others and become a dominant selection system in industry. (Sun et. al, 2009). Brunswicker and Seymour discovered that various stakeholders could gain an advantage through winning a design award. Design departments of companies also could use the award scheme to prove their design abilities. Winning an award is important for them to survive within the company as a department. By winning a series of awards could transfer design into the company's strategy core (Sahin-Galguner-Yavuzan, 2018, p.47).

Design awards bring reputation to company not only in the local market but also in the global market. Awarded products become visible especially with the award exhibitions for overseas buyers, which increases international marketing channels (Sahin-Galguner-Yavuzan, 2018, p.47).

On international level we can find international design awards and competitions almost in every developed country. Scientific research in that field concentrates on economic and social benefits of design promotion rather than impact on benefit for commercial organisation.

Goal of contribution is to prove if and in which form is design award used as part of promotion and communication of benefiting bodies, i.e. product owner- producer and creator – designer (in the case creator is not part, employee, of product owner).

To achieve main goal, we selected Slovak Design Award- national scheme, which should support best designs created by Slovak citizens and designers operating at Slovak market. Opposite to international competition Slovak Design Awards gives only few awards what make overview easier. It is used mainly for Small and Medium sized Companies, what make search for relevant information easier as by multinational corporation.

Certification and awards should have positive impact on design activity and rise of creative industry. Through Slovak Design Award can producer and designer achieve recognition for relative low costs. That can be helpful by expansion in international markets and can be used as testing in attempt achieve better recognition of designers and products abroad.

Slovak Design Centre operates National Design Award and is responsible for public presentation of competition. We can say that information about awards and winners are available normally in all

Slovak newspapers and is available on several webpages. It supports the public perception of positive role of design and achieves educational aspects of design policy.

We assume that award can be considered by designers and by product owner as important achievement and confirmation of innovative thinking and search for new. It is interest of both to make award information available as easy as possible.

We used information about winners and awarded designs for internet search. Using Google search engine, we tried to find official presentation of product owner and product designer. Going through webpages we were searching if, and in which form, information about award win were mentioned.

Design market in Slovakia in not very stable. One reason why only few categories are identified by National Design Award is that there is not enough offer of products and projects which would have appropriate quality. On the other hand, few categories decline the public recognition of award, what results in low benefit of participation. As the fee don´t cover the cost of evaluation process organiser can prepare competition only in budget size.

As we assumed it was very difficult to prove the information. As there is only small design service market, many designers have broader activities including cultural activities, graphics, art etc. Many of them offer design services as part-time activity beside their official work. Not all designers are included in design studio or have own presentation at internet.

The same problem rose by product owner. Unfortunately, although innovative design is connected with information era, many Slovak Small and Medium sized Enterprises have not own web presentation in form of page, or have only very informative page. Although we planned deeper analysis awards use in communication, finally we were lucky for ability to count presence.

2 Results and Discussion

Main research in field of design concentrates at social impact of awards and design competition. As our interest is in commercial impact of design awards and use of it in promotion, we will start discussion by analysis of design role in competitive strategy. Next step would be determination of design award as part of communication. Last step would be evaluation of real situation through National Design Award.

2.1 Design as instrument of differentiation strategy

Differentiation is considered as the mainly used form of competitive strategy. This strategy can include several forms and tools to achieve different perception of customer. Stratification of such instruments can help understand the differences in use. For our purpose we used classification according Koppelmann as you can see in figure 1.

The cognitive differentiation strategy implies differentiation not only on the basis of the consumer's subjective perception, but rather by providing objective and rational information on the quality of products and processes. I tis connected with use of certificates and labels and other forms of conformity assessment (Strhan, 2007). Thanks to recent scandals and health risk which occur repeatedly in developing countries interest in cognitive differentiation increased. We can already find examples of organisation which use cognitive oriented approach to differentiation as base for their communication.

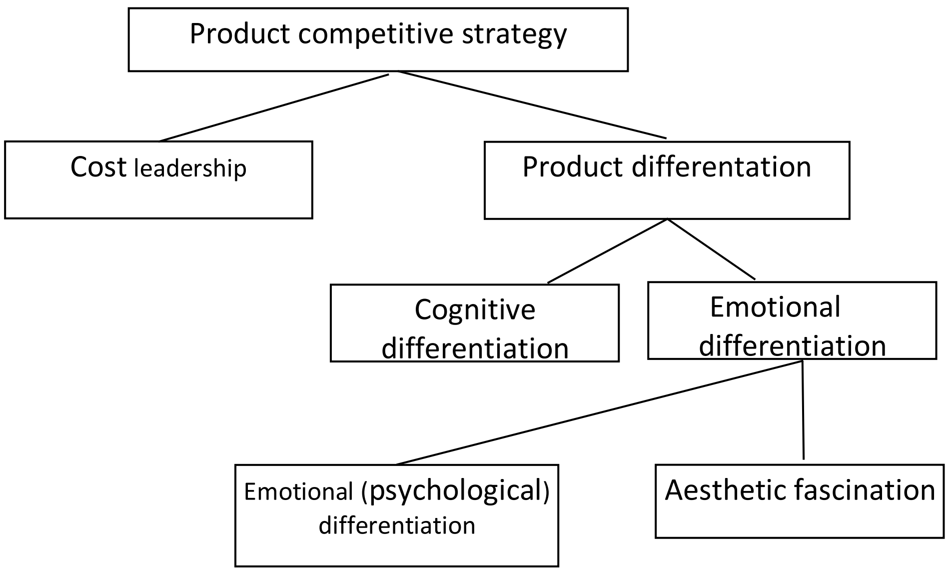
However emotional differentiation still dominates inside strategic decision process. One reason for that is, that one of the prerequisites for the successful product is to consolidate social differences, and to distinguish the consumer itself. Successful product must be able support specific consumer lifestyle (Gerken, 1994). Identification with society through products goes so far, that products acquire beside traditional economic value and utility value a new value. That value, according to different authors, gives product its meaning (Bedeutungswert) and is defined as heraldic or symbolic value of goods (Produktkulturen, 1992).

Impact for product strategy is, that from mass production for big markets companies switch to production and promotion concentrating at small market niches and small segments (Strhan, 2007). New production methods, mass customization connected with new logistic and distribution systems allow both, keep economy of scale and scope on one hand and produce small batches of products.

Product design is one instrument which can achieve uniqueness of products by consumer perception. Product design's has natural connections to many facets of marketing and business in general (Noble, Kumar, 2010, p. 654). In a highly competitive market, product design is regarded as by different scientist as a way of communicating product meaning to consumers, source of competitive advantage, and as "an integrated practice fundamental to firm strategy and market success" (Hsu et al., 2018, p. 886). Within the modern, product-driven firm, product design is an increasingly critical force in developing unique and compelling product offerings. It is essential that designers and marketers alike share some common design perspectives (Noble, Kumar, 2010, p. 654).

Product design is more or less connected with visual customer perception. Several research in marketing and communication confirm that visual images influence attitudes more than the verbal ad content (Edell and Staelin, 1983; Sharma 2016, p.507). Product visuals not only capture attention but are also assimilated and recalled better (Pieters – Wedel - Batra, 2010; Sharma, 2016, p. 507).

Fig. 1 Differentiation as part of competitive strategy



Source: Adapted from Koppelmann Udo: Produktdesign als Instrument der Marktprofilierung. In: Produktkulturen, Eisendle, R.- Miklautz,E.(editori), Campus Verlag, Frankfurt 1992. ISBN 978-3593347707

Impact of design on product perception make designing process very similar to marketing decision processes inside the company. As Lindahl and Nordik point out many marketing scholars suggest close coordination between marketing and design so that the products' design is adjusted to meet the demands of customers. They argue that products and their design process should be driven by the needs and demands of the market to increase the likelihood of market success (Lindahl- Nordin, 2010).

Other researchers e.g. Digerfeldt-Månsson, Fillis ask if it is preferable or even possible to rationally control the creative potential of design and other artistic activities. These researchers are more concerned with the design process and its fundamental nature; in particular, the process of designing products that distinguish themselves through their aesthetic qualities, creating so-called 'sensory experiences' (Lindahl- Nordin, 2010).

Independent of the various dimensions and functions of products, the design process is generally considered a creative process and the designer is seen as a creator. As mentioned by Beverland (2005), designers are often described as egocentric, sensitive, intuitive and emotional artists with right-brain thinking. There are, however, different kinds of creators, and a designer is not necessarily an artist (Beverland, 2005).

Conflict between marketing and design approach to product development can be solved inside company so that design achieves relevant position by new product development. Problem arises when product is launched on the market. Majority of consumer is not educated in design and design evaluation. Independent from design result, product designing process and evaluation of design should be communicated separately.

2.2 Design and design awards role in marketing promotion

Although design education belongs to the accepted parts of design promotion it is questionable in which level it can help consumers by the decision process. As customer can´t be informed about internal designing process and the role of design by product development, he/she is facing classical situation of information asymmetry. Information asymmetry models as we know from the market, assume that at least one business party has relevant information, whereas the other(s) do not. Normally are information asymmetry models oriented on purchase side, where buyer is not completely informed about condition of purchase (Strhan, 2019).

Perception of goods by consumer and customer is based on the level of like don´t like. Marketing approach without attempt create new innovative design would be more appropriate as the designer role creates risks for company. As design trends change rapidly, long-time impact of education approach can have limited success by short-term designing trends.

Economics theory uses concept of signalling to minimize the negative impact of product related information asymmetry. Signalling theory focuses primarily on the deliberate communication of positive information in an effort to convey positive organizational attributes (Connolly et al. 2011, p.53). Impact of different signals can differ. Some signals of quality may be more readily detected by the receiver than other signals are, so management scholars sometimes suggest that signals may be "strong" or "weak" (Connolly et al. 2011, p.53).

Design awards and certification can be considered from this view as form of signalling. As they have strict rules for evaluation and use of results, we can consider them as system with formal feedback. Awards schemes are relatively often used in communication of quality and product attributes. Expert reviews (jury) are summarized and compared and on the base of criteria which are set comparison of different products available on the market is made. Although formal inspection system is not used, public presentation of results makes the opportunity to misuse the system almost impossible (Strhan, 2018). Recognized and accepted jury creates even for layman consumer sufficient confirmation of quality views.

2.3 Use of Slovak Design Award in internet promotion of winners

National Design Award is organised annually by Slovak Design Centre with support from government and ministries. During its history it went through several changes. After last change in 2015 it is organised every year with changing orientation of communication design and product design eventually.

In **the recent year 2019**, award concentrated on product design. Although jury already decided, official presentation will be hold in October 2019. In competition participated 139 works from 107 designer in three categories. 54 works in category of professional design, 56 in category of student design works and 29 in category Design with value added. Best 51 works will be presented on exhibition, which will be open for public in autumn 2019.

Last year – 2018 award scheme concentrated on communication design. Three designs were awarded, three other special awards and special prize for lifetime achievement were granted. Benefits of award can be gained by both, designer and product owner as well. In three cases was design part of education process and designer represented education institution, and of course category lifetime achievement was individual. By four cases were two side participating, so together we counted 12 potential beneficiary bodies.

Two product owners (both book design) used the information about award by book presentation at internet. One producer (chocolate) did not mention award, but used similar award gained on international level (Worldstar award for packaging) as their achievement. By university of course winning of award by students was mentioned by achievement of students and last product owner was organiser of festival where product has only short life and original information were not anymore available. From 7 designer, whose work was awarded only 1 has mentioned it in his personal webpage. Other mentioned award in his curriculum and by two we could not find information about any activity.

Award scheme in year 2017 concentrated on product design. Again 3 awards were granted for best design and three special prizes were presented (Students work, value added, jury and public choice). Together with lifetime achievement award 8 projects were acknowledged. Because by products are designers often part of product owners, we identified only 10 benefiting organisation. By first prize we found visible declaration of award by product presentation at webpage. As company won Reddot design award, the logo of international design competition was presented as well. By second prize design seems to be only of development period and is not available at the market and by third design for German company was prepared by Slovak designer and we assume Slovak award brought product owner not enough benefit.

We can see individual differences in approach to award use as part of communication and marketing promotion. Winner of first prize and jury award are start-ups and both included the award into product description at webpage. Second prize winner and public and journalist award are in similar situation of new creative industry representing start-up, but did not mentioned award success in any form. Looking at overall availability of information from 10 bodies, which could gain benefit by declaration of national design award are information by first side contact available only in 4 cases.

National award for 2016 concentrated again on specific topic of communication design. Therefore, there was only limited place, mainly for books and communication instrument, to present product design. National award was given to one project and 8 other authors and projects were awarded. Although it is positioned in city of Žilina, official city tourism website characterizes it without mentioning award gained from the Slovak design Centre.

Three were personal award, for professional achievement, scientific paper and collection of works. Any of this winner mentions the award gained at their official website. By two communication design awards was mentioned only partly. In first case product presentation (book) presented the award, but in designer presentation it was not mentioned. In second case (tv program identity) award was part of reference by designer studio, but not mentioned by client – product owner. Altogether from 11 bodies who has benefit to be awarded in different form that year only 4 have this information still available in electronic form.

As we mentioned since **2015 National Design Award** has new scheme. It started with concentration on product design. Besides National award winner and two honorable mentions 5 other projects were awarded by special prize and 2 awards were personal (for lifetime achievement and company achievements).

National award winner is still in portfolio, but information about award could not be found. At least producer points that be design they cooperate with designers. One of awarded products (fashion collection) is mentioned in presentation of designer, who is product owner as well. Buy second awarded product information about award could be found at website archive, but product is not any more in portfolio. Designer in this case is employed abroad and his presentation could not be found.

From other awarded product design projects 3 were prepared as part of education process, where product owner was University and project were not commercial oriented. By one designer was product owner. In this case it is still offered as product and information about obtained award can be found. By last awarded project we could not found any information about it at webpage of product owner. Although awarded company still exists and is presented at webpage, information about award could not be found there. Together on project awarded participated 10 designers and by 3 information about award could be found in their formal presentation (webpage, LinkedIn).

Before change National award was organised on biannual base. **In the year 2013** 10 product and projects were awarded. Calculating all potential award benefiting bodies we can come to number 18. Highest award obtained company which does not any more exist and where designer changed focus apart from design. Five other product designs were awarded. Two products were timely limited (exhibition and book), one is still offered and by two we could not find if they are still available at market. Four designer developing products mentioned the award in some form in their curriculum available at official website (personal and/or atelier). Two clients were public (college and gallery) and from three commercial product owners only by one could be found some information about award for such product. From special awards most designers who were awarded mentioned in in some way at their official profile (curriculum). In one case, where company obtained special award from Ministry of Economy was at webpage mentioned information that company is winner of Redddot Design Award.

National award in the year 2011 was awarded by National Award one project in product and communication design were awarded with National Award. Five awards were given by different state authorities (ministries and National Agency for Development of SMEs), one product was awarded by private company (Audi award) and 10 designs have got honorable mention. Altogether 18 projects were awarded as one project has won two awards.

We counted 7 commercial organisations as product owner, one product owner was non-commercial organisations -gallery. Award for lifetime achievement had no product owner and 9 projects had as product owner Universities. Although three different Universities were awarded, we counted them as one product owner. As public non-commercial organizations we expect interest in benefit of such award is not commercial. Together we counted 8 potentially benefiting organisations.

Number of designer participation at projects was bigger. By 12 project worked designer alone (lifetime award included). One award was given to company as whole and no designer could be identified. On other 5 projects participated 13 designers and/or design studios, so together we counted 25 designers who could professionally benefits from Award.

By evidence of results we must state, that 2011 is already relatively far away, to expect active market presence of products winning the award. By designers of course we expect that Award-winning information could be included in their curriculum vitae. By companies who use design as part their strategy we can assume that at least in archive or by overall information we will find the mention of that award.

From 7 commercial organisation only by three information about award winning was mentioned in relevant form. From together about 25 designers only by 4 we were able to find information about win of award on internet. Although some of former students don´t work in design industry or are included into corporate scheme, we assumed that through social networks (especially LinkedIn) such information will be available.

Tab. 1 Use of National Award in electronic presentation

Year	Number of regu-lar and special awards	Number of be-nefiting bodies (product owner and designer)	Number of living internet refe-rence	Percentage of beneficiery using the potential
2018	7	12	4	33%
2017	8	10	4	40%
2016	8	11	4	36%
2015	10	15	4	27%
2013	10	18	6	33%
2011	18	33	7	21%

Source: own research on base of internet survey

After analysis of yearly results of National Design Award, we summarized information about use of this information in electronic presentation of benefiting body (designer, product owner). As we can see in table 1 use of this information is relatively rare. There are several categories where design students can participate and very often are successful. We can assume, that not all students will continue their professional carrier in creative industry and not all have professional oriented electronic presentation.

Unfortunately, even by professional organizations use of award winning is relatively seldom used in product and company presentation. We found by older awards several companies which did not exists anymore, so good and awarded design has not help build sustainable competitive position. As positive we can consider slight increase in number of information use, where last three years are attacking 40%.

Conclusion

National Design Award is good organized activity with long tradition. It is supported by state authorities and in professional circles good known and accepted. National Design Centre cares about promotion of that activity, so information about Award and Winner can be found in all relevant Journals and Newspaper in Slovakia. Accompanying activities (event, exhibition) are good known and presented. From that side marketing promotion of design is satisfying.

As we mentioned product design can be good source of product differentiation Awards can be good signal of quality of design for both, professional designer and company. Internet survey we made shows, that only small part of winners and awarded bodies in National Design Award competition uses that information in their principal electronic presentation. We can find two reason for that.

First explanation is that National Design Award brings the body only small competitive advantage as known among the professional, but not recognized by public. By search for potential customer (by designers), or by search for potential byuers (by product) value added and wish for use as part of communication is low.

Second explanation is that the National Design Award is still considered more as cultural and artistic event and not as commercial activity. Designer search for professional recognition which they achieve without need to promote it to public. Companies consider from beginning National Design Award as part of their public relation activity without thinking about commercial use in case of success.

We can consider this paper as introduction in research of design quality signalling alternatives. Deeper analysis of use by international competition, case study of experience and impact of selected winners could give additional information about benefits of use of National Award in promotion. Such information can increase interest of relevant organisation to participate in award scheme and that will have positive impact on Award as such.

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One-euro limited liability companies in the Slovak Commercial Code[1]

Lenka Vačoková[2]

Abstract

A simple share company is a new form of one-euro companies in the Slovak Commercial Code since 2017 but there is still no more than 100 companies created every year. The object of this paper is a legislation of foundation of the limited liability company. Author uses primarily methods of analysis, comparison and synthesis. Through the comparison of legislation of limited liability companies in the Slovak Republic, Czech Republic and Germany she strives to propose the future legislation of the company with limited liability of the shareholders and minimum share capital. Author suggests a limited liability company with minimum share capital in the Slovak legislation.

Key words

a process of foundation of the company, limited liability companies in the Slovak Republic and Czech Republic, GmbH, minimum share capital, minimum contribution of each shareholder, reserve fund, directors

JEL Classification: K2, K22

Introduction

Since January 2017, it is possible to establish a new type of a business company, a simple share company in the Slovak republic. It is a combination of a joint stock company and a limited liability company. The simple share company benefits from advantages of a limited liability company such as a simple structure of company's bodies, possibility of establishing one-person company (the only founder is either natural person or legal entity) and not so high minimum registered capital. It also uses fundamental elements of a joint stock company for instance register capital divided among a certain number of shares of a certain nominal value, shareholders do not bear any liability for the obligations of the company and do not have obligation to create a reserve fund. (NR SR. sk, 2015 Explanatory memorandum to the Government Bill to Parliament for a Law on amending Commercial Code)

The minimum amount of a shareholder's contribution into the simple share company is one euro. A founding agreement or a founder's deed has to be executed as a deed of a notary public on the legal act. Articles of association should be a part of the founding document. This kind of company cannot be based on a call for the subscription of shares. From January 2017 to May 2019 there were only one hundred and forty-one simple share companies established in the Slovak Republic. Despite advantages of this new kind of business corporation, the limited liability company remains the most popular company in the Slovakia. In 2018, 19 738 limited liability companies were founded, which represents around 99 % of all business companies or around 95 % of all legal entities founded in Slovakia. (Finstat.sk, 2019)

[1] No. 020EU-4/2019 Publishing of a new textbook from the subject Basics of Law in English for international students and Slovak students studying in English

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In the Czech Republic, related to the reform of civil and commercial law, a new Civil Code and the Business Corporation Act (hereinafter BCA) were adopted in 2014. Major amendments were made in the legislation of the limited liability company in order to improve the position of the Czech Republic in the business companies' competition. (Havel et al., 2012) The most important changes have been reducing the minimum amount of the shareholder's contribution to one Czech crown (CZK), possibility of shareholder to own more than one business share and possibility to form different types of business shares, if the memorandum of association allowed it. (§ 135 BCA) Common certificate, which represents the business share, may be issued, if so provided by the memorandum of association. (§ 137 paragraph 1 BCA)

In Germany, there was a big reform of a Limited Liability Companies Act (hereinafter GmbHG) in 2008. An Act on Modernization of the GmbH-Law and the Fight against Abuses (MoMiG) adopted a new variant of a limited liability company (GmbH) named Unternehmergesellschaft (haftungsbescgränkt) or UG-haftungsbeschränkt for short. UG-haftungsbeschränkt is founded with capital less than 25 000 Euro, which is needed for establishing GmbH. The minimum amount of share capital should be one euro according to the lowest nominal value of the share (§ 5a paragraph 2 GmbHG). UG-haftungsbeschränkt has to create a reserve fund in the high of 25 % of profit after deduction of losses for the previous year. If the company increases its share capital to the 25 000 euros or more, UG-haftungsbescgränkt becomes GmbH (Pokorná, 2010)

This paper is focused on comparison of fundamental elements of the limited liability company in the Czech Republic, UG-haftungsbeschränkt in Germany and limited liability company in Slovakia in order to propose future legislation of limited liability company in the Slovak republic and to improve the position of its legislation in the European area.

1 Methodology

The main objective of this paper is proposal of legislative changes in the provisions of the limited liability company in the Slovak republic. The author uses methods of analysis, comparison and synthesis together with method of deduction and induction. These scientific methods are applied to analyse legislation of the limited liability company in the Czech Republic, Germany and the Slovak Republic, to compare basic features in the national provisions of the limited liability company and to suggest necessary modifications in the Slovak legislation primarily in the process of creation the business company with limited liability of the shareholders.

2 Results and Discussion

2. 1 Subscribed/share capital, business share, contribution to the company (monetary/in cash, contribution in kind

As mentioned above, UG-haftungsbeschränkt (entrepreneurial company (limited liability) is a company which share capital does not reach the amount of 25 000 euro. In view of the fact that the nominal value of each share must be one euro, the minimum shared capital should be one euro in case of one-person company. Each shareholder may subscribe to several shares upon formation of the company. In addition, the amount of the nominal values of the individual shares may be variously determined and the total sum of the nominal values of all the shares must equal the amount of the share capital. (§ 5 paragraph 2, 3 GmbHG) The entrepreneurial company (limited liability) may be register when the whole share capital has been payed. Contributions in kind are not allowed. (§ 5a paragraph 2 GmbHG)

The situation around the share capital and contributions of the shareholders is similar in the current Czech legislation of the limited liability company. The minimum amount of the shareholder's contribution shall be one Czech crown (CZK), unless the memorandum of association stipulate higher minimum amount of the contribution. A different contribution amount may be provided for different business shares (§ 142 BCA)

Unlike German entrepreneurial company, contributions in kinds are possible under the section 143 of the Business Corporations Act. The fee, which is paid to the expert for his opinion shall be determined by agreement and paid by the company, not by the court (Havel et al., 2012). The expert opinion shall include at least a description of the contribution in kind, the valuation method(s) applied, the amount of the valuation for the contribution in kind and the reasoning leading the expert to such valuation. The difference between the price of the contribution determined by expert in his opinion and the amount of the shareholder's contribution in kind created the contribution premium (§ 144 paragraph 2 BCA). Before the filing of the application for incorporation to register the company in the commercial register, the whole contribution premium and at least 30 % of the amount of every cash contribution must be paid up (§ 148 BCA)

A common certificate, if so provided by the memorandum of association may represent a business share according to Business Corporations Act. If the memorandum of association allows more business shares for one shareholder, common certificate may be issued for each business share. It can be issued only for a business share that is not subject to any restrictions or conditions regarding its transferability. It is an order instrument and cannot be issued as a book-entry security. Common certificate may not be subject to public offering or admitted for trading on any public markets. (§ 137 BCA)

Under the Slovak Commercial Code, each member may own only one business share, which represents the member's participation in the company and the rights and duties derived from his participation. (§ 114 CC) No common certificate is allowed to the business share, there are no types of business shares. Each member's contribution have to be at least 750 euro, the minimum amount of subscribed capital is 5 000 euro. Contributions in kind are possible and have to be paid before the registration the company in the commercial register. Similarly, as in the Czech Republic at least 30 % of each cash contribution have to be paid before filling a petition for entry of the company in the commercial register. The total sum of cash contributions together with contributions in kind have to be no less than 50 % of the minimum shared capital, which is 2500 euro. (§ 111 paragraph 1 CC)

2. 2 Memorandum of association/Articles of association

In Germany, articles of association needs notarial form and signature of all shareholders. Since 2008, a limited liability company may be founded in a simplified procedure by using model protocol *(Musterprotokol).* The condition is that a limited liability company has no more than three shareholders and at least one director. The model protocol that serves as the list of shareholders is using for standard situations of establishing the company, typically for small and middle enterprises. (Pokorná, 2010) The model protocol thus includes articles of association, the list of shareholders and the appointment of a director. (Husár, 2014) The articles of association as well as model protocol should be amended by the resolution of shareholders. The amendment to the articles of association requires a majority of three quarters of the votes cast and must be recorded by a notary. (§ 53 paragraph 2 GmbHG) The amendment to the articles of association has no legal effect until it is entered in the commercial register. (§ 54 paragraph 3 GmbHG)

Likewise, under the Business Corporations Act the memorandum of association may be amended by agreement of all members. It can also be amended by a decision of the general meeting, if so stipulated in the memorandum of association. A decision of the general meeting, which results in an amendment of the memorandum of association, replaces a decision to amend the memorandum of association. It is for example decision about expulsion of the member who violated his duties in a particularly serious manner even though he has been invited to fulfil his duties and notified in writing about the possibility of expulsion or decision about inheritance of a free business share. Such agreements of the members of the company /such decisions of the general meeting have to be certified by an authentic instrument/requires the form of an authentic instrument. (§ 147 BCA)

Memorandum of association can be changed in the same manner in the Slovak Republic. According to the Commercial Code, executives are obligated after each amendment of the memorandum of association, to execute without undue delay the full text of the memorandum of association and are liable for its integrity and the correctness. (§ 141 paragraph 3 CC)

From our point of view, there are no significant deficiencies in the provisions of the Commercial Code concerning memorandum of association or articles of association and their changes in comparison with German and Czech legislation. In our opinion, model protocol under the GmbHG is an effective way to help small and middle enterprises in the process of establishing the company if there are no more than three founders of the company and at least one director who may be the founder or other person. This simplified process of establishing limited liability company should be also used in the Slovak republic.

2. 3 Decisions per rollam

As mentioned above, a business share represents rights and duties derived from member's interest in the limited liability company. Decisions of the members of the limited liability company are adopted at the general meeting, the highest body of the company or outside the general meeting. Business Corporations Act precise provisions of decision-making outside the general meeting *(per rollam)*. Unless the memorandum of association excluded *per rollam* provisions, a person who is authorised to convene the general meeting (for example executive, supervisory board etc.) send a proposal of a decision to the address indicated in the register of members or in other manner provided for in the memorandum of association. This proposal includes a deadline for the receipt of a member's opinion which is determined in the memorandum of association or it is 15 days, any documents required for its adoption (contracts, information from the commercial register etc.), and additional information if so stipulated in the memorandum of association. (Havel et al., 2012) Where a member fails to deliver his approval of the proposed decision to the person authorised to convene the general meeting within the period of time, such member is conclusively presumed to have disagreed with the proposal. (§ 175 BCA) Majority is calculated on the basis of the total votes of all members. (§ 176 BCA) The company or the person authorised to convene the general meeting has to notify to all members without undue delay after its adoption a decision taken, including its adoption date. (§ 177 BCA)

Under § 48 paragraph 2 GmbHG *a meeting need not be held if the shareholders all declare their consent to the disposition in question in text form or by submitting their votes in writing.* The shareholder or the director of the limited liability company proposes postal (distance) voting. Voting *per rollam* in the German law need to have consent of all members, also the members who are excluded from exercising they right to vote. Althought *per rollam* voting is not detailed in the

GmbHG, it follows from the case law that director or other person have to find out the result of the vote and inform the shareholders of that fact. (Bělohlávek et al., 2013)

The Slovak Commercial Code as well as a previous Czech Commercial Code and the German GmbHG contains only one general provision about *per rollam* decisions in business corporations. According to § 66 paragraph 8 CC the articles of association or the memorandum of association may also allow the votes to be exercised in writing or by other means of communication outside the general meeting. The voting members are regarded as if they were attending the general meeting. On the other hand more detailed is process of *per rollam* decisions provided for in provisions of the simple share company (§ 220zb CC). This legislation is very similar to BCA provisions. Small differences are only in a deadline for the receipt of a member's opinion, which is 30 days or it is determined in the articles of association and the board of directors has to notify results of the voting within 15 days after its adoption unless articles of association specify a shorter period.

From our point of view, the process of *per rollam* decision-making at the current time of electronic communication and internet represents important way of adopting decisions of members of business corporations and it should certainly be a part of legislation of a limited liability company to the same extent as in the provisions of the simple share company.

2. 4 Cumulative voting

Cumulative voting known in the British law and in the legislation of some states of the USA is *novum* in Czech corporation law. In addition, German, Austrian or Swiss law does not recognize it. (Havel et al., 2012, Bělohlávek et al., 2013)

If provided for in the memorandum of association, the members of the company's bodies (executives and supervisory board, if it is established) are elected by cumulative voting. (Section 178 BCA) The essence of this institute is to ensure the position of minority shareholders in the choice of company bodies is increased and it presents an incentive for the investor to acquire a share in the entity controlled by the dominant shareholder or shareholders. (Štenglová et al., 2013) For the purposes of cumulative voting, the number of votes of a member is determined by multiplying the number of votes disposed of by the member at the general meeting and the number of elected member positions in a company body. A member is entitled to use all the votes he controls or an arbitrary number of votes for certain person or persons only. Each member of a body is voted on separately at the general meeting. (Section 179 BCA) In cumulative voting, the persons for whose election the highest number of votes was cast are elected, provided that they were voted by at least an absolute majority of all votes of the members present at the general meeting, as determined for the purposes of cumulative voting. (Section 180 BCA)

Cumulative voting is an interesting legal instrument of voting members of the executive board or the supervisory board in the limited liability company in the Czech Republic for improving the position of minority members. From our point of view, provisions concerning the cumulative voting should be a part of legislation of the limited liability company in the Slovak Commercial Code and may be important for voting executives or members of supervisory board if so stipulated in the memorandum of association.

2. 5 Founder of the company, shareholder/member of the company, director, supervisory board

According to the Business Corporations Act, there are no more restrictions according to maximum number of shareholders in the limited liability company in the Czech Republic. A single founder may establish a capital company or it may have a sole member as a result of all its business shares being held by that member. (§ 11 BCA)

Directors of the limited liability company may not be only individuals but also legal entities (Štenglová et al., 2013). A director is understood in principle as a monocratic body unless memorandum of association stipulated otherwise. (§ 44 paragraph 5 BCA) A ban on competition conduct is redrafted under the Business Corporations Act. The director is obligated to inform members of the company that for instance he is a director of another company with similar scope of the business. It is presumed, that if members of the company know about competitive action of the director and remain silent, they agree with this competitive action. (Havel et al., 2012, Bělohlávek et al., 2013). A supervisory board remains facultative body of the limited liability company.

The member of a statutory body or a supervisory board must comply with the conflict of interest rules (section 54), a ban on competitive conduct and rules of conduct for members of a body to act with due care (business judgment rule) (section 51).

Provision of the section 159 paragraph 1 Czech Civil Code provides for a duty of due managerial care on the basis of duty of care and duty of loyalty known from the foreign legislations and includes three fundamental obligations: "*discharging the office with the necessary loyalty as well as with the necessary knowledge and care".* The essence of the rule of business judgment is not that it modifies the duty of due managerial care, it still holds true but it gives the acting members of the body the possibility of a "safe harbour" when they act *lege artis,* regardless of the consequence. The business judgment rule gives the protection shield to the person who has acted with care and knowledge, and loyal. (Štenglová et al., 2013, Kožiak, 2012)

Under the section 1 GmbHG, "*a limited liability company may be formed by one person or several persons*..." There are no limitations according to maximum number of shareholders of the GmbH or UG-haftungsbäschrankt. If the company uses a model protocol, maximum number of shareholders is three and one director, who must be only individual of full legal capacity, a shareholder or other person. According to section 6 paragraph 2 GmbHG for a period of five years after the judgment becomes final as director may not be appointed person who for instance *„on the basis of a court judgment or an enforceable decision issued by an administrative authority is not permitted to exercise a profession, a branch of a profession, a trade or a branch of a trade, in so far as the purpose of the enterprise fully or partially corresponds to the subject of the prohibition",* or *„who has been convicted on account of one or more wilfully committed criminal offences"* listed in that provision. Pursuant to new section 6 paragraph 5 GmbH *„shareholders who intentionally or gross negligently leave a person who may not act as director to manage the company's business shall be held jointly and severally liable to the company for that damage which arises on account of the fact that this person violates the obligations which he is under vis-à-vis the company"*. (Bělohlávek et al., 2013, Pokorná, 2010) A supervisory board under the GmbHG is also facultative body (Bělohlávek et al.)

Similarly, under the section 152 paragraph 2 Czech Civil Code a natural person who is a member of an elected body must have full legal capacity. According to section 46 Business Corporations Act: *"Persons who lack integrity within the meaning of the Trade Licensing Act or those showing the occurrence of a fact which is an obstacle to a trade may not be a member of a body of a business corporation".*

A person who is to become a member of a body of a business corporation have to inform the founder or the business corporation in advance whether insolvency proceedings under another legislative act or the process of expulsion from office of a member of the statutory body by the insolvency court are pending in relation to that person's assets or the assets of business corporation in which the person acts or has acted as a member of a body in the past 3 years or whether other obstacles to the function occurred with that person. (§ 46 paragraph 2 BCA)

The Business Corporations Act introduces new provisions of the process of expulsion from office of a member of the statutory body by the insolvency court, which is authorised to grant exceptions, too. The first reason for expulsion is bringing the corporation into bankruptcy and the second reason is repeated and serious violence of the duty of due care or other duty in the last three years. In German law, the insolvency court does not have similar competence. Pursuant to abovementioned provision of section 6 paragraph 2 GmbHG a person who has been convicted of wilfully criminal offence of failing to file an application for the opening of insolvency proceedings (delay in filing for insolvency), or of fraud or embezzlement under the Criminal Code to no less than one year of imprisonment may not be appointed as a director for a period of five years after the judgment has become final. (Bělohlávek et al., 2013, § 63-64 BCA)

The Slovak Commercial Code also recognises the institute of disqualification of a person who is a member of the statutory body or the supervisory body by insolvency court or criminal court. The disqualified person is obliged to notify his disqualification without undue delay to the companies or cooperatives concerned. (§ 13a CC) One of the reasons for the disqualification of the member of the statutory body to execute the function of the statutory is a final judgment of the court deciding on the statutory body's obligation to pay the contractual penalty for breach of its obligation to file a proposal for the bankruptcy under section 74a of the Bankruptcy and Restructuring Act. The person is disqualified by the court to be a member of the statutory body of the company and of other companies for a period of three years. Another reason for the disqualification is a final judgment of a court in criminal proceedings, the result of which will be a prohibition on performing functions in commercial companies and cooperatives pursuant to the section 61 paragraph 10 of the Criminal Code. The period of disqualification will depend on the court's decision and will be included in this decision. (Seneši, 2015) Reasons for disqualification members of the statutory body under the Bankruptcy and Restructuring Act have been extended since January the 1, 2018.

We recommended amendment of the provisions of the director's liability in the Commercial Code as it is formulated in the Business Corporation Act (business judgement rule) or in the German Stock Corporation Act.

2. 6 Reserve fund

As mentioned above UG-haftungsbeschränkt creates a reserve fund in the high of 25 % of profit after deduction of losses for the previous year. If the company increases its share capital to the 25 000 euro or more, UG-haftungsbescgränkt becomes standard GmbH. In the Czech Republic although the minimum shared capital can be 1 CZK, there is no obligation to create a reserve fund. Under the Slovak Commercial Code, the minimum amount of the shared capital is 5000 euro. The limited liability company is obligated to form a reserve fund in the first year of its profitability unless it was already created at the time of incorporation of the company. The reserve fund is created in the amount equal to at least 10% of the net profit, but without exceeding 5% of the amount of the registered capital. An amount determined in the memorandum of association or articles of association of at least 5% of net profit should be annually transferred to the reserve fund until it reaches the level being equal to at least 10% of the registered capital. (§ 124 CC)

Conclusion

This article primarily compares the provisions of the limited liability company in the Czech Republic, Germany and the Slovak Republic in order to suggest improvements in the legislation of the Slovak limited liability company. In the Czech Republic, the minimum amount of shared capital according to the minimum amount of member's contribution in one-person limited liability company may be 1 CZK. The obligation to create a reserve fund was abolished. On the other hand GmbH in the Germany required the minimum shared capital of the amount of 25 000 euro. The minimum amount of the shareholder's contribution can be only 1 euro. A variant of standard GmbH is UG-haftungsbeschränkt where the shared capital is less than 25 000 euro but may be also 1 euro. UG- haftungsbeschränkt has to create a reserve fund in the high of 25 % of profit after deduction of losses for the previous year. If the company increases its share capital to the 25 000 euro or more, UG-haftungsbescgränkt becomes standard GmbH. According to Husár, 2015 since now a designation GmbH ca be used, what is important mainly from the point of view of creditors and other persons.

We have two possibilities how to change the provisions of the limited liability company under the Slovak Commercial Code. The first (Czech) variant is a limited liability company with shared capital and the member's contribution in the minimum amount of 1 euro with no obligation to form a reserve fund. The second (German) variant is a start-up company with the shared capital and the shareholder's contribution with minimum amount of 1 euro. Shareholders will be obligated to form a reserve fund to the amount of 5 000 euro, what is currently the minimum shared capital in the Slovak limited liability company or to the amount of 25 000 euro, what represents the minimum shared capital in the GmbH.

In our opinion, the first Czech variant will be probably more realistic than the second will. The position of the Slovak republic in the European area of business corporations will be more competitive.

Regardless whether the first or second variant will be better, we think each member/shareholder should own more than one (business) share. There should be also various types of the shares in the legislation of the Slovak limited liability company. From our point of view, common certificate to the shares as mentioned in the Business Corporation Act is a good idea, too.

Model protocol as mentioned in the provisions of the GmbHG provides for simplified way of establishing limited liability company, if there are no more than three shareholders and one director. It reducing time and costs in the process of foundation of the company. (Husár, 2014)

In our opinion legislation of the limited liability company needs also detailed provisions concerning decision-making outside the general meeting, *per rollam* decisions. We support more precise provisions of the *per rollam* decision-making such as the provisions of the simple share company. The provisions of the cumulative voting should be a part of provisions of limited liability company and can be used if the memorandum of association stipulates it.

In addition, the business judgement rule as mentioned in the Business Corporation Act should be a part of provisions concerning liability of the executive body.

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Current Challenges in the Field of Education of Future Business Managers[1]

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Abstract

Nowadays, there are ongoing political, economic, technological and social changes that require new approaches in the education of future business managers. Businesses need people who can take responsibility for their own decisions, to face unforeseen situations, and to solve problems that have never occurred before. In this context, we talk about the need to teach soft skills at schools. The aim of our contribution is to introduce our experience with the process of teaching focused on the development of soft skills in future business managers, where we use design thinking approach using different methods to support soft skills, including feedback from students to this way of teaching. Our results show that new approaches to education are a revival of the pedagogical process, help develop the self-knowledge and self-awareness of students, facilitate understanding of the curriculum, and develop their soft skills that are needed for practice.

Key words

Education, business manager, project-based learning, design thinking

JEL Classification: A20, J24, M53

Introduction

According World Economic Forum (2019), 4th industrial revolution brings explosion of new fields, such as artificial intelligence, internet of things, self-driving vehicles, renewable energy, etc. New technologies brought also new demands on workforce, many job positions were replaced by robots, but on the other hand new job positions were created. Due to uncertainty and unfamiliarity with the future problems, it is not possible to teach students how to solve them concretely, so the aim of modern education process is to prepare new generation of young people to be able to flexible react to challenges that will appear.

Teaching process is less concentrated to memorizing information, that are easily available, but more important is to teach students, how to recognize, which information is reliable, and how to use them in problem solving. World Economic Forum (2019) defined 10 soft skills, that are top demanded – complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision-making, service orientation, negotiation and cognitive flexibility. To achieve these soft skills, several teaching tools were created, for example project-based learning, learning by doing, and design thinking approach.

Design thinking is defined as "a creative problem-solving process that focuses on understanding the needs of others, rapid testing and iterating, and bringing out your inner

[1] 2017-1-PL01-KA203-038527 DT. Uni. - Design Thinking Approach for an Interdisciplinary University

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creative genius”. (Tran, 2019) In this process is crucial to support students in their development of creativity, that is “the ability to make or otherwise bring into existence something new, whether a new solution to a problem, a new method or device, or a new artistic object or form”. (Kerr, 2019)

1 Methodology

The object of our research were students of University of Economics in Bratislava, participants on courses Small and Medium Sized Entrepreneurship in English language and Entrepreneurship in Practice – Retail Academy Club.

The aim of our paper is to introduce our experience with the process of teaching focused on the development of soft skills in future business managers, where we use design thinking approach using different methods to support soft skills, including feedback from students to this way of teaching. Feedback of students was gained through observation during teaching process and via online questionnaires in December 2018 and May 2019 with 30 responses, i.e. 62,5 %.

On the base of these results and our experience, we have formulated current challenges in the field of education of future business managers. Our intention is to further improve the teaching process and to extend the design thinking approach into more courses, which may help to make teaching process more attractive for students and more satisfactory for teachers.

2 Results and Discussion

Formal education and training should equip everyone with skills which will be necessary in personal life, social inclusion, active citizenship and employment. These include literacy, numeracy, science and foreign languages, as well as transversal skills and key competences such as digital competences, entrepreneurship, critical thinking, problem solving or learning to learn, and financial literacy.

Competences are defined as a “combination of knowledge, skills and attitudes appropriate to the context”. (European Commission, 2019) Key competences are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment.

While some of these competences are included in educational systems, there is still a gap in education of key competences such as entrepreneurship and citizenship, or transversal skills.

The role of teachers is also changing. Now is not so necessary to mediate information, as information are easily accessible, more important is teacher´s role to be a navigator in a network of information resources, challenges and mental confusion for students, how they can fully fulfill their lives. “The modern teacher sets the mirror to the young man so that he himself knows the correct direction of the inner compass (the teacher reflects his talent, abilities, strength). When a modern teacher reveals the strength of a young person, then he must do everything he can to develop it. These are the two main tasks of current education.” (Filo, Nekolová, 2017)

2.1 Literature overview

Current challenges in the field of education of future business managers.

“By 2025 almost half of all job openings in the EU will require higher qualifications, usually awarded through academic and professional programmes at tertiary level. Skills developed through these programmes are generally considered to be drivers of productivity and innovation." (EUR-Lex, 2016)

Sense of initiative and entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance.

Essential knowledge, skills and attitudes related to this competence:

Necessary knowledge includes the ability to identify available opportunities for personal, professional and/or business activities, including 'bigger picture' issues that provide the context in which people live and work, such as a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organization. Individuals should also be aware of the ethical position of enterprises, and how they can be a force for good, for example through fair trade or through social enterprise.

Skills relate to proactive project management (involving, for example the ability to plan, organize, manage, lead and delegate, analyze, communicate, de-brief, evaluate and record), effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams. The ability to judge and identify one's strengths and weaknesses, and to assess and take risks as and when warranted, is essential.

An entrepreneurial attitude is characterized by initiative, pro-activity, independence and innovation in personal and social life, as much as at work. It also includes motivation and determination to meet objectives, whether personal goals, or aims held in common with others, including at work. (EUR-Lex, 2019)

The key competences are all considered equally important, because each of them can contribute to a successful life in a knowledge society. Many of the competences overlap and interlock: aspects essential to one domain will support competence in another. Competence in the fundamental basic skills of language, literacy, numeracy and in information and communication technologies (ICT) is an essential foundation for learning and learning to learn supports all learning activities. There are several themes that are applied throughout the Reference Framework: critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings play a role in all eight key competences.

Supporting teachers and trainers

Learners at all ages need excellent educators to develop the broad set of skills and attitudes they need both for life and future work. Variation in learners' achievements in education and training depends mainly on individual characteristics and family background. However, in educational institutions, it is teachers and trainers who have most impact on learners' performance. They can inspire and help learners to acquire higher and more relevant skills. They also play a key role in introducing new teaching and learning methods, in stimulating creativity and innovation, in overcoming biases and in bringing out the best in increasingly diverse classrooms.

The ageing of teachers is an alarming trend in many countries. As they retire, there is an increasing risk of loss of experience and staff shortages. Innovative recruitment, attractive working conditions, and retention policies are needed to create a new generation of teaching professionals. Developing the competences of teaching staff, including those who have been in the profession for a long time, is also an ongoing and increasingly urgent priority throughout the EU.

The Commission will support the sharing of best practices in this area among Member States and stakeholders through cooperation and mobility opportunities. Particular attention will be given to innovation in pedagogy; this will include supporting flexible curricula, promoting interdisciplinary and collaborative approaches within institutions, and supporting professional development to enhance innovative teaching practice, including ways of using and bringing digital tools into the classroom and stimulating entrepreneurial mindsets.

Technological progress and globalization offer tremendous opportunities for innovation, growth and jobs. These developments require skilled and adaptable people who can drive and support change.

In order to address skills gaps that may prevent promising industries from growing, the Blueprint for Sectoral Cooperation on Skills was launched as part of the New Skills Agenda. The Blueprint is a new framework for strategic cooperation in a given economic sector between key stakeholders such as:

- business,
- trade unions,
- research,
- education and training institutions,
- public authorities.

The Blueprint will stimulate investment and encourage a more strategic use of EU and national funding opportunities. The aim is to support an overall sectoral strategy and to develop concrete actions to address short- and medium-term skills needs.

The Blueprint builds on previous work by the European Commission and sectoral partners to address sector skills mismatches, the Sector Skills Councils and the European Sector Skills Alliances. Going forward, it could also support smart specialization strategies, which help regions focus on sectors where they have greatest potential for competitive advantage.

All relevant EU and national qualitative evidence and quantitative data produced under the Blueprint will contribute to the Skills Panorama and the new Europass Framework. (European Commission, 2019)

Funding the Blueprint

The funding for Blueprint comes from a number of funding streams, including from Erasmus+. Calls for tenders are also being published regularly under the COSME programme.

The first five Blueprint Alliances started to work in January 2018:

Automotive

Maritime technology

Space - geo information

Textile, clothing, leather and footwear

Tourism

Four additional Blueprint Alliances started working in January 2019:

Additive manufacturing

Construction

Maritime shipping

Steel industry

The next six sectors eligible for funding under Erasmus+ are:

Bioeconomy, new technologies and innovation in agriculture

Batteries for electro-mobility

Defence technologies

Energy value chain – digitalisation

Energy-intensive industries/industrial symbiosis

Microelectronic manufacturing & design (European Commission, 2019)

„All educational institutions must work toward producing creative, productive and ethical citizens who can and will contribute to society and industry through the generation and use of new knowledge. It is expected that education institutions develop and transfer knowledge and prepare graduates for the real world (the workplace)“. (Khan, 2015)

2.2 Results of research

Design thinking is understood here as a structured process consisting of stages of exploring, creating, prototyping and evaluating. The full use of design thinking means not only going through all four stages, but also participating in the process of innovating with people who have different perspectives and are able to immerse themselves and try to think like others. Other important aspects of DT are the quantitative production of ideas, unlimited thinking, elimination of barriers between scientific disciplines, the use of various tools and the generation of a wide range of ideas. (Kolasa-Nowak et. al., 2018, p. 6)

Effectively introducing interdisciplinary practice requires a motivating objective and related activities as well as appropriate materials that are both timely and significant. (Arau Ribeiro, M. C., 2015). The interdisciplinary approach is supported by European key competences for lifelong learning.

2.3 Discussion

„The cumulative work of a global design thinking research community demonstrates our ability to instrument and quantify design behavior. We can measure its impact on corporate team performance. We have started to understand the underlying principles. Though valuable insights have been gained and methods and tools further developed, we are just at the beginning“. (Plattner et al., 2016, p. 11)

Conclusion

Current challenges in the field of education of future business managers require to further improve the teaching process. For us it means to support teachers in their personal development and to extend the design thinking approach into more courses, which may help to make teaching process more attractive for students, more satisfactory for teachers and more effective for the society.

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International Insolvency Proceedings

Mária Veterníková[1] – Ildikó Némethová[2]

Abstract

The aim of this paper is to focus on the legal resolution of bankruptcy or impending bankruptcy faced by an insolvent entrepreneur through international insolvency proceedings. International insolvency proceedings involve cross-border components of insolvency. This may, for example, refer to a foreign entity or property located abroad. With regard to cross-border components and legal regulations applied in specific situations, it is necessary to examine whether the cross-border element is associated with an EU member state or a non-EU country.

Keywords

Entrepreneur, bankruptcy, impending bankruptcy, insolvency proceedings, cross-border component.

JEL Classification: K33

Introduction

Globalisation and the European Single Market have promised numerous business opportunities for entrepreneurs. Risk is an integral part of business; its negative effect is reflected in the achievement of results worse than expected or even bankruptcy. A business is considered insolvent if the value of its debts exceeds the value of its assets. Business bankruptcy can be resolved by legal means. The Slovak law recognises three types of resolutions when a debtor is in a state of insolvency: bankruptcy proceedings, restructuring, and debt relief. They are regulated by the Act No. 7/2005 Coll. on Bankruptcy and Restructuring and on Amendments and Supplements to Certain Acts, as amended (hereinafter referred to as Bankruptcy and Restructuring Act). This Act regulates three types of bankruptcy proceedings, i.e. insolvency proceedings, restructuring proceedings and debt relief proceedings.

International insolvency proceedings refer to cross-border issues. This involves, for example, a foreign creditor or property located abroad. If a cross-border component is related to an EU member state (except for Denmark), the Regulation (EU) 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings (revised edition) (hereinafter the Insolvency Regulation) will apply to international insolvency proceedings. The provisions of the Bankruptcy and Restructuring Act shall apply unless Insolvency Regulation provides otherwise. In case of non-EU Member States, the relevant provisions of the Bankruptcy and Restructuring Act (§ 173 to 175) and the Private International Law and Rules of International Procedure shall apply. In addition to this legislative structure, there is Resolution no. 52/1858 of 15 December 1997 of the UN General Assembly on the adoption of UNCITRAL Model Law on Cross-Border Insolvency (hereinafter referred to as UNCITRAL or Model Law). The UN General Assembly has recommended

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all states to revise and amend their legislation in accordance with the Model Law, which is, however, only of an advisory character. Poláček (2017) notes that the Model Law has been implemented into national law e.g. in Australia (2008), Canada (2005), Mexico (2000), Poland (2003), Romania (2002), South Africa (2000), the United Kingdom (2006), and the USA (2005). Slovakia does not belong to these countries.

1 Methodology

The aim of this paper is to explicitly outline legislation on international insolvency proceedings. At present, such proceedings occur quite frequently, since it has become a common practice for an insolvent debtor or a debtor threatened by financial distress to have domestic and foreign creditors, or the enterprise or the organizational unit of the enterprise has some of its assets abroad. Primary scientific methods, in particular the methods of analysis and synthesis, induction and deduction, have been used to achieve the stated objectives.

2 Results and Discussion

2.1 Insolvency Regulation

The Regulation applies to public collective proceedings, including interim proceedings, which are based on law related to insolvency and in which, for the purpose of liquation avoidance, adjustment of debt, restructuring or liquidation, (i) the debtor is wholly or partially deprived of the right to dispose of his property and an insolvency representative is appointed ii) the debtor's assets and affairs are subject to control or supervision by a court, or iii) the court grants the temporary suspension of the proceedings in which individual claims are made in order to negotiate between the debtor and its creditors, provided that the procedure in which the suspension has been granted ensures appropriate measures to protect creditors. The Regulation explicitly identifies these insolvency proceedings in respective national legal systems in its Annex A. The Regulation does not apply to proceedings involving insurance undertakings, credit institutions, investment firms or collective investment undertakings.

The court of an EU Member State within the territory of which the centre of a debtor's main interests is situated shall have jurisdiction to open insolvency proceedings. Such proceedings are regarded as primary insolvency proceedings. The centre of a debtor's main interests is where the debtor regularly conducts the administration of his interests and which is ascertainable by third parties. In the case of a legal entity, its registered office shall be deemed to be the place where its main interests are concentrated unless proven otherwise. This presumption applies only if the registered office has not been transferred to another EU Member State within the three-month period prior to the filing of the insolvency application. In the case of a self-employed entity, the centre of main interests shall be the place of business, unless proven otherwise. This presumption shall apply only if the main place of business is not transferred to another EU Member State within the three-month period prior to the filing of the insolvency application.

When the center of the debtor's main interests is located in the territory of an EU Member State, the courts of a Member State have the authority to initiate insolvency proceedings against that debtor only if he has a business in that other Member State. An enterprise means any place of business in which the debtor carries out or has performed, for a period of three months prior to the initiation of the primary insolvency proceedings, an activity different from a transitional economic activity using human resources and assets. The effects of such proceedings are limited to the assets of the debtor located in the territory of that EU Member State. If the primary insolvency proceedings have begun, any subsequent insolvency proceedings shall become secondary insolvency proceedings.

Except as otherwise provided in the Regulation (Art. 8-18), the applicable law shall be the law of the Member State in which the insolvency proceedings have been opened. Such a right defines all relevant effects of the insolvency proceedings on the persons concerned and the legal relationships and determines the conditions for the opening, content, conduct and termination of insolvency proceedings.

The decision to initiate insolvency proceedings by a court of a competent EU Member State is recognised in all other Member States from the moment that it becomes effective in the State where the proceedings have been initiated. Recognition of the primary insolvency proceedings does not preclude the initiation of proceedings against the debtor, insofar as the enterprise is located in the territory of another Member State, by a court in that other Member State. The procedure initiated later becomes a secondary insolvency proceeding.

The administrator appointed by the competent court in the primary insolvency proceedings may exercise all the powers conferred on him by the law of the State which initiated the proceedings in another Member State, unless any other insolvency proceedings have been initiated in that other Member State, or unless on the basis of an application for insolvency proceedings any safeguard measures have been granted to prevent such proceedings. Under the rights in rem of third parties and rights subject to ownership, the administrator may, in particular, transfer the debtor's assets from the territory of the Member State in which they are situated.

An administrator appointed by the competent court in secondary insolvency proceedings may in any other Member State, by judicial or extrajudicial procedure, request that, following the opening of insolvency proceedings, movable property be transferred from the territory of the Member State of the proceedings to the territory of that other Member State. The administrator may also, in the interest of the creditors, bring actions for the annulment of a legal act.

In exercising his powers, the administrator must act in accordance with the law of the EU Member State in the territory of which he intends to act, in particular with regard to the procedures of assets' monetisation. Such powers shall not include coercive measures unless they have been ordered by the court of the Member State, or the right to adjudicate in legal proceedings or disputes.

Every foreign creditor has the right to claim his outstanding debts in insolvency proceedings. The court of competent jurisdiction or the administrator appointed by that court immediately after the insolvency proceedings have started in the Member State informs the foreign creditors of the opening of insolvency proceedings and, inter alia, which authority accepts creditors' claims.

Any Member State may refuse to recognise insolvency proceedings initiated in another Member State or to enforce an adjudgment rendered in connection with such proceedings if the effects of such recognition or enforcement are manifestly contrary to that State's public policy, in particular its fundamental principles or individual rights and freedoms. This is the only reason for refusing to recognise insolvency proceedings initiated in another Member State or for executing decisions taken in connection with such proceedings.

When insolvency proceedings concern two or more members of a group of companies, whereby, the group of companies is meant to be the parent undertaking and all of its subsidiaries, the appointed administrator in the proceedings concerning the member of that group shall cooperate with each appointed administrator in the proceedings related to other members of the same group, provided that such cooperation contributes to a more effective conduct of the proceedings, and is compatible with the rules applicable to such proceedings, and does not constitute a conflict of interest.

When two or more members of a group of companies are involved in insolvency proceedings, the court initiating such proceedings shall cooperate with any other court to which such proceedings have been submitted in relation to another member of that group or any court which has initiated such proceedings, provided that such cooperation contributes to a more effective conduct of the proceedings, and is compatible with the rules applicable to such proceedings and does not constitute a conflict of interest. To this end, the courts may, if necessary, appoint an independent person or body to act in accordance with their instructions, as far as it is compatible with the rules applicable to them.

In the interest of better knowledgeability and transparency, the Regulation imposes an obligation on EU Member States to maintain insolvency registers in which information on insolvency proceedings can be sought. Insolvency registers will become part of a system ensuring their interconnectedness within the European Union. The process of linking these registers is currently underway and work is also underway to make the search possible from one central location (from the European e-Justice Portal). It is already possible to search the system in the databases of the Czech Republic, Germany, Estonia, Italy, Latvia, the Netherlands, Austria, Romania, and Slovenia.

2.2 Bankruptcy of a Financial Institution with a Registered Office or Branches in the Territory of EU Member States

As already stated, the Regulation does not apply to insolvency proceedings involving financial institutions. For this reason, the Bankruptcy and Restructuring Act contains a special legal regulation in § 181 and et seq, which applies to this specific group of entrepreneurs. Pursuant to this legislation, all European financial institutions are excluded from the jurisdiction of Slovak courts, which refers to legal entities having a subject of business similar to Slovak financial institutions, if they are situated in one of the States of the European Economic Area or in another EU member state. This means that if, for example, a foreign bank with a registered office in Germany operates in the Slovak Republic, the Slovak court has no jurisdiction to initiate bankruptcy proceedings. Only German bankruptcy courts have this power (Pospíšil, 2012). A Slovak institution refers to a bank, an e-money institution, an insurance company or a reinsurance company with its registered office in the Slovak Republic.

The limitation of the jurisdiction of Slovak courts derives from the Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding-up of credit institutions, which regulates the so-called universality of the insolvency proceedings for the entire territory of the European Union and the States of the European Economic Area Agreement with regards to those institutions and the Directive 2001/2017/EC of the European Parliament and of the Council on the reorganisation and winding-up of insurance undertakings which governs the so-called universality of bankruptcy proceedings for the entire territory of the European Union and the States of the European Economic Area Agreement in terms of these institutions. The purpose of that legislation is to have a single supervision under the jurisdiction of the State in the territory of which the financial institution has its registered office.

2.3 UNCITRAL Model Law

According to the Model Law, national legislation should include provisions allowing for foreign primary and secondary bankruptcy proceedings. The Model Act describes a foreign primary proceeding as a foreign activity that takes place in the country where the debtor has its core interests. Foreign secondary proceedings are proceedings conducted in addition to foreign primary proceedings in the state where the debtor runs an operation. Operations are considered to be any place of operations where the debtor carries out a non-transitional economic activity through human resources, goods or services. A foreign administrator (agent) is an entity or body appointed temporarily, who is authorised to manage the reorganisation or liquidation of the debtor's assets or affairs in a foreign business or act as a representative of a foreign proceeding.

A foreign administrator may ask the court to recognise foreign proceedings in which he has been appointed as administrator. A domestic court is to recognise foreign proceedings and a foreign administrator as soon as possible if the application complies with the requirements. Foreign insolvency proceedings are to be recognised as primary proceedings if they take place in the State where the debtor has its core interests or as a foreign secondary proceeding if it occurs in a State where the debtor runs an operation. A domestic court does not have to recognise foreign proceedings if this contradicts public policy. After acknowledging foreign proceedings, the foreign administrator is obliged to inform the court of any substantial change in the state of the foreign proceedings, of any change of the administrator, of other foreign proceedings, known by the administrator and concerning the same debtor. Upon applying for recognition, a foreign administrator may apply for an interim measure if necessary, to protect the debtor's assets or the creditors' interests. A foreign administrator may also request the suspension of enforcing a decision involving a debtor's assets and designate a cross-border administrator or another person as asset manager to protect it.

Courts and administrators should cooperate in insolvency proceedings, either directly or through designated persons or bodies. States may, in their national arrangements, regulate co-operation in particular on the appointment of a person or body to act under the direction of the court in matters of notification, coordination of administration and control of the debtor's assets, co-ordination of parallel proceedings, and the like.

After the recognition of foreign primary proceedings, national proceedings can be initiated only if the debtor has assets in that State. The effects of this procedure are limited to these assets. If the insolvency proceedings are conducted parallelly in several states, the court is obliged to apply for cooperation. Unless proven to the contrary, the recognition of a foreign primary proceeding for the purposes of initiating the national proceedings is a proof that the debtor is in bankruptcy. The national legislation should grant a foreign administrator objective legitimacy to file for bankruptcy if the conditions for its filing are met.

Foreign creditors should have the same rights as domestic creditors. If a declaration of insolvency proceedings has to be delivered to creditors under national law, it should also be delivered to foreign creditors (Ďurica, 2010).

2.4 Cross-border insolvency proceedings in the Bankruptcy and Restructuring Act in relation to non-EU Member States

If the debtor is located outside the territory of the Slovak Republic and outside the territory of EU member states, the jurisdiction of the Slovak courts in bankruptcy and restructuring proceedings is given if the debtor has assets in the territory of the Slovak Republic.

Recognition of foreign decisions in insolvency proceedings is governed by the principle of reciprocity. The principle of reciprocity applies only if the Slovak Republic is not bound by an international treaty governing the satisfaction of the debtor's creditors in proceedings regulated by the Bankruptcy and Restructuring Act.

A proposal for the recognition of a foreign decision may be submitted by a foreign administrator. The Bankruptcy and Restructuring Act does not stipulate any requirements of the proposal and therefore it is necessary to proceed according to the Act on Private International Law and Rules of Procedure (Ďurica, 2010). A foreign administrator must demonstrate the commencement of foreign bankruptcy proceedings, including his appointment as administrator, and the legal interest in recognising a foreign decision. The court will recognise foreign decisions on a reciprocal basis, i.e. if such a decision by a Slovak court is also recognised by a foreign state. The court may not recognise a foreign decision if other foreign bankruptcy proceedings or restructuring proceedings are in progress by a Slovak court with regard to the same debtor in the Slovak Republic. The Slovak court cancels the recognition of foreign proceedings if it finds that the conditions for its recognition are not met. Recognition of foreign insolvency proceedings is also repealed by the opening of a bankruptcy or restructuring proceeding by a Slovak court. A court may only start a bankruptcy or restructuring procedure if the debtor has assets in the territory of the Slovak Republic.

Conclusion

In cross-border insolvency proceedings, the situation is complicated by the fact that legislation differs from country to country. If insolvency proceedings affect the territory of several States, it is important to define which state's law could be applied to relevant insolvency proceedings. Two principles apply when choosing the law to be followed by a Slovak or foreign court. The first principle applies to insolvency proceedings involving EU Member States, where cross-border bankruptcy proceedings in relation to EU Member States (except for Denmark) apply the provisions of the Bankruptcy and Restructuring Act unless the Insolvency Regulation provides otherwise. If the Slovak Republic is not bound by an international treaty providing for the satisfaction of creditors of a bankrupt debtor and the debtor is a member of a non-EU Member State, the second principle is followed according to which the principle of reciprocity will be applied on the recognition of foreign decisions on proceedings stipulated by the Bankruptcy and Restructuring Act.

On the basis of the practice of Slovak courts, at present, it can be stated that insolvency proceedings involve a European foreign component. Most often, it concerns creditors with their registered office, place of business or residence in the territory of EU Member States who have claims against a domestic insolvent entrepreneur.

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Generational Differences in Healthy Lifestyle in Slovakia[1]

Dana Vokounová[2]

Abstract

It seems that living a healthy lifestyle is the new rising trend of the 21st century where consumers are taking a more responsible role in the selection of their lifestyle behaviour. The concept of healthy lifestyle is a state of complete physical, mental and social wellbeing. The aim of this paper is to compare healthy lifestyles of Generations X, Y and Z in Slovakia using survey data.
Based on respondents' answers, we can characterize Generation X as they are starting to have health problems. Although from all generations they declared the least importance of a healthy lifestyle, they show the greatest effort to live healthy, but only partially interested in what they consume. Generation Y mostly trying to live healthy and only partially interested in what they consume. In many areas they represent a transition between X and Z generation. Generation Z live healthy and is somewhere between the X and Y generation, but they make up the largest share of great interest in what they consume. They often have a problem with falling asleep, which can be caused by the fact that most of them face very often stressful situations.

Key words

Generation, Healthy lifestyle, Food, Exercise, Stress

JEL Classification: I12

Introduction

We live in the 21st century when healthy lifestyle is getting more popular. One of the reasons is that there have been some significant changes in people´s lives. On the one hand, we are becoming more comfortable because we have helpers that can make our physical and mental work easier. On the other hand high demands are placed on us that contribute to stress or frustration. We lose track of what foods are healthy because we don't know how the plants were grown, the animals bred and the final products made. The aim of this paper is to compare healthy lifestyles of generation X, Y and Z.

1 Methodology

In order to compare lifestyles of generations X, Y and Z in Slovakia a quantitative research was conducted. Literature review showed that the birth years of these generations are not clearly defined. Generation X is included in the interval 1960-1980, Generation Y 1977-2000 and Generation Z from 1995 (Bejtkovský, 2016; Bresman & Rao, 2017; Williams & Page, 2011). For our study we used the following intervals to include the respondent in the respective generation: Generation X (1964 – 1979), Generation Y (1980 – 1995) and Generation Z (1996 – 2010). The survey was carried out using CAWI and questionnaire was available on Google website since November 2018 to January 2019. We obtained 167 answers, while the structure of the sample was: 24% generation X, 55% generation Y and 21% generation Z.

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[1] VEGA 1/0657/19 The role of influencers in the consumer decsion-making process

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2 Results and Discussion

2.1 Literature Review

Lifestyle describes behavioural strategies and routines assumed in order to individual or group to score as convenient in a social context. Following a healthy lifestyle will have numerous health benefits, being proven that it reduces the risk of cardiovascular disease, decreases incidence of obesity and diabetes (Dima-Cozma et al., 2014). Today´s health concept represents a health care approach that protects, maintains and improves the health of the individual, family and society and takes the individual to the center (Güler, 2019). Healthy life style aims not only to prevent a disease or illness but also to bring a person´s general health to a better level (Bozlar & Arslanoğlu, 2016). The health of individuals is linked to the health-related behaviours they choose to adopt. Healthy lifestyle behaviours consist of balanced diet, doing enough physical activities, not smoking, health responsibility, stress management and hygienic measures (Tanir, 2019). The World Health Organization points out that 60% of an individual´s health-related quality of life depends on his/her lifestyle (WHO, 2001). A good health-promoting behaviour depends on the living habits adopted during early years (Abdelaziz & El-Shafei, 2012). Even lifestyle factors can be potent in determining both physical and mental health, some professionals have underestimated their importance. Walsh (2011) suggests application of therapeutic lifestyle changes (TLC) because of their benefits to individuals, such as improvements in health, self-esteem and quality of life. Some of these TLCs are:

- **Exercise** offers physical and both preventive and therapeutic psychological benefits. Exercise reduces the risk of multiple disorders and is therapeutic for diabetes, cardiovascular diseases, etc.
- **Nutrition and diet** is important for both physical and mental health. There are two major dietary components which must be considered: food selection and supplements which offer valuable prophylactic and therapeutic benefits.
- **Nature** can promote improved cognitive functioning and overall well-being. In the last decades a further artificial dimensions has been added and we increasingly spend our lives in artificial environments composed of artificial noise and lightning or nonnatural spectra and rhythms.
- **Relationships** are central to both physical and mental well being. Social isolation is increasing in many cultures as people today are spending less time with family and friends. The need for good relationships may be greater than ever because they are associated with enhanced happiness and quality of life.
- **Recreation and enjoyable activities** can overlap other TLCs such as exercise, time in nature or social interaction but can involve play, art or humour. Recreation can combine physical activity with relaxation.
- **Relaxation and stress management** include somatic, psychological and contemplative approaches. People now face novel stressors and many of them respond in an inadequate way. Relaxation helps cultivate positive emotions and can contribute to the overall well-being.

People from different generations exhibit different consumer behaviour including health related area. According to Steptoe and Wardle (2001) unhealthy lifestyle behaviours are usually established during youth or young adulthood. Teenage phase is usually coupled with a combination of stressors and is critical for the development of lifelong healthy attitudes and practices, as well as for avoiding the biological precursors of chronic disease in later life (Al-Nakeeb et al., 2015).

2.2 Survey results

In the first question, we asked the respondents what they mean by a healthy lifestyle. Table 1 shows that respondents most often said that it was healthy eating and active movement. However, respondents also reported other responses such as positive thinking, stress avoidance, being happy, being eco-friendly and work-life balance. Their understanding of a healthy lifestyle is in line with the views of the authors mentioned above.

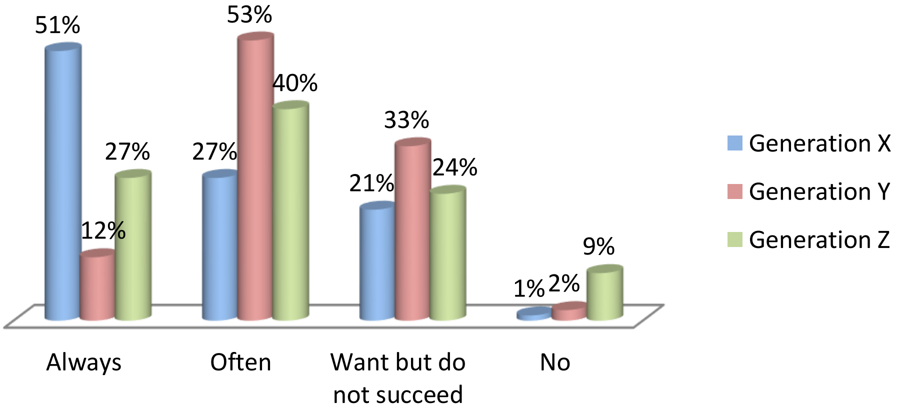
Tab. 1 The idea of a healthy lifestyle

	Generation X (%)	Generation Y (%)	Generation Z (%)
Healthy food	41	43	39
Physical activity	37	40	33
Good quality sleep	4	6	9
Not smoking,not drinking alcohol	7	3	3
Other	11	8	16

Source: Research data

Everyone understands the importance of a healthy lifestyle, with almost three quarters of them leaning towards the answer certainly yes (X generation 69%, Y generation 76% and generation 79%) and the rest of the respondents said yes. Though everyone is aware of the importance of a healthy lifestyle, not everyone applies it. More than half of generation X is trying to live healthy permanently (51%) and of generation Y most of the time (53%). 27% of generation Z is trying to live healthy permanently and 40% most of the time. A part of the respondents from all generations, despite trying to maintain a healthy lifestyle, they do not succeed (Graph 1).

Graph 1 Trying to live healthy

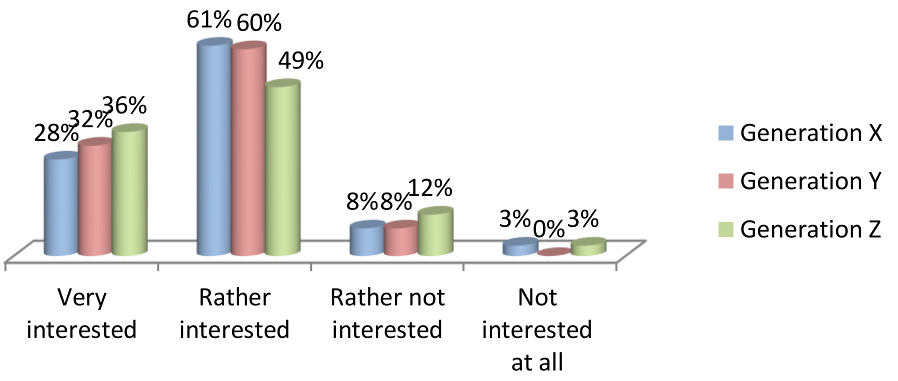


Source: Research data

Nutrition and diet

We asked respondents whether they were interested in what they were eating (for example, in terms of composition, nutritional value, origin). The absolute majority (regardless of age) is interested in what they consume (89% of from generation X, 92% of generation Y and 95% of generation Z), while this interest is not very strong (Graph 2).

Graph 2 Interest in consumed meals



Source: Research data

Tab. 2 Proper eating

	Always/almost always (%)	Most of the time (%)	Not so often (%)	Not at all (%)
To what extent do you keep that				
… your meal is healthy				
Generation X	14	53	25	8
Generation Y	14	65	20	1
Generation Z	18	52	24	6
… you eat regularly				
Generation X	13	64	15	8
Generation Y	26	52	15	7
Generation Z	24	43	18	15
… you drink enough fluids				
Generation X	44	41	15	0
Generation Y	59	31	10	0
Generation Z	64	21	9	6
… you eat enough fruit				
Generation X	26	49	23	2
Generation Y	31	46	21	2
Generation Z	46	33	12	9
… you eat enough fresh vegetables				
Generation X	28	46	23	3
Generation Y	43	40	16	1
Generation Z	46	30	18	6

Source: Research data

According to American Heart Association the number of meals we eat a day may not be so important. How we eat those meals is what matters most when it comes to decreasing the risk of heart disease and other health problems.

All respondents eat approximately 4 times a day (Generation X 3.9 times a day on average, generation Y 4.0 and generation Z 3.9 meals a day). In Table 2 it can be seen that there are no significant differences between generations in terms of healthy eating. Most of them are almost always trying to maintain their drinking regime, and less often make sure their diet is balanced, eat regularly and eat enough fruit. Especially the Y and Z generations eat a sufficient amount of fresh vegetables. The Z generation has the greatest share of the "always" response in all areas except regular eating, which suggests that this generation has the best eating habits among all three generations.

The following Table 3 contains findings on how individuals of each generation are trying to reduce consumption of unhealthy food.

Tab. 3 Reducing the less beneficial parts of the diet

	Always/almost always (%)	Most of the time (%)	Not so often (%)	Not at all (%)
To what extent do you keep that				
… you reduce the consumption of salt				
Generation X	23	39	28	10
Generation Y	15	32	38	15
Generation Z	15	31	30	24
… you reduce the consumption of fat				
Generation X	10	51	31	8
Generation Y	9	51	31	9
Generation Z	18	40	27	15
… you reduce the consumption of sugar				
Generation X	20	44	31	5
Generation Y	18	53	21	8
Generation Z	19	37	32	12
… you replace ordinary sweets with a healthier alternative				
Generation X	13	51	26	10
Generation Y	17	44	33	6
Generation Z	16	26	40	18
… avoid sweetened beverages				
Generation X	62	28	10	0
Generation Y	54	24	17	5
Generation Z	43	36	12	9

Source: Research data

Among the nutritional components (Table 3), all respondents try to avoid, in particular, sweetened beverages, with more than half of the X and Y generations always trying to do so. Generation X seeks to reduce salt intake and avoid sweet drinks more compared to other generations. On the other hand generation Y focuses more on reducing sugar in the diet and the generation Z has the largest proportion of those who always try to reduce fats and the smallest proportion of those who replace normal sweets with a healthier alternative. The Z generation has the largest proportion of all 3 generations in the "not at all" response, suggesting that they are less inclined to restrict inappropriate diet than the other two generations.

Cigarettes

The respondents are rather non-smokers (Table 4). The strongest smokers are from generation X and weak generation Y and Z.

Tab. 4 Number of cigaretts per day

	Generation X (%)	Generation Y (%)	Generation Z (%)
0	79	77	76
1-10	3	17	18
11-20	15	6	0
21 and more	3	0	6

Source: Research data

Exercise

All respondents are most devoted to walking and exercising at home, while walking and hiking dominate in generation X and exercise at home in the generation Z. It is characteristic of Generation X, that it does not go to the gym, does not run, skates and does not pursue collective sports. With less frequency they go swimming and cycling. Typical for the generation Y is that it goes to the gym, runs and skates more than Generation X but less than Generation Z. All generations do biking equally often. Generation Z runs more frequently, goes to the gym, swim, skates and plays collective sports compared to other two generations.

Stress management

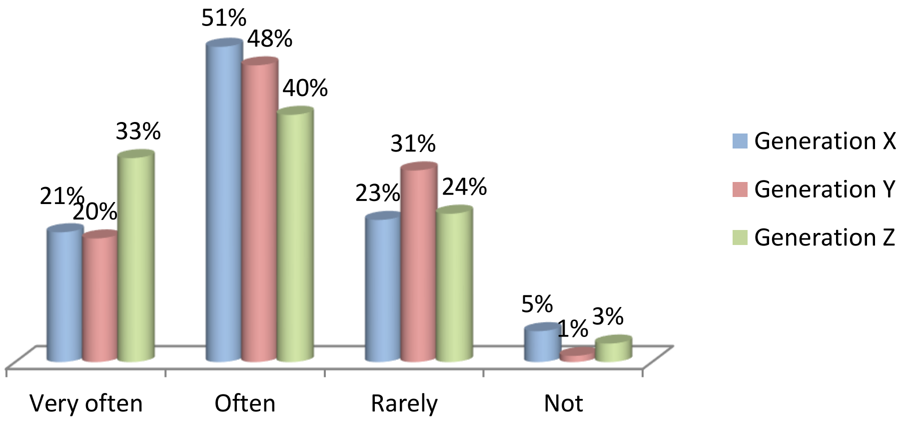
Sleep is very important for both physical and mental regeneration. American National Sleep Foundation recommends for younger adults (18-25), for adults (26-64) sleep range 7-9 hours and for older adults (65+) 7-8 hours. Survey results showed that during the week generation X sleep on average 7,02 hours, generation Y 7,13, generation Z 6,58 hours and during the weekend it is 8,28 hours for generation X, 9,19 for generation Y and 8,45 for generation Z. We can see that generation Z is sleeping during the week less and generation Y during the weekend a little bit more than is recommended.

Most respondents have no sleep problems (59% generation X, 56% generation Y and 52% generation Z). Surprisingly, generation Z (18%) has more frequent sleep problems compared to generation X (8%) or Y (5%). Occasional problems tend to have mostly Y-responders (39%), X-generation (33%) and Z-generation (30%).

The most frequently cited causes of sleeping problems are stress and nerves, too many thoughts and health problems, especially for generation X (27% generation X, 2% generation Y and 6% generation Z).

In particular, the Z generation is very often exposed to stress situations compared to the others (Graph 3). The two other generations are often exposed to stress situations.

Graph 3 Frequency of stress situations



Source: Research data

The last questions were about satisfaction with current lifestyle and possible changes. Generation Y (69%) is the most satisfied with its lifestyle, followed by Z generation (55%) and the least generation X (49%). What the respondents would like to change is in particular the way of eating and doing more sports (Table 5). Almost a fifth of generation Z wouldn't want to change anything.

Tab. 5 What they would change in their lifestyles

	Generation X (%)	Generation Y (%)	Generation Z (%)
Do more sports	42	37	29
Improve eating habits	29	41	38
Reduce stress	4	4	11
Other	12	5	4
Nothing	13	13	18

Source: Research data

Conclusion

All 3 generations understand the term healthy lifestyle only partially because most of them associate it with diet and physical activity only. They realize its importance for their happy life. Everyone would like to live healthy, but they do not succeed all the time. Based on respondents' answers, generations can be characterized as follows:

Generation X - born 1964-1979. Although from all generations they declared the least importance of a healthy lifestyle, they show the greatest effort to live healthy, but only partially interested in what they consume. This is also reflected in the fact that they are trying the least of all generations to eat regularly, make their diet healthy, drink enough fluids and consume enough fresh fruit and vegetables. On the other hand, they try to reduce salt intake and avoid sweetened beverages. If they smoke, it's rather 11 to 20 cigarettes a day. Most often they go hiking, and cycling is more intense than in other generations. They go to the gym, skate, run, do sports, swim and practice at home the least of all generations. They are not stressed very often, but rather often. They are starting to have health problems. They are least satisfied with their lifestyle and they would like to do sport activities more often.

Generation Y - born 1980-1995, mostly trying to live healthy and only partially interested in what they consume. In many areas they represent a transition between X and Z generation, they are trying hard to eat regularly, trying to limit sugar a little more than others, and focus more on fresh vegetables than fruits. If they smoke, it's a maximum of 10 cigarettes a day. They have occasional sleep problems. They are most satisfied with their lifestyle and if they want to change something, it is to improve eating habits and physical activity.

Generation Z - born 1996 - 2010, to live healthy, is somewhere between the X and Y generation, but they make up the largest share of great interest in what they consume. Most intensively, they try to make their diet healthy, drink enough fluids and consume enough fresh fruit and vegetables. On the other hand, they are least trying to limit the intake of salt, fat, sugar, to drink a sweetened beverage and to replace normal sweets with a healthy alternative. If they smoke, it's a maximum of 10 cigarettes a day. Most of them go to the gym, run, skate, swim, play collective sports and exercise at home. They often have a problem with falling asleep, which can be caused by the fact that most of them face very often stressful situations. As part of their current lifestyle, they would change their eating habits. Most of them (among all the other generations) wouldn´t want to change anything.

The findings of this survey can be used in nutrition, leisure time activities, education, relaxation or psychology.

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Legal Regulation of Cross-Selling of Financial and Non-Financial Products

Martin Winkler[1]

Abstract

Cross-selling is together with up-selling one of basic methods how an entrepreneur can increase his revenues or how he can help to increase revenues of his business partner (in case he is combining sale of his own products with sale of complementary products provided by a different entrepreneur). In comparison to up-selling which does not have a specific legal regulation except of compliance with general requirements of client´s consent thereto (and, of course, in case the client benefits from his legal position as consumer, also with consumer protection regulation), cross-selling is particularly and specifically regulated – by EU law on one side as well as domestic laws on the other. In this paper we take a closer look at both these levels of regulations and at the same time we pay a special attention to cross-selling of financial and non-financial products.

Key words

cross-selling, up-selling, product tying, product bundling, cartel agreement, abuse of a dominant position, Unfair Commercial Practices Directive, Insurance Distribution Directive, Mortgage Credit Directive

JEL Classification: K12, K21

Introduction

The aim of this paper is to analyze the legal regulation of one of the sales techniques commonly used in the sale and distribution of goods and services, namely cross-selling. Since legal analyses mostly focus on legal institutes and not sales techniques, we have decided to conduct this analysis from several points of view. First, we used an interdisciplinary economic-legal perspective to define the basic terms and concepts whose exact legislative definition is absent and thus determine the subject of the scientific examination. Subsequently, we used a vertical view in terms of a progress from transnational (EU-law) to national regulation. Furthermore, we applied a horizontal approach and looked at the issue from the point of view of different branches of law, ranging from general civil law through consumer protection law up to the public-law branch of economic law with antimonopoly regulation. Finally, we have again applied an interdisciplinary economic-legal approach in terms of type of product and/or service and forms of their distribution in connection with their legal reflection in the applicable law. As a result of our efforts, we present this paper having the ambition to describe and analyze most of the legal obstacles that an entrepreneur may encounter in connection with using cross-selling techniques. We also prepared some de lege ferenda proposals.

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1 Methodology

General scientific methods, especially analysis and synthesis, method of induction and deduction, method of abstraction, method of comparison and method of generalization were used in this paper. The author emphasized the use of analytical and synthetic methods.)

2 Results and Discussion

2.1 Respective terms and definitions

At the very beginning of this paper we would like to pay attention to terminological and conceptual issues.

Up-selling also known as additional sale, is a sales technique, which increases value of the product or service being sold. It consists in offering a product or service of the same nature, but with higher quality or greater functionality. It should be emphasized that products and services sold as part of up-selling are substitute goods, which means that they substitute each other and meet the same needs (Kwiatkowska, 2018). It is clear from the definition, that additional product is provided by the same provider to the same client. The advantage of up-selling for the provider is apparent: it involves the increase of order volume either by the sales of more units of the same purchased item, or the upgrading into a more expensive version of the purchased item (Kamakura, 2008). One of the benefits of up-selling for the customer is presented in his dissertation by W. Heidig (2012), according to which customers find it difficult to anticipate which product or service features might become important in the specific moment of consumption. Thus, offering them additional and advanced products or services can help to solve this problem (Heidig, 2012). Another advantage for the client is time and cost savings.

Cross-selling can generally be defined as practice of selling an additional product or service to an existing customer (Li, Sun, Montgomery, 2011). It is therefore the offering of complementary or unrelated additional products or services (Heidig, 2012) (so called add-ons – Bertini, Ofek, Ariely, 2009 and Gabaix, Laibson, 2006) by a single seller (who can also be the provider or who sells products of one or several providers) to a single client, either at the same time and in the same place or with some time delay. In general, cross-selling is believed to bring benefits to both the seller and/or provider (e.g. increased revenue at fixed cost, higher customer loyalty – Paradecki, 2008), as well as to the customer (e. g. price advantage, time saving, getting a complex product or service of a better quality – Schmitz, Lee, Lilien, 2014).

One of the forms of cross-selling is the product bundling or just **bundling**. This term is legally defined (although not generally) by the Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No. 1093/2010 (so-called Mortgage Credit Directive; hereinafter referred to as „MCD“), according to which (in relation to credit agreements) „bundling practice“ means the offering or the selling of a credit agreement in a package with other distinct financial products or services where the credit agreement is also made available to the consumer separately but not necessarily on the same terms or conditions as when offered bundled with the ancillary services [Article 4 (27) MCD].

As there is no general legal definition of product bundling, when generalizing the definition given in the MCD, we conclude that the bundling involves a simultaneous sale of two or more products, which are also available separately. It is obvious thereof, that – although these may be products of several providers (e.g. banks and management companies, travel agencies and insurance companies, car dealers and leasing companies) – they are offered in a package provided by one seller who may or may not be their provider. E.g. a financial agent may be a seller of a term deposit whose provider is a bank and at the same time of an insurance product whose provider is an insurance company.

Finally, **product tying** is legally defined in relation to credit agreements as the offering or the selling of a credit agreement in a package with other distinct financial products or services where the credit agreement is not made available to the consumer separately [Article 4 (26) MCD]. Generalizing this definition, we conclude that it is a simultaneous offering of products that are not sold separately. Even in this case, it follows from the nature of the concept that the tied products must be sold by one seller. Product tying is considered as another form of cross-selling in the broader sense.

Further in this paper we will deal with the legal regulation of cross-selling in its most common forms, i.e. product bundling and product tying, with particular reference to financial products and their combination with non-financial products.There are built-in styles for a paper title, author, abstract, key words, introduction, section heading, sub-section heading, paper text, tables, graphs, figures, bullets, conclusion and list of references in this template.

2.2 General regulation of cross-selling

Both Slovak and European Union law generally allow cross-selling, i.e. simultaneous offer of several products addressed to the same client at the same time. Of course, both legal orders generally set out certain conditions that a provider (seller) has to comply with and which are defined positively on one side (e. g. information requirements[2] or price indication requirements[3]) and negatively on the other (e. g. misleading actions and misleading omissions[4] or describing product as free, while the consumer has to pay for another product to get the first[5]).

However, product tying to consumers is in principle prohibited by Slovak law [§ 4 (3) ACP]. According to that provision, the provider (seller) must not make the sale of a product or the provision of a service conditional on the sale of another product or the provision of another service to consumer. However, product tying is not considered to be the case if:

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[2]§ 10a et seq. of the Act No. 250/2007 Coll. on consumer protection as amended (hereinafter referred to as „ACP“), § 3 of the Act No. 102/2014 Coll. on consumer protection in relation to distance and off-premises sales and services contracts as amended, Article 5 and 6 of Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (so-called Consumer Rights Directive).

[3]§ 14a ACP, Article 3 of Directive 98/6/EC of the European Parliament and of the Council of 16 February 1998 on consumer protection in the indication of the prices of products offered to consumers (so-called Price Indication Directive).

[4] § 8 ACP, Articles 6 and 7 Directive of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (so-called Unfair Commercial Practices Directive; hereinafter referred to as „UCPD“).

[5] Point 20. of the Annex 1 ACP, point 20. of the Annex 1 UCPD.

a) the seller sells these products or provides these services also separately (i.e. so-called product bundling) or

b) the tying of the sale is caused by the technical impossibility of the separate sale of the products or provision of the services (e. g. several types of life insurance);

these facts – however – must be proven by the seller upon request of the supervisory authority [§ 4 (4) ACP].

This is specific Slovak legislation that does not have its basis in European Union law. On the contrary, Court of Justice of the European Union has concluded in a number of cases that national legislation which – apart from certain exceptions and without taking into account the particular circumstances of the case – prohibits any tied offer to the consumer, is not in accordance with the UCPD[6] . It is therefore justified to consider whether the provisions of § 4 (3) and (4) ACP are compliant with European Union law. Fortunately, there is a number of exceptions to the general rules on product tying in relation to financial services, which will be highlighted below.

However, product tying limits are generally determined by European and Slovak competition law, in particular by the regulation of agreements restricting competition and abuse of dominant position.

According to § 4 (1) of Slovak Act No. 136/2001 Coll. on the Protection of Competition as amended (hereinafter referred to as the "APC") an **agreement restricting competition (cartel agreement)** is an agreement between undertakings, concerted practice of entrepreneurs or decision by associations of undertakings, which have as their object or effect the restriction of competition. Agreements restricting competition are prohibited unless otherwise provided by APC. One of the types of agreements restricting competition is an agreement which makes the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts [Article 4 (4) (e) APC]. This Slovak legislation follows the EU regulation in Article 101 (1) (e) of the Treaty on the Functioning of the European Union (hereinafter referred to as "TFEU"), which has almost identical content.

In this case, the competition restrictive agreement can be not only the tying contract itself but also the agreement between entrepreneurs as well as their concerted practice or their association's decision to require such tying contracts from their clients. They will thus have to order additional products and/or services, which, by their nature or according to commercial usage, are not related to the subject of the main contract. These tying and tied products and/or services must be completely independent of each other, and the tied product is bought by the purchaser solely on the grounds that he cannot otherwise obtain the principal performance. This tied performance may not be the same for all participants in the agreement, it is important that the participants have agreed on a particular product tying[7].

Agreements restricting competition (cartel agreements) involving product tying usually take the form of a so-called vertical restraints. Article 101 TFEU itself does not make a clear distinction between horizontal and vertical restraints. Nor does it define these terms. The term **"vertical cartel agreement"**, respectively "vertical agreement" should therefore be borrowed from the Commission Regulation (EU) No 330/2010 on the application of Article 101(3) of the Treaty on the

[6] E.g. Case C-522/06 (11 March 2010) Telekomunikacja Polska SA w Warszawie c/a Prezes Urzędu Komunikacji Elektronicznej, Cases C-261/07 and C-299/07 (23 April 2009) VTB-VAB NV c/a Total Belgium NV and Galatea BVBA c/a Sanoma Magazines Belgium NV.

[7] Commentary on Sections 4 to 6 of the APC published on the website of the Antimonopoly Office of the Slovak Republic (https://www.antimon.gov.sk/-4-6-dohoda-obmedzujuca-sutaz).

Functioning of the European Union to categories of vertical agreements and concerted practices[8], according to which it means an agreement or concerted practice entered into between two or more undertakings each of which operates, for the purposes of the agreement or the concerted practice, at a different level of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services [Article 1 (1) (a)]. The individual forms of vertical agreements are in detail described in the Guidelines on Vertical Restraints issued by Commission in 2010[9] (hereinafter referred to as „Guidelines“). According to Guidelines, a vertical restraint consisting of product tying may take the form called single branding when the buyer is obliged or induced to concentrate its orders for a particular type of product with one supplier (paragraph 214 in connection with paragraph 129 et seq. of the Guidelines). More detailed criteria for assessing product tying as a form of vertical restraints are described in paragraphs 214 to 222 of the Guidelines.

There is also possibility for an agreement restricting competition (cartel agreement) consisting of product tying to take the form of a horizontal co-operation agreement, also called **horizontal cartel agreement**. However, the Communication of the Commission – Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements[10] does not pay specific attention to tying contracts in the framework of horizontal cartels regulation.

Product tying can also be considered as an **abuse of a dominant position** within the market. The dominant position in the relevant market is held by the entrepreneur or by several entrepreneurs who are not exposed to substantial competition and who – because of their economic strength – can act independently [Article 8 (1) APC]. One of the forms of abuse of a dominant position within the relevant market defines Article 8 (2) (d) APC following Article 102 (e) TFEU as making the conclusion of contract subject to acceptance by the other party of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contract. It is therefore the same definition of tied contracts, but with the difference that restricting competition in the first case (see above) consists in an agreement between undertakings to require product tying from their clients and, in the second case, in a sole decision of a single dominant undertaking.

The concept of product tying which is a form of abuse of a dominant market position was expressed by the European Commission in its Communication — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings[11] (hereinafter referred to as „Guidance“). The Commission defines tying as situation where customers that purchase one product (the tying product) are required also to purchase another product from the dominant undertaking (the tied product). Tying can take place on a technical or contractual basis (paragraph 48. of the Guidance). In connection with the abuse of dominant position the Commission specifically defines also bundling which can be either pure or mixed. In the case of pure bundling the products are only sold jointly in fixed proportions. In the case of mixed bundling, often referred to as a multi-product rebate, the products are also made available separately, but the sum of the prices when sold separately is higher than the bundled price (paragraph 48. of the Guidance). These practices themselves are not forbidden; on the contrary – they can bring a number of benefits to clients, e. g. reduce their transaction costs or enhance the ability to bring such a product to the market (see paragraph 62. of the Guidance).

[8] OJ L 102 of 23 April 2010.
[9] OJ C 130 of 19 May 2010.
[10] OJ C 11/01 of 14 January 2011.
[11] OJ 2009/C 45/02 of 24 February 2009.

However, an undertaking which is dominant in one or more product markets of a tie or bundle (referred to as the tying market) can harm consumers through tying or bundling by foreclosing the market for the other products that are part of the tie or bundle (referred to as the tied market) and, indirectly, the tying market (paragraph 49. of the Guidance). The criteria set out for Commission's intervention in such a case are (paragraph 50. of the Guidance):

(i) dominant position in the tying market,

(ii) the tying and tied products are distinct products,

(iii) the tying practice is likely to lead to anti-competitive foreclosure.

The detailed conditions for assessing these criteria are set out in paragraphs 51 to 58 of the Guidance in connection with several decisions of the Court of Justice of the European Union[12] .

2.3 Legal regulation of cross-selling of financial and non-financial products

In the beginning of this chapter we will deal with the legal regulation of insurance cross-selling. This issue is regulated in the Slovak Act No. 186/2009 Coll. on Financial Intermediation and Financial Advisory (hereinafter referred to as "AFIFA"), amended by Act No. 282/2017 Coll. which transposed the provisions on cross-selling of insurance and non-insurance products from the Directive (EU) of the European Parliament and of the Council of 20 January 2016 on insurance distribution (so-called *Insurance Distribution Directive*; hereinafter referred to as „IDD") into the Slovak law. AFIFA regulates insurance intermediation activities performed not only by financial agents or financial advisors, but also by insurance companies themselves[13] .

According to IDD as well as AFIFA cross-selling is defined as a technique when an insurance product is offered together with an ancillary product or service which is not insurance, as part of a package or the same agreement [Article 24 (1) IDD, § 37c (1) AFIFA], e. g. travel insurance along with a product of travel agency or mortgage life insurance along with a mortgage.

According to latest EIOPA[14] report on consumer trends[15] 11 EU-member states have observed a steady increase in insurance being cross-sold with other consumer goods and services which was related to several factors, e. g. (especially in Spain) with consumers buying more and more valuable electronics via instalment payments, which results into cross-selling of these products with payment protection insurance and insurance policies protecting electronic devices; the mortgage life insurance and payment protection insurance continues to be sold jointly with consumer loans. Also negative factors have influence on cross-selling, such as remuneration structures encouraging the sale of products even if consumers may not need or request them which can lead to pressure sales tactics[16].

On the other side, if adequately regulated and monitored, cross-selling has the potential of being beneficial to consumers: it can reduce costs for consumers by offering products as a package

[12] E. g. Case T-201/04 Microsoft c/a Commission, Coll. 2007, p. II-3601, Case T-30/89 Hilti c/a Commission, Coll. 1991, p. II-1439.
[13] § 70 (2) (e) of the Act No. 39/2015 on insurance as amended.
[14] European Insurance and Occupational Pensions Authority with its headquarters in Frankfurt.
[15] Seventh Consumer Trends Report, as cited above.
[16] Ibid, p. 14.

for lower price, save time making just one stop as well as better understand the need for insurance protection and take advantage of it[17].

Under § 37c AFIFA, the following possibilities are available within cross-selling of insurance:

1. First is when an **insurance product is offered along with a non-insurance ancillary product or service** (which may be financial or non-financial) as part of a package or a single contract. In such a case, the seller (financial agent, financial advisor or insurance company) shall inform the client whether the individual components of the package or contract may be purchased separately [§ 37c (1), first sentence]. If so, the seller shall provide:

   (i) an adequate description of the different components of the package or agreement,

   (ii) separate evidence of the costs and charges of each component,

   (iii) in case the risk or the insurance coverage resulting from such an agreement or package offered to a customer is different from that associated with the components taken separately, the seller shall provide an adequate description of the different components of the agreement or package and of the way in which their interaction modifies the risk or the insurance coverage [§ 37c (2)].

   Thus, that provision lays down some of the seller's information obligations in connection with the bundling of insurance and non-insurance products, but at the same time does not prohibit the seller from tying them together.

2. The second possibility is when an **insurance product is ancillary to goods or services which are not an insurance**, as part of a package or the same agreement, the seller who is financial agent or financial adviser shall offer to the customer the possibility of buying the goods or services separately. However, this shall not apply when an insurance product is ancillary to:

   (a) an investment service or activity pursuant to Article 6 of the Act No. 566/2001 Coll. on securities and investment services (e. g. insurance sold with an investment instrument)[18],

   (b) a mortgage credit agreement (e. g. payment protection insurance sold with a credit agreement),

   (c) a payment account (e. g. travel insurance sold along with a credit or debit card issued to a payment account);

   in these cases, the financial agent or financial adviser is not obliged to offer these products separately [§ 37c (3)]; on the contrary – this Article allows him to tie an ancillary insurance product with above mentioned financial product that is provided as primary. This is a special legal regulation compared to the general provision of § 4 (3) CPA and § 4 of Act No. 90/2016 Coll. on housing loans as amended (hereinafter referred to as "AHL") (see below), i. e. cited provision has therefore priority over the general one according to the interpretation rule *lex specialis derogat generali*.

3. Finally, the third option is the mutual tying and bundling of insurance products in the form of so-called **multi-risk insurance policies** [Article 24 (5) IDD]. At the same time, AFIFA as well as IDD allow such simultaneous sale of several insurance products.

[17] Ibid, p. 15.
[18] In Slovakia, no such a combination of products is offered.

According to Article 24 (4) IDD EIOPA may develop guidelines for the assessment and the supervision of cross-selling practices indicating situations in which cross-selling practices are not compliant with the obligations laid down in Article 17. Up to date, however, EIOPA has not used this right.

In relation to **bank deposit products**, in the context of cross-selling the following provisions of the applicable legislation should be mentioned:

- § 27c (12) of the Act No. 483/2001 Coll. on banks as amended (hereinafter referred to as „AB“) according to which banks may not tie a **basic banking product** to the provision of another product or service,
- § 27d (14) AB according to which banks may not make the opening of a **standard account** conditional on the purchase of further services or shares from the bank concerned, where this condition applies to all clients,
- § 44c of the Act No. 492/2009 Coll. on payment services as amended where a payment service provider offers a payment account as part of a package of services together with another product or payment service which is not linked to a payment account, the payment service provider shall inform the consumer, before entering into a framework contract, about the option to enter into a framework contract for the payment service separately and provide the consumer with information regarding the fees associated with each of the other products and services offered in that package that can be purchased separately.

Finally, in relation to **credit products**, § 4 of the AHL applies, according to which a creditor may employ bundling practices, however tying practices shall be prohibited. Anyway, creditor may require borrowers to have a relevant insurance policy relating to a housing loan agreement, but in such cases, the creditor shall also accept an insurance policy from a supplier other than preferred by creditor if such a policy has a level of guarantee equivalent to the one the creditor has proposed.

Using common interpretation procedures we can draw a conclusion which the legislator apparently did not intend, namely that the aforementioned provision of § 37c (3) AFIFA, according to which, where an insurance product is ancillary to housing loan agreement (e. g. payment protection insurance sold with a housing loan agreement), the financial agent or financial adviser may not offer to the customer the possibility of buying both services separately. Accordingly, the financial agent and the financial adviser should have an exception from the ban on tying a housing loan agreement to purchase of a particular insurance product, but this exception does not apply if the seller is a creditor, i. e. directly a housing loan provider. Nevertheless, such anomalies are not only expressions of the imperfection of Slovak legislation. According to the letter of EIOPA, EBA[19] and ESMA[20] sent to the EU Commissioner for Financial Stability, Financial Services and Capital Markets Union Lord Jonathan Hill of 26 January 2016[21] , in European Union law there is a lack of

[19] European Banking Authority with its headquarters in Paris.
[20] European Securities and Markets Authority with its headquarters in Paris.
[21] The cross-selling of financial products – request to the European Commission to address legislative inconsistencies between the banking, insurance and investment sectors. Accessible on EIOPA website here: https://eiopa.europa.eu/Publications/Other%20Documents/ESAs%20letter%20to%20European%20Commission%20on%20cross-selling%20of%20financial%20products_27012016.pdf#search=cross%20selling.

comprehensive cross-selling regulation of financial products, which is split into particular financial directives MiFID II[22] , IMD[23] (today IDD), PAD and MCD.

Conclusion

One of the frequently used selling techniques is cross-selling in addition to up-selling. Two forms of cross-selling are legally regulated – product bundling, where the product is bundled with other different products or services, with each product being available to the client separately, and product tying, which is the case when products that are not sold separately are offered to the client at the same time.

In EU law, product bundling is generally permitted under certain (mostly informational) obligations, and product tying is prohibited only if it violates competition rules either in the form of an agreement restricting competition (cartel agreement) or an abuse of a dominant market position. Of course, these competition law limits apply also in the Slovak legislation, which, however, goes much further than EU regulation and bans product tying to consumers, despite the benefits that product tying can bring them, which have also been confirmed by the Court of Justice of the EU. The Slovak Consumer Protection Act admits only a few exceptions to this rule:

- when selling the main insurance product with supplementary non-insurance,
- for the sale of the main financial product, which is an investment service, a housing loan (only if it is offered by a financial intermediary) or a payment account with an ancillary insurance product,
- when selling multi-risk insurance policies covering different risks under a single insurance contract.

Finally, we can say that the Slovak and EU cross-selling legislation for financial and non-financial products is fragmented and inconsistent, causing interpretative problems. It is necessary to adopt complex regulation of this issue, for example in one of the sources of consumer protection law.

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The Impact of Influencer Marketing on Consumer Behaviour [1]

Štefan Žák[2] – Mária Hasprová [3]

Abstract

Social media are currently experiencing great success and their power to influence consumers is growing. The role of opinion leaders in social media marketing is taking over by the so-called influencers who can significantly influence shopping and decision-making behaviour of consumers. Influencer marketing is becoming more popular and forces companies to redistribute their media budgets for this purpose. The objective of this paper is to find out how influencer marketing, a part of digital marketing, is perceived by consumers. The authors provide theoretical definition of the term influencer marketing and its components, define the characteristics of the social media, social networks, the tools of the social network marketing. The authors also explain the differences between influencer marketing and celebrity endorsement and discuss potential cooperation with influencers. The paper presents the selected results of the survey focused on consumer perception of influencer marketing.

Key words

influencer marketing, consumer behaviour, social media

JEL Classification: M3, M31, M37

Introduction

Social media are very closely related to digital marketing, influencer marketing, influencers and their activities. They represent the space for implementation of activities involved in the influencer marketing and are also a contact point mediator. Through timely and targeted activity, influencers become attractive partners for collaboration with different companies, giving them financial or other rewards.

Many people are confused by the terms social media and social networks. Social networks are part of social media that are superior to networks. The media cover blogs, networks, chatting virtual spaces, or likewise known forms of Internet encyclopaedias. The networks themselves, as part of social media, mediate the interaction between registered users. The most well-known social networks are Facebook, MySpace, LinkedIn, and others. Their character differs depending on the content of the information. They can be focused on the professional field of the user activity, or vice versa, on the private field. The primary objective of these media and networks was to mediate information and interaction among the interested users. They should not have served as a sales channel, but they are currently the strongest channel of communication, which is exactly aimed at boosting the sales. Therefore, the digital marketing and its forms have an incredible reach and strength.

Influencer marketing is based, in particular, on the confidence of consumers acquired by these opinion leaders. Many of the influencers are also bloggers, that is, people who share their

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[1] VEGA (S.G.A.) 1/0657/19 The role of influencers in the consumer decision-making process

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experiences, stories or interests with the broader Internet public. They have their own circle of interests, they even have not been originally the influencers, they just became ones. Many of them are sportsmen, actors, adventurers, or just ordinary mothers on maternity leave. Each of them can influence another group of people, and each of them is also able to promote a different product. The essence of the influencer marketing is the right product promotion. An essential factor of this form of marketing is that the influencer must be identified with the product, so he or she will not recommend a product without any experience with it, or even absence of any knowledge of it.

1 Methodology

The main objective of the scientific paper was to find out how influencer marketing is perceived by consumers. To meet our primary goal, we first had to meet the sub-goals that helped us reach the primary goal. The first sub-objective is the need to clarify the current market situation and to characterize the digital revolution, which entails many changes. At the same time, it was necessary to characterize the communication channels through which influencer marketing communicates and therefore the authors devoted themselves to social media tools. Another objective was theoretically to define influencer marketing as a term and activities it involves. The authors defined influencer marketing, its carriers, influencers and their main characteristics. Finally, the authors defined the possibilities of cooperation with influencers and briefly described the situation on the Slovak market.

The issue processed in the paper required the use of several scientific methods. Due to this issue is one of the less discussed parts of marketing, we have collected primary data collection through an online questionnaire. The obtained data were processed by several mathematical-statistical methods. Another of the used scientific methods was the analysis, which enabled us to break down all the data obtained by relevance and importance. By the method of synthesis we came to causal connections processed in the result part of the contribution. So far, there is not enough theoretical background to this issue, so we had to study, analyze and selectively process the available information that served as a basis for the theoretical part of the paper. Through deduction, we have drawn conclusions from these general theoretical bases that we have used throughout the process of post processing. By the method of induction, we were able to formulate general outcomes and make recommendations and conclusions based on them.

2 Results and Discussion

2.1 Marketing and social media tools

Social media play an increasingly important role in marketing of the companies. Therefore, we consider it necessary to explain the fundamental differences between the classic functioning of marketing and the marketing of social media. First of all, one needs to realize what benefits the social media have brought us. They overcome classic marketing barriers such as getting feedback, speed of information spread, and improve the building of customer relationship. These are just a few of the differences that we can see at the "first glimpse", without a deeper analysis. However, exactly a deeper examination of the social media marketing topics comes with the revolutionary and fundamental difference represented by a marketing mix. This mix can be referred to as a set of basic elements that serve as a tools for achieving the goals and strategies. We call them 4P–product, price, place and promotion (Bednárik et al., 2010). In this classic model, the transfer of information is one-way in the direction from the enterprise to the customers. Feedback from the customer is very difficult to obtain, and also the measurability of the advertising effects is more complex than in the case of social media, where the classical model changes its form. The well-known 4P are replaced by 4C, which we should not confuse with 4C from the perspective of the customer.

These new 4C have been described by American journalist and social media marketing expert John Jantsch (Heinzmarketing, 2010). Under Jantsch's 4C, we mean content, context, connections, and community.

Behind the content, we should see a useful cluster of information that ensures the company trust of their customers. They select the information in the social media space and do not believe in the content of a useless information, which does not attract their attention, as well. Context is the form, in which the content should be delivered, so it is an abstract filter for the marketers, through which each content should first pass. It is a necessity for the content to be in line with the context, to fully adapt to it, thus make the whole process of publishing content in the social media space more efficient. Relationships, their origination and consolidation, are something that is fully supported by the social media and technology. In the current situation on the market, it is necessary to think that the data is spreading extremely fast and that the company needs to understand how the consumers see the company, and that an open communication is not a rarity. This is closely linked to the building of communities that arise from a common way of thinking or using the products. This brief analysis shows that a product that has been in the middle of attention and interest, has been replaced by a content (Heinzmarketing, 2010). This is an abstract bond among the users in a social media environment (Bednárik et al., 2010).

Fig. 1 4C of Social media marketing

Source: custom compilation.

Based on the above changes in the functioning of marketing in a social changed environment, we should look back into the past and be realize a few facts. Marketing has been massive and has been associated with advertising, whereas advertising agencies have sought to gain more awards than getting more customers. In the past, the ad was based on so-called disturbance, used to keep the product in mind of the consumer and to watch the ad message henceforward. However, the trends have changed significantly, and the relationships, their building and consolidation gained strength. Emphasis is placed on communication, addressability and innovation. The chance is also being given to smaller companies that are entering the market with thought leadership (Bednárik et al., 2010). It is one of the forms of content marketing that builds on talent, passion and enthusiasm for entrepreneurship, while taking into account exactly the community and its creation (Marketinginsidergroup, 2017).

Social media tools are a dynamic group that is constantly evolving, merging, but also growing. Some of them are losing importance, just because of other services whose functions are very complex. The basis, however, is as follows (Wpbeginner, 2018; Bednárik et al., 2010):

- Blogs - Wordpress, Sme.blog.sk, Ghost,
- social networks - Facebook, Instagram, Myspace,
- search engines - Google, Bing,
- wiki-systems - Wikipedia and others,
- travel and review websites - Tripadvisor,
- video-websites - YouTube, Vimeo,
- microblogs - Twitter, Tumblr,
- B2B social networks - LinkedIn,
- and other.

The listed social media marketing tools are in many cases points of action of the influencers, who use them to publicize their knowledge and "influence" the audience. The most common homes are their personal blogs, YouTube stations, and Instagram or Facebook profiles. Currently, the term Instagram is most frequently discussed among the influencers, which is gaining popularity every day thanks to the enriched features by its developers.

Each of the listed tools has its own specifics and provides a different scope and type of services. Depending on the nature of the product, its properties or the marketing objectives of the company, we choose the right tool to ensure effective communication. Choosing the right tool and strategy does not guarantee any success yet. It is important to understand the needs and behaviour of the customers, who are present in the social media space. Companies should realize the facts that arise from the existence of social media marketing. These facts can be called the basic cornerstones, which must be understood in order for the company to be able to function in the social media environment.

- Strengthening of the identity.
- Link building–Building of the communities.
- Communication driven by the user.
- Communication initiated by the supplier.
- Personal communication.

Identity building is based on the fact that classical public relations practices are projected into the social media space. It is possible to mention e.g.: publishing photos, videos and links to press releases on blogs and microblogs. Creation of links and communities means grouping together users who share a specific common interest or intent. This may be a product, brand, or sympathy for a particular product group, e.g. zero waste products. Communication serves as a feedback mediator between business and customer, which is particularly valuable for further company development. This occurs in a bidirectional manner, thus the consumers can also query using the communication via social networks or discussion forums. Facebook, Twitter and Instagram belong among the best-known areas, where the interactive communication takes place. All listed networks are also fully used as a customer service and customer support. It is obvious that different networks have different functions, so individual companies are using the network that addresses a segment that is sympathetic to their corporate philosophy and product portfolio (Bednárik et al., 2010).

2.2 Influencer marketing

To better understand the emergence of influencer marketing, consideration should be given to current trends in the population lifestyle. A number of people have started eating healthy, think about pollution, know the concept of fair trade, support domestic growers, and so on. In essence, they are coming back in time when people have been more quality minded and have been living in harmony with nature. Paradoxically however, today's consumer is informed about nature, quality and food production via the Internet. They do not acquire their empirical experience themselves, but believe the others. This is exactly what the influencer marketing is built on. The very word influencer comes from an English term influence, which translates into impact. Hence, the influencer marketing utilizes the power of influencing the people through other people (Podnikatel, 2018). In practice, this form of marketing looks very simple, and consumers are accessed mainly through the Internet and the social media. It should not be forgotten, exactly the social media is home of an enormous amount of sensitive information and people's "second lives".

Influencers could be characterized as a very authentic group of people who publicize their attitudes, opinions and views through the social media. People sympathize with them, because the content they publish is very well "digestible", reminds the followers of their life or the situations, they encounter. In essence, they are one of us, and are closer to us than celebrities, whose lives are fundamentally different from ours. Despite the fact that they are very straightforward and without embellishment in addressing of the people with their contributions, they are specialists on the topics, they are fully committed to. Also, their followers are supporters of given area and therefore they do not try to change the content of their contributions radically. In addition to the professional side, they got used to publishing part of their privacy, free time or problems. In this way, they also win hearts of their fans, whom we allow to call as a community (Starmedia, 2017).

- Summary of influencer properties (Podnikatel, 2018):
- Expertise, the specialist on particular topics.
- Character and personal properties.
- Focus on a certain area of activity (e.g.: Youtuber, Instagramer, etc.).

Duration of the "lifetime" is a very important aspect that determines the success of the influencer. The longer it operates in the given sphere, the more stable and interesting he/she is. Fast rises often mean also rapid falls, so time will show whether it's just a fashion shot or not.

2.3 Possibilities of cooperation with influencers

Influencers can be described as a heterogeneous group of people working in the social media space, who reach the awareness of other users through different channels of communication. Each of these channels has its own specific features and offers various ways to communicate the campaign and interact with the influencer. We can divide them into three basic groups, based on which channel they use:

1. Bloggers - people who have gained the interest and trust of people because of the content of the blog. They are mostly interested in a few topics that are regularly discussed and, depending on the number of readers, affect the people. Many of them are ordinary people in their ordinary life, who have jobs and common problems, and therefore they can gain people's trust.

2. Youtubers - vloggers, or Youtube video web social network users, who present their views on multiple topics through videos (Androiportal, 2016).

3. Instagrammers - at present, Instagram is considered to be an important part of the communication channels of the companies, and the instagrammers are those users, who have been able to get a lot of fans in the form of followers thanks to their photos and descriptions.

Influencers can be divided into groups according to the number of followers, however, in the Slovak Instagram area, it is generally considered as interesting the user, with at least 1,000 followers. The companies perform regularly so-called social media monitoring that consists of searching for tags or links to their products that are placed in users' posts. Such monitoring includes all posts with a specific marking (tag, click on the link) shared or published by users with at least 1,000 followers.

After defining the types of influencers, the channels on which they operate, we have laid the theoretical basis for building of a cooperation, and engaging them in our marketing plans and strategies. But there are many ways to use their power and influence. Therefore, we have divided the individual relationships into three fundamental and most important ones.

1. Product placement - Literally it means placement of the products, most often in TV or film production, but currently also in the contributions of social network users. Product placement is a deliberate, creative, and paid placement of the product either in an audio-visual work or, in our case, in a content created by the influencer. He is a protagonist and is naturally trying to incorporate the branded product into his post (Labská et al., 2014). It is necessary not to forget that this form of promotion is regulated by the Act No. 308/2000 Coll. on broadcasting and retransmission (Zákony pre ľudí, 2016), and the conditions related to the product placement must be studied before cooperation. The attention to the above fact is drawn also by the new paid advertising policy, i.e. affecting also the product placement, by so-called hashtag #ad or #sponsored (Variety, 2017).

2. Sponsored posts and sections - Many businesses search for bloggers and influencers, who are able to get their products to their sections, such as photos and videos. In these sponsored sections, the influencers devote themselves to activities directly related to the product. For example a live stream (live) from a workshop or press conference where it is obvious what brand it is.

3. Reviewing products on blog - Relatively common form of collaboration that consists of posting the contributions on one's blog, vlog or profile (Bigbuy, 2017). The content of such contributions is product evaluations that are very detailed and complex. Authors express their own experiences, use external links to help producers raise awareness of the product or direct mediate the sales. In this case, the bloggers are called external authors, because they are from the outside of the business and can evaluate the product more or less objectively. It should be noted that despite the financial reward for the publication of the product evaluation, the evaluation is not manipulated to purport only positive. The product is evaluated from their point of view, but the review includes both, the positive and the negative aspects, the user may encounter.

2.4 Slovak influencers

It has been long since the Internet eradicated the geographical boundaries of its field of activity, and so there are many well-known influencers worldwide, who are also successful. The most successful of them have their audiences scattered around the world and it is difficult to overcome their achievements. Slovakia is a small country, but it is the home of many successful opinion leaders. The social networks, which are visited by millions of users with the same goal, contributed to the boom of their fame. Cure the curiosity and engorge the new information. In the world, the fashion bloggers, make-up artists, vloggers, and sportsmen are the most popular influencers in the world, and this is also the case in Slovakia.

More complicated, than the determination of the effect of an influencer, is to estimate his/her strength and success. Given that quantitative indicators of the influencers' power (number of followers or collaborations) changes from minute to minute, it is necessary to look for those qualitative ones. These are their personal prerequisites, attitudes, and opinions on selected topics, humanity or consistency in relation to the work performed. There is not one guaranteed guideline on how to become a good influencer or how to choose the right influencer for one's business.

The company Elite tried to solve this puzzle and published the book called *Instaheroes*. We could also call it a handbook or an overview, which is especially useful for businesses to be able to choose the right influencer. The book is available for download free of charge in the electronic version, which we consider to be very beneficial because it is the only publication so far that deals with this topics, especially from the practical aspect. Instaheroes grouped the most widely known influencers on Instagram in one book, categorized them on the basis of the interest area they are devoted to, and made a short structured interview with each of them (Jurovcová et al., 2017). In each of the listed areas, they ranked three to four top Slovak influencers of Instagram. Influencers are divided into the following basic areas: celebrities, vloggers, fashion/beauty bloggers, travelers, photographers, artists.

2.5 The survey focused on the impact of influencer marketing on consumers

The survey we carried out concerned influencer marketing and its impact on consumers. We acquired primary data by inquiring through an online questionnaire that was available for completion for three weeks. It contained clearly defined questions aimed at identifying the effects of influencer marketing on respondents and their knowledge in the subject matter.

The aim of the survey was to find out how influencer marketing and its components are perceived. Due to the close relationship between social networks and influencer marketing, we wondered which of these networks are most watched and attractive, and for what reasons. We wanted to find out which parameters the social network must have in order for users to watch and identify it as the best. Finally, we have examined whether they are watching the influencers and through which channels they are accessing them.

The online questionnaire involved 114 respondents of all ages, from 19 years to 56 and over. So this sample was very varied and proved that almost all generations are reachable in the online environment and can be addressed not only by traditional marketing tools and communication channels. From a geographical point of view, the sample was limited to Slovakia only, so the questionnaire was conducted only in the Slovak language. Respondents from all over Slovakia, from various income categories and jobs were involved. The questionnaire was structured, so the questions were to capture the facts and opinion of the respondents. In order to get to the largest and varied sample, we have chosen an online form that brings with it many advantages. One of them is the fact that such a questionnaire via the Internet will reach a relatively large and varied sample in a short time, with the cost of it being low and the time cost being significantly lower than in the classic form of the printed questionnaire. The questionnaire consisted of 11 sections and 20 predominantly substantive questions that were both closed and complementary. In the 3rd, 5th and 6th section of the questionnaire, there were filtering questions that knocked out those respondents who would not fulfill one of our goals. The following sections concerned influencers, social networks and their users. Therefore, those who do not use social networks and do not monitor influencers have been redirected to the last section with classification questions. A large part of the questions offered the possibility of multiple answers, as needed by the respondent. Thanks to this fact, each answer had the same weight and the results can be considered objective. The questionnaire also contained closed questions where only one of the answers could be identified by the respondents. Such questions allow very quick evaluation and sorting of responses to needed groups. In the final section there were questions of classification character, which were tasked with finding out the specific features and characteristics of the respondents.

The main goal of the survey was to support the following hypotheses:

- **H1:** We assume that over 90% of respondents are social media users.
- **H2:** We assume that more than 40% of respondents watch Instagram more than Facebook.
- **H3:** We assume that at least 50% of respondents are watching on some of the social networks of influencer, blogger or instagramer.
- **H4:** We assume that at least 75% of respondents would trust the issue of presentation and satisfaction with the product more influencers than celebrities.

We received rare and interesting answers from respondents who participated in the survey. We paid most attention to the answers to the hypotheses. We have found that up to 100% of our respondents are registered on social networks, which are one of the most important channels of communication for influencer marketing. This result confirmed that social networks have a great use and potential in marketing. For quick and efficient information distribution through influencers, social networks need to be part of everyday people's lives and be able to navigate within them. The most important thing is for users to feel safe in a social networking environment without worrying about the misuse of private data. Interesting content is equally important and attracts people to the so-called. „scrolling“, browsing the content and responding to it. These responses are measurable and make contributions and content visible to other audiences. In this way, influencers can get more followers and thus become more visible. Using Instagram works with hashtags, sharing or commenting. Influencers tend to use their original hashtag, which is later adopted by their followers, and in this way they also make the tag's creator visible. However, we found out that Instagram (28,1%) is less and less monitored than Facebook (68,4%), which surprised us very much because Influencers themselves believe that Facebook is in decline. They are less popular and attractive to users. Our respondents disproved this claim and therefore one of our hypotheses could not be accepted. However, we are of the opinion that Facebook really lost its fans for a while because of the introduction of so-called Facebook Explorer. Explorer is a feature that automatically distributes content to commercial and private users. Sorted fan page and company profile posts from friends added. This feature did not have a very good response, the reactions to contributions in Explorer have seen a decline in responses, which, of course, did not please them. This feature has automatically disappeared to selected users after the pilot version, and Facebook has returned to its old-fashioned tracks, bringing it back to its fans.

Our survey also covered social networks and we were interested in which of them responded. In order to bring the reader into question, it is important to note that the Influencer cradle is on the YouTube social network. In fact, the first Influencers were YouTubers, which we also call "vloggers" because they mainly work with videos. These are posted on YouTube. Although YouTube has a social networking status, we have decided to make a smaller expert. We did not add it to the question of using social networks as an answer, but if someone wanted to label it, it was enough to add a reply. None of our respondents have added this to us, which surprisingly surprised us because YouTube is one of the most popular social networks and even those not registered on it can even watch it. We were thinking about this fact and we came to the conclusion that YouTube does not make people feel that they are on the social network. These are also popular thanks to the ability to chat on YouTube. However, posts can be shared, rated, or commented on. Most people, however, rightly regard YouTube as a video database, which in fact does not detract from its popularity and attractiveness. In terms of marketing, YouTube also has enormous potential and is able to communicate effectively with a selected segment.

We'd like to stop by another interesting finding. It was the third hypothesis that we accepted because it was confirmed that more than 50% of the respondents were watching influencer on some of the social networks. In particular, up to 58.7% of our respondents are monitoring influencers on social networks, which means that the influencers segment is really big. We learned that people visit their social network accounts more times a day and therefore consider them a very effective communication channel. Thanks to the Internet and social networks, information spreads in a more natural way than through classic advertisements, TV trailers or newspapers. Each user has a circle of friends and followers with whom they share their activities and posts. Thus, the dissemination mechanism is very effective and influencers can be those who can start this information flow. In terms of trust, influencers are significantly better off than celebrities, as confirmed by the confirmation of the fourth hypothesis, where 88.8% of respondents said they would believe more inluencers than celebrities if they were products and applications designed for the specific segment.

It is ideal to use influencers in the early stages of the product life cycle, or in the regression phase, when we want to remind consumers again. It can be one of the alternatives for start-ups in mobile health segments and wearable devices that do not have enough marketing resources and want to become more visible. Influencer marketing is less costly than renting advertising space on the web, on TV or in print. Nevertheless, it has more intervention and results are easier to measure.

Conclusion

The aim of the scientific paper was to find out how consumers perceive influencer marketing, which is considered a new form of marketing and is part of digital marketing. The authors wanted to highlight the advantages that influencer marketing brings with it and point out that even though it is still unexplored from a theoretical point of view, it works very well in practice and is being acquired by more and more companies. Influencer marketing, as one of the forms of digital marketing, is, in our opinion, the most natural way to influence people's thinking. Since time immemorial, people have trusted authorities, celebrities, or the closest. The human population's credibility is deeply rooted in us, and influencer marketing is just a tool that can benefit from it. Its success and popularity are constantly increasing and companies are increasingly inclined towards it. The fact that the internet and social networks are part of almost every home, only emphasizes its meaning and strength. We can openly say that influencer marketing exists because people are more fond of technology than they need, and they can spend hours on the internet. They also satisfy their curiosity on social networks, which are often the first and last thing they control during the day. It is important, therefore, that the timing of influencers who know their audience well and be able to adapt to it is important. Mothers on maternity leave have different time than working people or students. Many influencers argue that they were most successful in adding posts in the evening when most people are at home and have time to view content on social networks. However, it depends on the product and audience to which the product information is addressed. Influencer marketing is perfectly customizable and therefore we believe that its strength will grow in the coming years, replacing the classic forms of marketing, the effect of which is gradually decreasing.

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Environmental Economics - Solutions for Plastic Waste Recycling[1]

Otília Zorkóciová2 - Hana Palušková[3]

Abstract

Enormous consumption behavior of consumers, increases the production of huge amounts of waste, which puts a significant burden on the environment and thus the business environment and the individuals themselves. For international tasks, the problem of plastic waste is increasingly being discussed on a global platform, and these days, it is a significant aspect for many to seek new solutions. Precisely because businesses are forced to adapt their activities to consumer preferences as quickly as possible, they use huge amounts of plastic material for its low cost and durability. The European Union, as well as its individual states - including Slovakia, is also responding to the enormous extent of the problem, which is created by huge plastic consumption. The scientific paper points to the need for environmental solutions in the recycling of plastic waste - the accumulation of which is increasingly burdensome every day on the planet Earth already growing into excessive to unmanageable dimensions. Better use of resources provides new business areas, improving technology leading to increased efficiency in whole value chain.

Key words

sustainable development, plastic waste, European union, recycling packaging waste rate

JEL Classification: Q51, Q53, Q56

Introduction

At the moment of excessive consumption, each individual has their own needs and with constantly increasing population, their absolute number rise. To be able to remain competitive, companies should respond to market demands as effectively as possible.

Enormous consumption behavior increases the production of huge amounts of waste, which puts a significant burden on the environment and thus the business environment as well as the individuals themselves. In general, the issue of waste is a widely discussed concern that is global in nature. These days, it is a significant aspect for many to seek new solutions on a global platform.

It is accurately because businesses are forced to adapt their activities to consumer preferences as quickly as possible, using huge amounts of plastic material, precisely because of its low price and durability. Plastics are almost all around us and create a huge global burden. Their number, which reaches the seas and oceans by the rivers, is so great that so-called "plastic islands" are formed in the oceans, which are formed by clusters of plastic material (Vitkovský, 2018).

Every year, 8 million tons of plastic waste flows into the oceans. While it is very difficult to estimate the great problem of pollution our planet faces - because of the aforementioned

1 This paper was created within the research projects of the Ministry of Education, Family and Sport of the Slovak Republic VEGA No: 1/0420/19

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decomposition of plastics into very small, even invisible particles. They become toxic when consumed by animals and remain dangerous in the form of food for humans. In general, the Asian countries are among the most polluted countries by the plastic waste. Of these, China (8.8 million metric tonns), Indonesia (3.2 million metric tonns), Philippines (1.9 million metric tonns), Vietnam (1.8 million metric tonns) and Sri Lanka (1.6 million metric tons) are the most polluted ones (Hotz, 2015).

In modern economic thinking, the so-called "R" rules play an important role, contributing to the creation of a circular economy, which can create the basic system to combat waste generation (Eurostat, 2018):

- **Recycle** - means the ability to sort waste to create a secondary source of raw materials
- **Remanufacture** – mainly concerns electronic products, from which, using some new parts or repairs, we can create a whole new product.
- **Reuse** - it means limiting disposable plastic waste by preferring products that can be reused.
- **Repair** - it means willingness to repair broken products instead of throwing them out.

These rules, which relate to the production process itself, can be supplemented by the following, which is even more precedent for massive waste generation (Envirocitiesmag):

- **Reduce** - plastic consumption - An example is Amazon's online store, which gives consumers the opportunity to choose the green packaging option for their purchased products.
- **Rethink** - it talks about the ability to create and use existing products in different ways to meet customers needs.
- **Refuse** - to be able to say single-use plastic products such as plastic cutlery - an unnecessary use of straw disposable plastic products.

The European Union is also responding to the huge scale of the problem, which is created by enormous plastic consumption. The goal of reducing the consumption of plastic material is to protect human health, contaminated seas and the entire environment. Evidence of this problem is the fact that out of the total value of the plastic packaging material produced, only 5% remains inside the economy. This means that up to 95% of plastic packaging is lost after first use. For this reason, in January 2018, the European Commission adopted a "A European strategy for plastics." The strategy, in addition to the objectives already mentioned, is also intended to contribute to the achievement of the Sustainable Development Goals 2030 and the objectives of the Paris Agreement. The main challenge of this strategy is to recycle all plastic packaging on the EU market by 2030 and reduce the consumption of disposable plastics (Izakovičová, 2018).

In the EU, an average of 31 kg of plastic packaging waste per year per individual. This represents the volume of nearly 16 million tons of plastic waste generated in the product packaging process in one year. This trend is constantly rising. According to Eurostat the least plastic-producing EU Member States was Croatia, with 12 kg per capita, and Italy with 55 kg produced the most plastic waste per capita in 2014. In the same year, 23 kg was plastic waste per person in the Slovak Republic. Of the total amount of plastic waste in the EU, approximately 40% is recycled. One of the EU countries which recycled plastics the most are for example Slovenia (63%) and country which recycled plastics the least was for instance Finland (24%) (Eurostat, 2018) . In the April 2018, the European Parliament approved the recycling targets that are part of the new legislation to achieve an efficient circular economy (circular economy- minimizing waste generation, recycling, reuse of materials and innovations). The new legislation sets specific measurable targets for individual packaging groups such as plastics, paper, cardboard, glass, wood and metal. Furthermore, it provides for a reduction in landfill, by increasing the recycling of municipal waste and by defining the amount of waste landfilled (Bartošovičová, 2018).

At the end of May 2018, the EU set out the proposed legislation to ensure by 2025 almost complete collection of several disposable products that are most polluting European seas and beaches. These are mainly plastic cutlery, cotton buds, straws or plates that cause up to 70% of the EU territory's infestation. These products can only be produced through more gentle materials. (Euractiv, 2018).

At the end of March 2019, the European Parliament approved a ban on the sale of signle-use plastic products throughout the EU. New legislation for all Member States specifies (EP, 2019):**by 2025:** the proportion of recycled content in plastic bottles must be at least 25%

- **by 2029:** 90% minimal collection of plastic bottles
- **by 2030:** the proportion of recycled content in plastic bottles must be at least 30%

The Directive also lays down stricter conditions for plastic (and tobacco) manufacturers in the form of extended producer responsibility and greater awareness of the negative environmental impacts of these products. According to the rapporteur, Fréderique Ries (EP, 2019), new legislation is a framework for which it can advocate on the international stage, as marine pollution by plastics has a global character. This legislation will reduce environmental costs by 22 billion EUR, an estimate of the cost of plastic pollution in Europe by 2030.

The modernization of the Chinese economy could also have caused the European Union to move so hard to combat plastic waste. Since the 1980s, China has been a leader in the import of waste. However, at the beginning of 2018, China announced a restriction on the import of waste from abroad in 24 waste items, including plastics. This step is likely to represent a change in the global trade in secondary raw materials and to make waste producers more accountable. Last but not least, this pressure was also felt by the environmental ministries of member states, which, as mentioned, began to adapt plastic policy to new global conditions (Ekolist.cz, 2018).

1 Methodology

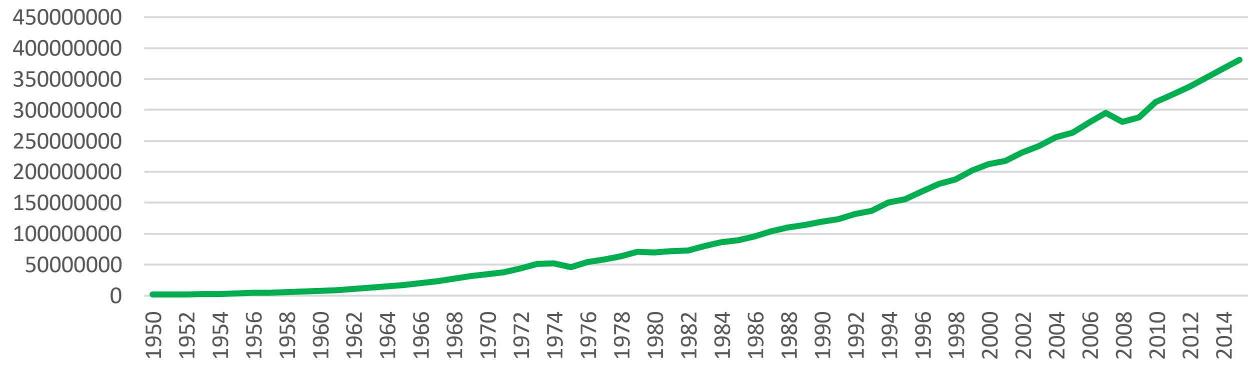
The aim of the scientific paper points to the need for environmental solutions in the recycling of plastic waste - the accumulation of which is increasingly burdensome every day on the planet Earth already growing into excessive to unmanageable dimensions.

The following methodology has been used in the scientific paper: With the help of literary research and abstraction, we have obtained and selected the most relevant professional and scientific information, dealing with the researched issues. Furthermore, on the basis of analysis and synthesis, we have worked out the most important insights from the most important point of view regarding the issue of plastic waste, its global production and the industrial areas most affected by the production of plastics and waste. In the next part of the paper, we have developed and explored, through induction and deduction, the generation of waste in EU Member States - focusing on the production of plastic waste and its recycling rate. In the logical continuity of the research, we compare and evaluate the monitored issues in the V4 countries with an emphasis on the development of given indicators in the Slovak Republic. In the scientific paper we also used graphical methods to clarify the basic contexts and trends of the evaluated indicators in the historical context.

2 Results and Discussion

In general, plastic waste is a huge environmental problem that pollutes mainly seas and oceans. So its form before decomposition, which degrades the quality of life of marine animals, as well as its form after decomposition, which in the form of very small particles gets all the way into the organisms of all living creatures, including humans. The development of annual global plastics production between 1950 and 2015 is shown in Graph 1.

Graph 1 Annual Global Plastics Production 1950-2015 in tonnes per year



Source: own processing according to https://ourworldindata.org/grapher/global-plastics-roduction?time=1950..2015

In 1950, the annual flow of plastics was 2 million tonnes, while in 2015 its annual production was 381 million tonnes. A slight decline in plastic production was recorded during the global financial crisis in 2008, when global plastics production fell by 14 million tons. Cumulative plastic production since 1950 was 7.8 billion tonnes in 2015. The proportion of world plastic production by region is shown in Table 1.

Tab. 1 Global Plastics Production Share by Regions 2017 in %

ASIA	EUROPE	NAFTA	MIDDLE EAST, AFRICA	LATIN AMERICA	CIS
50,1%	18,5%	17,7%	7,1%	4%	2,6%

Source: own processing according to https://www.plasticseurope.org/application/files/6315/4510/9658/Plastics_the_facts_2018_AF_web.pdf

The largest plastic producers in 2017 were Asian countries. Of these, China accounted for 29.4% of the total plastic flow, which is the largest share not only among Asian countries, but also from around the world. Followed by European countries with 18.5% and NAFTA with 17.7% in 2017.

In Table 2 we demonstrate the industries that most used primary plastic material in 2015 in mill. tonnes.

Tab. 2 Primary Plastic Production by Industrial Sector in 2015 in million tonnes.

No.	Sector	Value in mill. tonnes
1.	Packaging	146
2.	Construction and Building	65
3.	Other	59
4.	Textiles	47
5.	Consumer (and Institutional Products)	42
6.	Transportation	27
7.	Electronic (Electrical)	18

Source: own processing according to: https://ourworldindata.org/grapher/plastic-production-by-sector

As shown in Table 2, the industrial sector in the area of packaging most contributes to the formation of plastic streams. Its total production in 2015 was 146 million tons of plastics. We can assume that precisely the properties of plastics, such as lightness, flexibility and low production costs, contribute to considerable savings for businesses when transporting goods through global logistics networks.

However, production does not have to be directly related to the production of plastic waste. Table 3 shows the production of plastic waste for 2015 by individual industrial groups.

Tab. 3 Plastic Waste Generation by Industrial Sector in 2015 in million tonnes

No.	Sector	Value in mill. tonnes
1.	Packaging	141
2.	Other	42
3.	Textiles	38
4.	Consumer (and Institutional Products)	37
5.	Transportation	17
6.	Electronic (Electrical)	13
7.	Construction and Building	13

Source: own processing according to https://ourworldindata.org/grapher/plastic-waste-by-sector

The product packaging industry has also created the largest plastic waste production. In 2015, it produced 141 million tons of plastic waste. In the second place was (except "other") textile industry, whose production of plastic waste in 2015 reached the level of 38 mil. ton. The construction sector, which produced the second largest amount of plastics (65 million tonnes, in 2015) among the monitored groups, produced only 13 million tonnes of plastic waste in 2015, representing the same amount of electronics area that produced nearly 4 times less plastic in its production process for 2015.

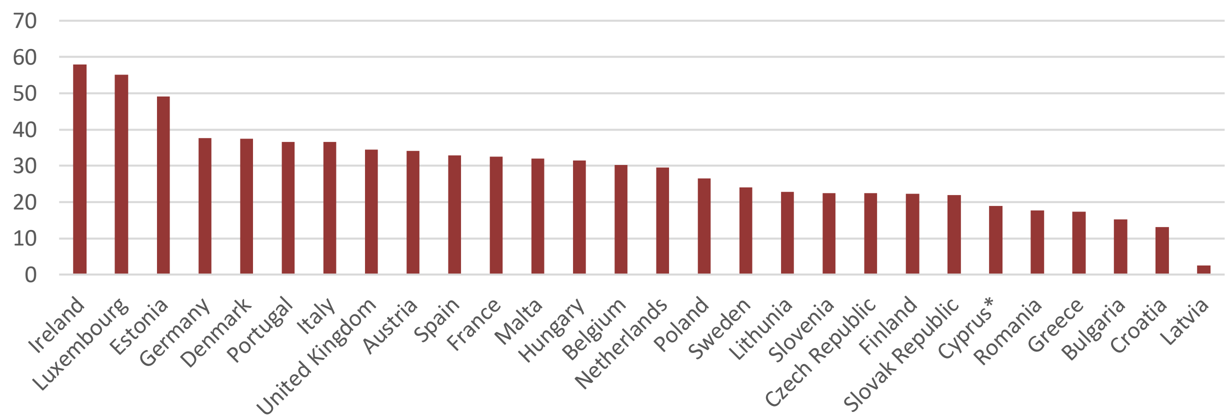
2.1 European Union- Plastic Packaging Waste

Statement by Vice-President for Sustainable Development, Frans Timmermans (European Commission, 2019) underlines the importance of European plastic contamination solutions: “There is a growing sense of urgency in European society to do whatever it takes to stop plastic pollution in our oceans. The European Union is responding to this clear call of our citizens. We have taken ambitious steps by introducing concrete measures to reduce the use of single-use plastics.”

As we have already announced, the EU has adopted ambitious targets for the production and handling of plastics. Just as packaging plastic production is one of the most environmentally burdensome in the world from total plastic production, its share of total plastic production in EU member states is as high as 40%.

The highest total EU plastic packaging waste production in 2016 was recorded in Germany, the United Kingdom, France, Italy and Poland (European Parliament, 2018). However, a more relevant indicator of the formation of plastic waste (in packaging) is shown per capita. EU countries producing the most plastic waste per capita in 2016 are listed in Graph 2.

Graph 2 Generation of Plastic Packaging Waste in EU (28) by Country in 2016 (kilograms per capita)



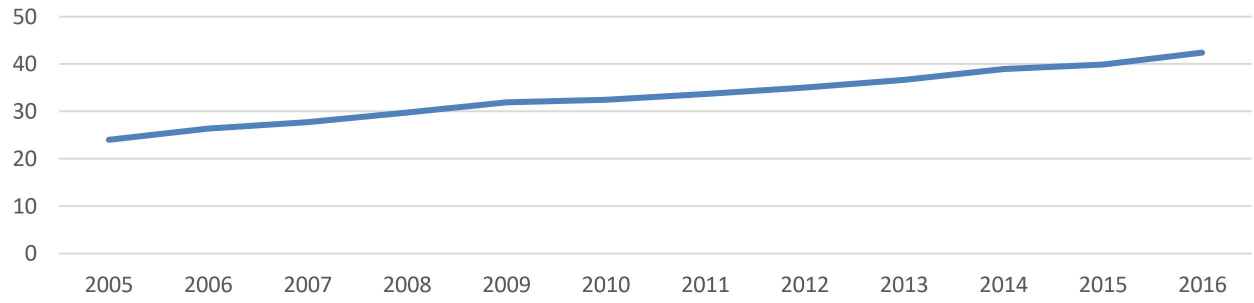
*estimated

Source: own processing according to https://www.statista.com/statistics/972604/plastic-packaging-waste-generated-per-capita-countries-eu/

Of the EU countries (28), Ireland (57.94 kg / p.c.) generated the largest plastic waste in packaging in 2016. It was followed by Luxembourg (55.09 kg / p.c.), Estonia (49.1 kg / p.c.), Germany (37.62 kg / p.c.), and Denmark (37.46 kg / p.c.). The lowest recorded value was achieved by Latvia with the production of 2.55 kg / p.c., as the only one did not exceed the limit of 10 kg per capita. Among the V4 countries, the **Slovak Republic (21.99 kg / p.c.)** was the first, followed by the **Czech Republic (22.42 kg / p.c.)**, **Poland (26.53 kg / p.c.)** and **Hungary** closed with **31.48 kg / p.c.**

As we have said, an efficient way to minimize the excessive production of plastic waste is to use a circular economy model that once again transforms raw materials into a production or consumption cycle. We have said that we include the so-called "R" rules. One of the most important is Recycle, which allows the creation and use of secondary raw materials. The evolution of the recycling rate of plastic packaging waste in the EU (28) is shown in Graph 3 between 2005 and 2016.

Graph 3 Recycling Rate of Packaging Waste in EU (28) 2005-2016 in %



Source: own processing according to https://ec.europa.eu/eurostat/tgm/table.do?tab=table&plugin=1&language=en&pcode=cei_wm020

Since 2005, we have seen a gradual increase in the recycling rate (packaging plastic waste). In 2016, its rate was 42.4%, which is 2.5% more than in the previous year. EU countries, which have reached the highest level in the monitored indicator for 2016, are presented in Table 4 with year-on-year comparison.

Tab. 4 Recycling Rate of Plastic Packaging Waste in selected EU countries in 2015 - 2016 with year-on-year comparison in %

	country/year	**2015**	**2016**	**difference**
1.	Lithuania	54,8	74,4	+19,6 %
2.	Cyprus	63,7	63,7	0%
3.	Slovenia	63,4	62	-1,4%
4.	Czech Republic	61,7	59,2	-2,5%
5.	Bulgaria	60,8	52,6	-8,2%
6.	Slovak Republic	54,4	51,7	-2,7%
7.	Netherlands	49,8	51,5	+1,7%
8.	Sweden	49	50,7	+1,7%
9.	Germany	47,4	48,4	+1%
10.	Poland	30,8	46,9	+16,1%

Source: own processing according to https://ec.europa.eu/eurostat/tgm/table.do?tab=table&plugin=1&language=en&pcode=cei_wm020

Based on Table 4, Lithuania (74.4%) achieved the highest recycling rate for plastic packaging material in 2016, which improved the indicator by 19.6% year on year, the highest among the EU Member States under review. The second highest growth was recorded in Poland, which grew by 16.1%. By contrast, Bulgaria recorded the largest decline among the countries under review, with a recycling rate of 8.2%.

The rate of recycling of plastic packaging waste in V4 countries in 2016 was as follows: **Czech Republic 59.2%, Slovak Republic 51.5%, Poland 46.9% and Hungary 31.4%.**

Significant EU action in the fight against plastic production / consumption and waste generation can significantly affect the internal market in some industrial sectors. The plastics industry includes nearly 60,000 companies, mostly SME, employing over 1.5 million people (PlasticsEurope, 2018). That is why the adoption of a new plastic policy in the national economy must also be systematic and very consistent, with the least possible detriment to businesses.

Tightening environmental policy and making it difficult for business operators can create short-term consequences for those who do not adapt to the new conditions. Conversely, they can create new business opportunities underlining the words of Jyrki Katainen (European Commision, 2019): "In a modern economy we have to reduce the amount of plastic litter and make sure we recycle most of the plastics used. More innovative and sustainable ways of production will bring new opportunities for European businesses, increasing their competitiveness, growth and job creation. Once implemented, the new rules will not only tackle plastic pollution, but also make the European Union the world leader in a more sustainable plastic policy, thus driving forward our circular economy."

Conclusion

An important aspect in combating excessive plastic waste generation is compliance with the R's rules that create a sustainable system of circular economy. The production of plastic products is constantly increasing, which can contribute to the growth of the population in the future to even greater negative consequences, which are not only reflected in the environment, but also affect human safety and health.

As mentioned above, the ban on Chinese plastic waste import can further contribute to greater efficiency in the creation and adherence to the EU's environmental objectives. Member States are also very concerned about the over-generation of plastic packaging waste, which can be tackled with various alternatives that burden the environment to a lesser extent. These are different products that at first glance resemble plastic, but they are actually degradable and compostable products. However, their market price is still higher than the plastic equivalent. Although the recycling rate of this raw material in the EU is growing steadily, and a number of zerowaste-style businesses are emerging, it is essential to address the issue globally and come to a common consensus among global players on the market.

These important EU steps - creating an environmental strategy that reflects the welfare of its people and the environment in the long run with a view to future generations - put EU among the world's leaders in the fight against negative global threats.

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Foreign-trade relations of the Slovak Republic with Western Balkans[1]

Ľubica Zubaľová[2] – Kristína Drieniková[3]

Abstract

Considering the high orientation of Slovak foreign trade towards the EU markets, the Strategy of external economic relations of the Slovak Republic for 2014– 2020 identifies, among others, 4 main priorities: diversification of the territorial and commodity structure of exports increase the share of small and medium-sized companies and to boost export of services. Western Balkan region is of a significant importance for Slovak foreign trade policy and promoting mutual trade relations could lead to the fulfilment of the pro-export policy challenges in all priorities. The aim of the paper is to evaluate, on the basis of scientific methods, the trade relations between Slovak Republic and Western Balkans and to identify barriers and prospects for mutual relations' expansion.

Key words

Western Balkan, foreign trade, export, import

JEL Classification: F1, P45

Introduction

Considering the high orientation of Slovak foreign trade towards the EU markets (in 2018 the EU accounted for 85% of Slovak exports and 68% of Slovak imports), the Strategy of external economic relations of the Slovak Republic adopted for a period of 2014 – 2020 identifies, among others, four main specific priorities in its trade policy goals – regarding exports: diversification of the territorial structure of exports; diversification of the commodity structure of exports; to increase the share of small and medium-sized companies on exports; and to accelerate exports of services (Kašťáková & Ružeková, 2019).

There are prospective opportunities to deepen economic, trade and investment ties in the Western Balkan region which is important for the whole European Union – not only in terms of trade but also in terms of trade routes, security and stability. It offers a high degree of economic complementarity, untapped economic potential, new export markets and investment opportunities.

Therefore, the Western Balkan region is of a significant importance for Slovak foreign trade policy and promoting mutual trade relations could lead to the fulfilment of the pro-export policy challenges in all the priorities. Strategy of external economic relations is focused predominantly on the foreign trade policy. With regard to the dominant position of the EU countries in Slovak exports, the current support to the EU markets will be maintained, however the Export - Import Bank of the Slovak Republic (EXIMBANKA SR) will focus more on supporting exports to the markets of non-European territories. Besides the EU market, territories in the EU's near neighbourhood are the

[1] This research was supported by the Ministry of Education, Family and Sports of the Slovak Republic VEGA grants: VEGA 1/0420/19 - The importance of EU and Western Balkan trade cooperation in terms of expansion of entrepreneurs and VEGA 1/0546/17 - Impact of the geopolitical changes on enforcement of the EU strategic foreign trade interests (with implications for the Slovak economy).

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priority areas of economic and trade diplomacy of Slovakia. The Strategy identified specific countries of priority interest, among them Serbia, Bosnia and Herzegovina and North Macedonia from the Western Balkan region (MH SR, 2014).

The Western Balkan countries as the territory in the near neighbourhood, is among the priorities for Slovak capital exports also according to scope of the Slovak economic diplomacy in bilateral and multilateral relations by 2020. Primarily in Serbia, Macedonia and Montenegro, except traditional trade partnerships, there are prospects for investments of Slovak entities in these countries, especially their participation in the implementation of energy and infrastructure projects (MZV SR, 2016).

1 Methodology

The aim of the paper is to evaluate, on the basis of scientific methods, the trade relations between Slovak Republic and Western Balkans and to identify barriers and prospects for mutual relations' expansion.

In the introduction we emphasize the importance of Western Balkans for Slovakian foreign trade policy in terms of foreign trade strategy. Further we focus more closely on the analysis of mutual trade exchange with the region and individual countries and comparison of trade flows between years 2017 and 2018. We also briefly evaluate the commodity structure of mutual trade. For purposes of the analysis, we used the data of the Ministry of Economy of the Slovak Republic, Ministry of Foreign and European Affairs of the Slovak Republic, the Statistical Office of the Slovak Republic, ITC Trade Map and Eurostat.

In the following sections we highlight the main opportunities for development and expansion of mutual economic and trade cooperation, as well as summarize the main barriers for this cooperation development. To explore trade barriers and opportunities we used the data of Doing Business, Transparency International, European Commission data and scientific publications by Stanfey & Milatovic, Homkin and Dabrowski & Myachenkova. We faced some problems to get comparable date on trade with Kosovo, as Slovak Republic does not recognise the sovereignty of Kosovo and thus do not track and publish all trade information. However, Kosovo's impact on the trade with the region is negligible and does not affect the final conclusions.

2 Results and Discussion

All Western Balkans are signatories of preferential Stabilization and Association agreements with free trade provision facilitating and deepening trade flows, that govern trade relations between the EU (including Slovak Republic) and Western Balkans.

2.1 Slovakia – Western Balkans trade relations

Western Balkans foreign trade shares of GDP are relatively high, but as exporters their performance is weak and trade balance is deficit (partly compensated by income of labour remittances). Due to close integration with EU in trading, EU is dominant trade partner of Western Balkans, reaching 70% of their total trade. Slovakia´s biggest trading partner from the region is Serbia, 24th biggest trade partner overall (from 224 trade partners overall), Bosnia and Herzegovina

44th, Macedonia 54th, Albania 71th and Montenegro 73th. Trade with Kosovo is negligible and is not included in official statistic as Slovak Republic does not recognise independency of Kosovo.

Tab. 1 Slovakia´s foreign trade relations with Western Balkans (in Mio. EUR, 2008 – 2018)

	2008	**2009**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Total trade of Slovakia*	98623	80106	126109	126770	134015	138286	148411	159527
Trade with Western Balkans	592.4	560.5	847.7	832.6	893.3	951.6	1034.9	1115.2
Serbia	*432.7*	*391.1*	*536.4*	*505.3*	*538.0*	*631.5*	*703.9*	*766.2*
Albania	*25.7*	*52.4*	*43.3*	*46.7*	*41.9*	*34.5*	*39.4*	*28.3*
Bosnia and Herzegovina	*75.7*	*54.1*	*134.4*	*134.1*	*151.6*	*155.1*	*172.9*	*176.9*
Macedonia	*41.8*	*50.0*	*90.8*	*96.6*	*112.8*	*93.8*	*89.3*	*125.3*
Montenegro	*7.7*	*7.2*	*35.6*	*37.7*	*29.9*	*20.9*	*15.9*	*18.5*
Kosovo	*8.8*	*5.7*	*7.2*	*12.2*	*19.1*	*15.8*	*13.5*	*n.a.*
Trade with Balkan – in % of total Slovak trade	*0.60%*	*0.7%*	*0.67%*	*0.65%*	*0.67%*	*0.69%*	*0.7%*	*0.7%*

Source: own elaboration based on data of Statistical Service of the Slovak Republic. (2019). DATAcube. Retrieved May 28, 2019 from http://datacube.statistics.sk/#!/folder/sk/f69; and * Eurostat. International trade of EU, the euro area and Member States by SITC product group. Retrieved May 22, 2019 from http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do

Table 1 is indicating the development of trade between Slovak Republic and particular Western Balkans as well as with the region as the whole within the period of years 2008 – 2018. It is visible, that overall mutual foreign exchange is growing and reaching highest ever volume of 1115.2 Mio. EUR in 2018. The share of Western Balkans trade on total Slovak foreign trade is small, but steadily ascending, reaching 0.7% in 2018, the same share as in 2009, but at that time the reason was the low total Slovak foreign trade rather than gain in trade with Balkans. The foreign trade with all countries moved up, with exception of Albania, where trade exchange declined by 1% in our import and by 32% in export in 2018. Thanks to the increased export of Slovak republic to Montenegro by 16 %, mutual trade exchange continues growing. However, the import from Montenegro remained week reaching 50 000 EUR.

Table 2 contains the comparison of Slovakian import and export overall and with Western Balkans by countries in 2017 and 2018 and evincing the increase of total import of Slovak Republic in 2018 compared to previous year by 7.7% and exports by 6.6%.

Tab. 2 Slovak import and export with Western Balkans by countries (thousands EUR, years 2017, 2018), change vs. 2017 and share on Slovak foreign trade (in %, years 2017, 2018)

	2017		**2018**		**Change in %**	
	Import	**Export**	**Import**	**Export**	**Import**	**Export**
Total Slovak trade	71817207	74813273	77326032	79785593	107.7	106.6
Trade with Western Balkans	462703	560289	531833	583417	115	104
Serbia	*355737*	*349955*	*391973*	*374204*	*110*	*107*
Albania	*5486*	*33889*	*5429*	*22904*	*99*	*68*
B&H	*72226*	*100682*	*75199*	*101737*	*104*	*101*
Macedonia	*29106*	*59955*	*59177*	*66163*	*203*	*110*
Montenegro	*148*	*15808*	*55*	*18409*	*37*	*116*

Source: own elaboration based on data from Ministry of Foreign and European Affairs of the Slovak Republic. Retrieved May 29, 2019 from https://www.mzv.sk/podnikajme_v_zahranici/ekonomicke_informacie_podla_krajin

Overall Slovak import to Western Balkans rose by 15% and export by 4%. Import to three biggest trade partners in region of Western Balkan progressed by 10% in case of Serbia, 103% in Macedonia and 4% in Bosnia and Herzegovina. Import slightly declined in trade with Albania (by 1 %), but the significant fall by 63% was recorded in case of Montenegro. Total import from this country only reached 55 000 EUR. Export accelerated with all countries (by 1% – 16%) except for Albania, where the volume felt by 32%.

Tab 3 Slovak Republic – Western Balkans trade balance (in thousands EUR) and share of Western Balkans' import and export on Slovak overall import and export (in %) in 2018

		Share on total SR trade 2018 in %		**% of total trade with Western Balkans trade**
	Balance	**Import**	**Export**	
Serbia	- 17769	0.507%	0.467%	68.7%
Albania	17475	0.007%	0.029%	2.5%
B&H	26538	0.097%	0.128%	15.9%
Macedonia	6986	0.077%	0.083%	11.2%
Montenegro	18354	0 %	0.023%	1.66%

Source: own elaboration based on data from the Ministry of Foreign and European Affairs of the Slovak Republic. Retrieved May 29, 2019 from https://www.mzv.sk/podnikajme_v_zahranici/ekonomicke_informacie_podla_krajin

Table 3 evaluates trade balance of Slovak Republic in trade with Western Balkans, which is positive with all countries except for Serbia. Trade balance with Serbia is negative since 2017, in particular due to growing supply of sub-delivering companies (Leoni: wires, cables and wires systems, Yura: cables and harnesses, Bratstvo Subotica: railways supplies, etc.) (MZV SRa, 2019). The share of Serbia on total foreign exchange of Slovak Republic with Western Balkan region is 68.7%, significantly highest share of all countries, even if the share on overall Slovak import represents only 0.507% and export 0.467%. The second most important trade partner form the region is Bosnia and Herzegovina with 15.9% on regional trade with Slovak Republic and Macedonia with 11.2%. The trade with other countries is very small.

As it is indicated in table 1 and 2 **Serbia** is Slovakia´s largest trade partner in region (24th overall) with total trade reaching 766.2 Mio. EUR in 2018. The Slovak trade balance is, after long years of positive results, negative. Overall volumes of foreign trade is raising, import by 10%, export by 7 %. The exchange of goods with the second largest trade partner from the region **Bosnia and Herzegovina** (45th overall) is constantly growing since 2013. It has reached 176.9 Mio. EUR in 2018 and both export volume (by 4%) and import volume (by 1%) are on the increase. Slovakian trade balance has been positive over the past 3 years. **Macedonia** is Slovak 3rd biggest trade partner among Western Balkans. Mutual trade accounted for 125.3 Mio. EUR in 2018. While export to Macedonia went up by 10 %, import mounted by 103% compared to 2017. The import from the country was very low in 2016 and 2017, compared to previous years, however never reached the same high volume as in 2018 (75199 thousands EUR). The trade balance is positive since 2016. The foreign trade with **Albania** is rather small making the volume as low as 28.3 Mio. EUR. Export is on decline since 2013 and in 2018 decreased by additional 1% to 5429 thousands EUR. Import has been growing during the years 2013 – 2017 but declined in 2018 visibly and reached only 68 % of the value of the previous year. Trade balance is positive. **Montenegro** is a very small market and the mutual trade of the value 18.5 thousands EURO in the 2018 was the lowest in the region. Export started to grow moderately in 2016 and kept the same trend in 2018, when increased by 16 % to 18409 thousands EUR. Decline of import persists since 2016 and fell to only 37% of the value of the previous year (55 thousands EUR). Trade balance is in surplus.

As for the commodity structure of mutual trade, Slovakia exports to Western Balkans are dominated by electrical machinery and equipment – whereby it account for almost 64% of exports to Albania, to other countries these products account for around 30 – 40% of exports (39% of exports to Montenegro, 34% to Serbia, 43% to Macedonia and 28% to Bosnia and Herzegovina). Vehicles are the second most exported item to Western Balkan region (above all to Montenegro and North Macedonia). Steel and iron products, nuclear reactors, as well plastics are another most exported products to the countries of the Western Balkan (MH SR, 2018a).

On the other hand, import structure from the region is more diversified. Electrical machinery and equipment is the most imported product group from North Macedonia and Serbia (36% and 52% of exports, respectively). In the case of Montenegro, there has been a change in the import structure – in 2016 and 2017 the most imported products to Slovakia were ores, slag and ash (78% and 64% of imports, respectively), while in 2018 vehicles accounted for 60% of imports (ITC Trade Map, 2019). As for North Macedonia, imports to Slovakia rose more than 200% in 2018 when compared to the previous year. This increase was supported by the increase in some of the commodities groups. Imports of furniture rose (second most imported product group) by 540%, imports of nuclear reactors by more than 500%, imports of electrical machinery and equipment increased by more than 230%, imports of arms and ammunition rose by 257% as well as imports of toys increased by 1179 % (MH SR, 2018c).

In the case of North Macedonia, electrical equipment for the telecommunications industry is the main export commodity from Slovakia (accounting for 33% of Slovak exports in 2017), followed by exports of passenger cars and televisions. On the other hand, in addition to importing goods for the automotive industry (wires and cables) clothing and textile products predominate in Slovak imports from Macedonia (MH SR, 2018a).

According to Qorraj and Jusufi (2018) Western Balkans remain poorly integrated into the EU markets. Despite having some comparative advantages for a range of their products and services, they need to invest in new technologies and skills in order to increase their productivity and also to follow external market trends.

2.2 Opportunities to increase mutual trade

Slovakia, as a promoter of EU enlargement, supports the Western Balkans' European Union path and backs the mutual economic and cultural relations. The history of relations between Slovakia and Western Balkans, namely Serbia, dates back to the 16th century, when Serbians helped Slovakian city Komarno to fight against Osman inclusion. Finally, Serbs even settled in some areas of Slovakia. And vice versa, 250 year ago a wave of Slovakian immigrants arrived at area around Vojvodina. In 2010, Slovaks were declared as national minority in Serbia, which enables them further maintain their language, identity and culture in Serbia (Xinhua, 2019). All official **languages** in the region are Slavonic, understandable to certain level for Slovak trade partners, especially in non-official relations. Language, religion and history had a significant impact on the trade in Western Balkan region (Kaloyanchev, P., Kusen, I., Mouzakitis, A., 2018).

Despite the very good political relations, the trade exchange lags behind the potential. There are several potential sectors to accelerate mutual trade and investment between Slovakia and Western Balkan countries, especially in traditional cooperation sectors as **energy** - in construction and reconstruction of energy capacities and renewable energy projects. Serbia is considered to be very perspective partner for Slovakia in this sector regarding new technologies and green energy deliveries, construction of power plants or their reconstruction. There are many opportunities for subcontracting and technical advice as well as future extension of energy network. Energy sector is one of the largest sectors of the Serbian economy accounting for 10% of GDP (MZV, 2017). Also mutual cooperation with Albania could be increased in the energy sector as the country depends on hydro-energy, the only thermal power plant is out of order and demand for electricity is expected to rise by 60% by 2020 (MZV, 2018). Exports of technological units (power plants, production technologies) could be used to create export opportunities in these countries for other small and medium-sized enterprises of the Slovak Republic as subcontractors or complementary suppliers (construction of infrastructure, residential areas, services and others) (MZV SR, 2016).

Among another important sectors are **agriculture** (bio production, food processing), **infrastructure** (building and reconstruction of railways and highways), **environmental protection** (e.g. in Kosovo drinking water production and distribution, there is also a market for filtering equipment, wastewater treatment plants and equipment), **waste management**, **tourism** (hotels privatisation and hotels building).

Cooperation in the **military** sector is also promising, for example with Montenegro in armaments cooperation, defence industry or military education (SITA, 2017) and also with Macedonia which army was supplied with military equipment from Slovakia. Potential sector for cooperation with Bosnia and Herzegovina and Kosovo offers **mining and metallurgy** industry**.**

Slovakia also offered Macedonia and Montenegro **experience of innovation, society and e-government informatisation**, as well as experience in public finance management. (MH SR, 2018, a, b). Innovations are also another important priority for Slovak – Serbian cooperation. Slovakia and Serbia signed a Memorandum of Understanding in the field of innovation, innovative digitalisation and technology transfer in November 2018, which should *"contribute to the exchange of information in the field of digitisation and innovation, industrial potentials, as well as to increase cooperation between Serbian and Slovak innovation and start-up companies, as well as cooperation between faculties"* (Srbija.gov.rs, 2018). The memorandum of Understanding on Cooperation was signed also between the Slovak Innovation and Energy Agency and the Innovation Fund of Serbia in 2018 (Hnonline.sk, 2018).

2.3 Barriers to development of deeper foreign trade and investment interactions

Even if tariff barrier are reduced significantly by Stabilisation and Association agreements, non-tariff barriers (technical barriers, sanitary and phytosanitary measures and administrative barriers) could act as an impediment to free trade. OECD study found, that Western Balkan reduced significantly technical and administrative barriers in the process of convergence with EU norms and Aquis (Kaloyanchev, & Kusen & Mouzakitis, 2018). We have explored more closely following barriers: insufficient integration in the trade channels and EU supply-chains, trade openness, unfavourable business environment, documentary and border compliance, corruption, and underdeveloped infrastructure and logistic.

As far as **integration in the trade channels**, some countries of the region are better integrated than others – especially Serbia, North Macedonia and Montenegro as the main exporting countries of the region and as measured by the shares of exports of goods and services in their GDP (Qorraj & Jusufi, 2018). According to the most recent World Bank data – for 2017, the share of exports of goods and services on the GDP in Montenegro and Serbia exceeds 50% (55.4% and 52.4% respectively), in Montenegro it accounts for 41.1%, in Bosnia and Herzegovina for 38.9% and in Albania for 31.5%. Kosovo has the lowest openness constituting 26.6% of the GDP. Thus, this ratio is much lower when compared to Slovakia, where exports of goods and services account for almost 97% of the GDP (World Bank Group, 2019a). When comparing the **trade openness** measured by trade (aggregated value of exports and imports) to GDP, ratio indicating the importance of international trade in the economy, in North Macedonia, Serbia and Montenegro it exceeds 100% (125%, 114% and 105% respectively), in Bosnia and Herzegovina it almost reaches this share (95%) and the lowest level of trade openness has been reached in Kosovo (79%) and Albania (78% of the GDP). Trade openness of the Western Balkans is below expectations. The region lags behind the Central European countries – e.g. in Slovakia the share of exports and imports in the GDP has reached 191%, in Hungary 169%, in Czech Republic 152%, and also in Slovenia it exceeds 150%. (World Bank Group, 2019b). Slovakia has long been one of the top ten most open economies in the world, for comparison; in 2012 its openness was at 170.8% and in 2016 at 183.9%, which confirms the continuing status. The country´s high export performance and openness is the result of its participation in global value chains (MH SR, 2018d).

Tab 4 Doing business ranking Western Balkans and Slovakia (2019)

	Serbia	**Albania**	**B&H**	**Mace-donia**	**Monte-negro**	**Kosovo**	***Slovakia***
Total rank	48	63	89	10	50	44	*42*
Starting a business	40	50	183	47	90	13	*127*
Registering property	55	98	99	46	76	37	*9*
Getting credit	60	44	60	12	12	12	*44*
Minority investors protection	83	26	72	7	64	95	*95*
Getting electricity	104	140	130	57	134	113	*47*

Enforcing contract	65	98	75	37	68	50	*47*
Trading across boarders	23	24	37	29	47	51	*1*

Source: World Bank. (2019). Doing Business 2019. Retrieved May 22, 2019 from http://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf

Table 4 compares business environment of Western Balkans and Slovakia. **Business climate** is favourable in Macedonia, ranked on 10^{th} place by World Bank in Easy of Doing Business ranking (best place for getting credit in region and in protection of minority investors), Kosovo (relatively easy to start a new business), Montenegro (easy to get credit) and Serbia occupied 44^{th}, 50^{th} an 48^{rd} position out of 190; the worst performer was Bosnia and Herzegovina (89^{th}). All countries performed poorly in process of registration of property and in getting electricity (ranking from 57 – 157). Compared to year 2017, only Macedonia and Albania improved their overall ranking, all others dropped. Compared to Slovak Republic, all Western Balkans have more favourable conditions for starting business and minority investor protection. Slovak Republic, as a part of EU, has significantly better trading across border system. Access to electricity is one of the most important obstacles for foreign direct investment.

Trading across borders costs is associated with border and documentary compliance and domestic transport costs and time. Table 5 compares trading across borders in Western Balkan and Slovakia in 2018.

Tab 5 Trading across borders comparison *(2018, hours and USD)*

Rank (DB 2018)	Serbia 23.	Albania 24.	B&H 37.	Mace-donia 29.	Monte-negro 47.	Kosovo 51.	*Slo-vakia 1.*
Time to export (hours)							
Documentary compli-ance	2	6	4	2	5	38	1
Border compliance	4	9	5	9	8	21	0
Costs to export (USD)							
Documentary compli-ance	35	10	92	45	67	127	0
Border compliance	47	35	106	103	158	105	0
Time to import (hours)							
Documentary compli-ance	3	8	8	3	10	6	1
Border compliance	4	10	6	8	23	16	0
Costs to import (USD							
Documentary compli-ance	35	10	97	50	100	42	0
Border compliance	52	77	109	150	306	128	0

Source: World Bank. (2019). Doing Business 2019. Retrieved May 22, 2019 from http://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf

In Doing Business 2018 is Slovak Republic ranked as country 1 in trading across borders, where preparing of both export and import documentary takes 1 hour and costs are zero. Ranking of

Western Balkans varies between 23 (Serbia) to 51 (Kosovo), OECD ranking average is 26. In Western Balkans is the documentary preparing procedure more time consuming, taking 2 – 6 hours, in Kosovo 38 hours when exporting, 3 – 10 hours while importing. Border compliance takes 4 – 9 hours, in Kosovo 21 hours in case of export and 4 – 23 hours in import. Kosovo has the most time consuming procedures when exporting, Montenegro when importing. Time to export average for EU is 8,1 hour, in Slovakia up to 1 hour, time to import average for EU is 1,7 hour (border compliance) and 0,6 hour (border compliance), in Slovakia up to 1 hour altogether. Concerning costs, the most efficient exporters and importers are Serbia and Albania; costs of other countries are relatively high. EU average is 85.2 USD (border compliance) and 17 USD (documentary compliance) in export; 29.2 USD (border compliance) and 4,5 USD (documentary compliance) in import. Western Balkans ranking in time efficiency is worse compared to Slovakia and EU average, costs of border compliance in export in Serbia and Albania are rated below EU average (others above), and in costs of documentary compliance only Albania is performing better. Other countries are facing challenges for improvement. Bothe documentary and border compliance costs in import are higher compared to EU and SR average.

Custom and border efficiency and management, quality of **infrastructure and logistic** are below EBRD average. The quality of roads is especially unsatisfactory in Bosnia and Herzegovina, Montenegro and Serbia. Tracks wait 7 – 48 hours at border for custom control. Improvement of cross border management would save 800 Mio. EUR annually (Hopkins, 2018).

Transparency International Corruption Perception index confirms persistence of **corruption** in region; in 2018 Western Balkans were ranked between 99 (Albania) to 87 (Serbia) out of 180 countries. Albania, even if its position was improved by 5 points since last year, is the worst performer (Albania blocked the anticorruption reforms). Serbia has problems with maintaining the rule of law and judiciary, excess of public to information; Kosovo with transparency, rule of law, citizen engagements; Montenegro is solving political party financing and shadow on results of latest election. Development in Bosnia and Herzegovina, with poor administration, fraud, and accountability of prosecution, is worrying (Transparency International, 2019).

Bosnia and Herzegovina, Kosovo and Albania should speed up the process of full implementation of Stabilization and Association Agreement, namely the tariff reduction, so that all countries reach the same level of integration with EU in case trade liberalization. Not all countries of the region are members of WTO (Bosnia and Herzegovina, Kosovo and Serbia) so not all of them adhere to WTO standards. **Insufficient integration into EU supply-chains** is another barrier to trade and investment. Up to 50 % of Western Balkan region’s manufactured goods exported are those with low added value, labour and resources intensive and low skill and tech intensive (Stanfey & Milatovic, 2018). Each country has also different stage of adapting EU standards.

If **trade barriers** were removed, region would grow by 3.84 % annually (Dabrowski & Myachenkova, 2018).

Conclusion

The Western Balkan region is of a significant importance for Slovak foreign trade policy according to the Strategy of external economic relations as well as the scope of the Slovak economic diplomacy. Besides the EU market, the Western Balkans are among the priority areas of economic and trade diplomacy of Slovakia. In Serbia, Macedonia and Montenegro, except traditional trade partnerships, there are prospects for investments of Slovak entities in these countries, especially their participation in the implementation of energy and infrastructure projects.

Overall Slovak – Western Balkans mutual foreign exchange is increasing, in 2018 it reached the highest ever volume of 1115,2 Mio. EUR. However, the share of Western Balkans trade on total Slovak trade is small, but steadily growing, reaching just 0.7% in 2018. The trade balance of Slovakia in trade with Western Balkans, is positive with all the countries except for Serbia. The trade deficit with Serbia since 2017 has been mainly due to growing supply of sub-delivering companies. Serbia is the largest trading partner for Slovakia among the Western Balkans, accounting for 68.7% of the Slovak trade with the region, followed by Bosnia and Hercegovina on the second place (15.9%).

Slovak exports to the region are dominated by electrical machinery and equipment (accounting for almost 64% exports to Albania, to other countries for around 30 – 40% of exports), followed by vehicles (above all to Montenegro and North Macedonia). The import structure from the region is more diversified, however electrical machinery and equipment is also the most imported product group from North Macedonia and Serbia. In the case of Montenegro, unlike in 2016 and 2017, in 2018 vehicles accounted for 60 % of imports. As for North Macedonia, imports to Slovakia rose more than 200% in 2018 when compared to the previous year. This increase was supported by the increase in imports of furniture, nuclear reactors, electrical machinery and equipment, arms and ammunition, as well as toys.

Among the opportunities to increase mutual trade, the language (Slavonic languages), religion and history significantly support mutual trade and economic relations. Despite the very good political relations, the trade exchange lags behind the potential. There are several potential sectors to accelerate trade cooperation and investment, especially in traditional cooperation sectors as energy, agriculture, infrastructure, environmental protection, mining and metallurgy, as well as in the field of digitisation and innovation, industrial potentials.

As for the trade openness measured by trade to GDP ratio, the Western Balkan region lags behind the Central European countries. In North Macedonia, Serbia and Montenegro the ratio exceeds 100% (125%, 114% and 105% respectively), in Bosnia and Herzegovina it almost reaches this share (95%) and the lowest level of trade openness has been reached in Kosovo (79%) and Albania (78% of the GDP). For comparison, in Slovakia the share of exports and imports in the GDP has reached 191%, in Hungary 169%, in Czech Republic 152%, and also in Slovenia it exceeds 150%.

Besides limited competitiveness and export of products with low added value, custom and border efficiency and management, quality of infrastructure and logistic belongs to the most serious obstacles to foreign trade growth. In both documentary and border compliance performance is below OECD and EU average and improvement of cross border management would save 800 Mio. EUR. Persistence of corruption and poor access to electricity remain a significant obstacle.

Even though most tariff barriers were removed in the process of stabilisation and association, Bosnia and Herzegovina, Kosovo and Albania should speed up the process of full implementation of Stabilization and Association Agreement. Membership of Serbia, Kosovo and Bosnia and Herzegovina could help to adhere to WTO standards.

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Title: Trends and Challenges in the European Business Environment : proceedings of the 6th International Scientific Conference on Trade, International Business and Tourism

Published by: Vydavateľstvo EKONÓM, University of Economics in Bratislava
Dolnozemská cesta 1
852 35 Bratislava

Publishing year : 2019

ISBN 978-80-225-4646-1