ACTA OECONOMICA UNIVERSITATIS SELYE

International scientific journal
Volume 8.
No. 2

The publication of this issue was funded by the Pallas Athéné Domus Educationis Foundation.

PADE

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DOMUS EDUCATIONIS
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J. SELYE UNIVERSITY - FACULTY OF ECONOMICS

ACTA OECONOMICA UNIVERSITATIS SELYE

International scientific journal

Volume 8.
No. 2

2019
KOMÁRNO

EDITORIAL BOARD
ACTA OECONOMICA UNIVERSITATIS SELYE

Acta Oeconomica Universitatis Selye is published twice a year by the J. Selye University, Faculty of Economics, Bratislavská cesta 3322, 945 01 Komárno, Slovakia

CONTENS

DOES THE GOVERNMENT DEBT AFFECT COUNTRY'S COMPETITIVENESS?

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Received 08. August 2019, Reviewed 15. October 2019, Accepted 31. October 2019

Abstract

Competitiveness is a very wide area with a number of factors affecting it. One of the factors we are investigating is government debt. Government debt is usually perceived as something negative. But neither economy can perform without it. The aim of the paper is to determine whether a country's debt affects its competitive position. Using the example of the V4 countries, we will try to identify whether government debt has an impact on competitiveness and to what extent. When analyzing the time period of 6 years, competitiveness in the V4 countries has been different. Also, the government debt of given countries varies in height and development. When evaluating the results of the Pearson correlation coefficient, the resulting values for the V4 countries are different.

Key words: *Competitiveness, Government Debt, V4 countries, International Institute for Management Development, Economic Growth.*

JEL Classification: *O40, F63, E01*

Introduction

In many ways, competitiveness is an important indicator for countries. Already in 1776, Adam Smith, in his best-known work, The Essence and Wealth of Nations, developed the idea that the country's wealth depends on the country's ability to produce goods, provide services, and expand production on the principles

of cooperation. (Hronček, 2015) Thus, it is a classic concept of free competition, in which Smith emphasizes the selfish interests of individuals. (Tokárová, 2016) Nation's competitiveness is generally defined as a set of institutions, policies, and relevant factors that determine a country's level of productivity. (Ekici, Kabak and Ülengin, 2016) The existing structure of foreign trade of the country, can an extremely important factor perpetuating the competitive advantages already enjoyed. (Falkowski, 2018) National competitiveness is the ability of the national economy to work, thereby ensuring the growing well-being of its citizens while sustaining the productivity growth of its factors. This ability is connected with maintaining an environment for the companies and other institutions to create, use and sell goods and services that meet the requirements of global competition and changing social standards. (Chikan, 2008) Macroeconomic business environment is linked to the development of a country's and the international economy, and its direction. (Krajňáková et al., 2018)

The basic prerequisite for the rising standard of living of a country's population (Šanda and Křupka, 2018) is the long-term sustainable competitiveness of the domestic economy, which is related with the competitiveness of its businesses. (Hečková and Chapčáková, 2011) To obtain the good level of competitiveness of the country, the government must set the rules for efficient administration. Because, the public administration is an important part of every state ´s economy, which purpose is to provide various public services to citizens.(Mura and Vlacseková, 2018)

Entrepreneurial activity is considered as one of determinants of economic development in market economies, in V4 counties too. (Zygmunt, 2018) The developed region is an accelerator of the country's economic growth (Grybaitė and Stankevičienė, 2018), thus affecting its competitive position (Štefko et al., 2010). Liu (2017) notes that international competitiveness is a key concern for policy makers, managers and academics. With the increasing degree of globalization changing the role of nations in competitiveness, we need to develop a better understanding of international competitiveness at national, cluster and corporate level. At country level, the ultimate aim of competitiveness is to maintain and increase the real income of its citizens, which is usually reflected in the standard of living of the country. (Ajitabh, 2008)

Competitiveness at national or transnational level is evaluated by many major institutions. Each year, selected organizations use dozens of objective and subjective indicators to assess the wealth created by world nations and subsequently publish an assessment of national competitiveness. These assessments serve as a benchmark for policy-makers and other stakeholders to assess their country's relative competitive performance in a global context. (Ekici, Kabak and Ulengin 2016)

The International Institute for Management Development (IMD) is an independent business school with Swiss roots and global impact, expert in leadership development and transforming organizations to create permanent influence. As a world pioneer in competitiveness studies, IMD considers its mission to improve people's lives by helping countries and companies create long-term value. Its activities focus on the creation and implementation of seminars on competitiveness and on the creation of research materials to support the understanding of the pillars of competitiveness of companies and national economies, it publishes World Competitiveness Yearbook (WCY) annually. (IMD, 2018)

IMD measures four competitiveness factors and each factor consists of five sub-factors. These are 20 partial factors together. These criteria emphasize market support for business and the ability to attract investment. (Loo, 2015)

Picture 1 Factors of competitiveness according to IMD

Economic Performance	**Business Efficiency**
Domestic economy	Productivity and efficiency
International trade	Labour market
International investment	Finance
Employment	Management practices
Prices	Attitudes and values
Government Efficiency	**Infrastructure**
Public finance	Basic infrastructure
Fiscal policy	Technological infrastructure
Institutional framework	Scientific infrastructure
Business legislation	Health
Societal framework	Environment and education

Source: own processing according to Loo 2015

The relevance of government debt for economic growth has become crucial, particularly in a context where policy makers have to face increasing fiscal imbalances. In terms of economic theory, at moderate levels of government debt, fiscal policy may induce growth, with a typical Keynesian behaviour. However, at high debt levels, the expected future tax increases will reduce the possible positive effects of government debt, decreasing investment and consumption resulting in less employment and lower output growth. (Afonso and Jalles, 2013)

The linkages between fiscal policy and growth have been the object of several analyses For instance, Gemmell (2004) has summarised many existing empirical work dividing it into three generation studies depending on the econometric methods used. Even though our main purpose is empirical in nature, it is worth referring to some initial theoretical contributions which serve as the underlying basis for our analysis. (Afonso and Jalles, 2013)

Public debt has important influence over the economy both in the short- and the long run. The conventional view is that debt (reflecting deficit financing) can stimulate aggregate demand and output in the short run (assuming no non-Keynesian effects), but crowds out capital and reduces output in the long run. (Kumar and Woo, 2010) Most policymakers do seem to think that debt reduces long-run economic growth. This view is in line with the results of a growing empirical literature (Reinhart and Rogoff, 2010; Kumar and Woo, 2010) which shows that there is a negative correlation between public debt and economic growth in advanced and emerging economies, and finds that this correlation becomes particularly strong when public debt approaches 100 percent of GDP. The link between public debt and economic growth could be driven by the fact that it is low economic growth that leads to high levels of debt. (Panizza and Presbitero, 2012)

Material and methods

The purpose of this paper is to determine whether a country's debt affects its competitive position. For the analyzes we chose the V4 countries and 6 seasons (2013 - 2018). We have divided this main objective into several sub-objectives in order to achieve it in successive steps.

First of all, we chose one of several competitiveness research institutions. It is IMD, which evaluates the competitiveness of selected countries and compiles a ranking of these countries every year. In the last year's evaluation, this institution has analyzed 63 countries, with a strong predominance of European countries. We analyze the V4 countries' competitiveness according to the IMD assessment based on the data from the annual reports.

In the next step we evaluated the evolution of countries' debt through the government debt indicator. Data were obtained from Eurostat. All analyzed data are also presented in graphical or tabular form.

At the end of the research we focused on statistical determination of correlation between evaluation of competitiveness and government debt. The correlation analysis detects the dependence of two variables. Thus, if one variable is changed, this change also affects the other. The correlation was processed with the help of mathematical software R. The Shapiro - Wilk test was chosen to test the normal segmentation of the sample. Dependence, or the strength of the dependence and the relationship between the variables is determined by the Pearson correlation coefficient. Based on the observation of the p-value, we determined whether or not there is a dependency on condition of hypothesis verification:

- H_0: $\alpha=0$
- H_1: $\alpha \neq 0$

The strength of the relationship according to the value of the correlation coefficient (r) in absolute value was assessed as follows:

- (r) <0,1 (trivial correlation),
- 0,1 – 0,3 (small correlation),
- 0,3 – 0,5 (mean correlation),
- 0,5 – 0,7 (high correlation),
- 0,7 – 0,9 (very high correlation),
- (r) > 0,9 (almost perfect correlation).

Results and Debate

The assessment of the competitiveness of the V4 countries according to the IMD assessment shown in the annual reports is discussed in this section.

Table 1 Position and score of Slovakia in the IMD competitiveness ranking

	2013	2014	2015	2016	2017	2018
Slovakia (rank)	47	45	46	40	51	55
Slovakia (score)	54.485	53.302	57.176	65.886	64.727	60.037

Source: own processing according to The IMD World Competitiveness Scoreboard

The table below shows the evolution of the ranking and the achieved competitiveness score of Slovakia in the IMD ranking measured on the basis of four factors and displayed in the World Competitiveness Scoreboard from 2013 to 2018. From the total of 60 countries evaluated, Slovakia was on the 47the position in 2013. Ranking 45th in 2014 and 46th in 2015 did not represent a significant change in ranking for Slovakia compared to the 2013. The following year, Slovakia got worse assessment and gained an unfavourable development, ranking on 51st place. In 2018, it confirmed the worsening tendency of placement and fell to 55th position, a score of 60.037 out of 63 countries evaluated.

Table 2 Placing V4 countries in the IMD competitiveness ranking

	2013	2014	2015	2016	2017	2018
Czechia	35	33	29	27	28	29
Hungary	33	36	33	33	38	34
Poland	47	45	46	40	51	55
Slovakia	50	48	48	46	52	47
Number of evaluated countries	60	60	61	61	63	63

Source: own processing according to The IMD World Competitiveness Scoreboard

Table 2 describes the processed Global Competitiveness Index of the V4 countries over the period 2013-2018, based on a sample of 63 countries and more than 340 competitiveness measuring criteria. The Czech Republic has been better in this ranking compared to Slovakia. In the whole monitored period it reached the highest ranks among the V4 countries. The second best country is Poland. In 2013 it had even higher ranking of competitiveness than the Czech Republic. Slovakia and Hungary occupied the last place in the IMD competitiveness assessment among the V4 countries. In the last year, Slovakia gained even the worst position among the V4 countries on 55th place from 63 evaluated countries. What is most interesting in the period under review the highest places in all analyzed countries were achieved in 2016.

The analysis of government debt was based on absolute values expressed in millions of Euros and on the share of government debt in GDP expressed in%. The percentage has a higher informative value when comparing countries than absolute values, therefore these values are also included in the article.

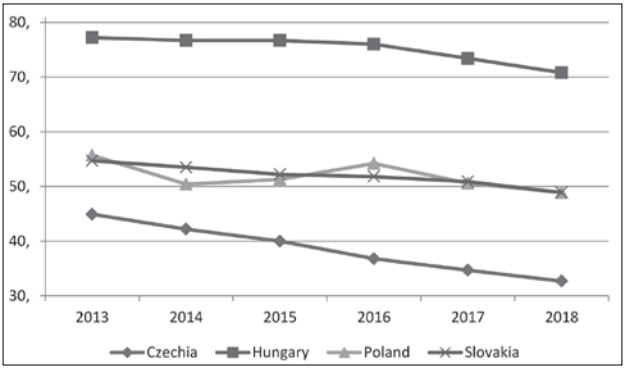
Table 3 General government gross debt in million Euro

	2013	2014	2015	2016	2017	2018
Czechia	67 102.2	65 588.5	67 951.6	64 945.2	68 515.1	67 449.7
Hungary	78 593.2	79 195.2	83 443.1	87 038.6	90 735.7	92 861.2
Poland	222 120.4	202 973.2	216 529.2	228 840.9	240 776.2	240 470.1
Slovakia	40 600	40 725	41 295	42 053.2	43 231.1	44 144.5

Source: own processing according to Eurostat

All countries except the Czech Republic show a growing volume of government debt in the period under review. Only in the case of the Czech Republic is this development fluctuating with ambiguous direction in this short period. The highest values of government debt have just the largest country, which is Poland. Contrast, Slovakia has the lowest volume of government debt.

Graph 1 General government gross debt as % of GDP in V4 countries



Source: own processing according to Eurostat

If we look closer at comparing the V4 countries with the indicator of government gross debt as% of GDP, the informative value of the results from the absolute values is different. Countries which in absolute terms had the highest (Poland) and lowest (Slovakia) values of the indicator are now countries with mean values (50-55 %) within the V4. The Czech Republic has the lowest debt ratio, with the current downward trend. In 2018, the value of government debt as% of GDP in the Czech Republic was only 32.7 %, compared to Hungary, which had the highest, more than 70 % rate.

In the last part of the paper we come to conclusion, whether the debt of the country affects its competitive position. We determined the hypothesis and tested it using the statistical program R.

Hypothesis: We assume that there is a correlation between gross government debt and the competitiveness of the V4 countries.

- H_0: We assume that the ratio of gross government debt to the competitiveness of the V4 countries is statistically significant.
- H_1: We assume that the ratio of gross government debt to the competitiveness of the V4 countries is not statistically significant.

Before performing a Pearson correlation coefficient, it is necessary to determine whether the sample to be examined is derived from the baseline or selected sample with normal distribution by performing Shapiro - Wilk normality test, the values of which were obtained by data processing in software R.

Table 4 Shapiro - Wilk normality test

		Shapiro – Wilk test	
		Value (W)	**p – value**
Government debt	Czechia	0.97816	0.9246
	Hungary	0.79093	0.06822
	Poland	0.85438	0.2088
	Slovakia	0.96764	0.8599
Competitiveness	Czechia	0.90914	0.4624
	Hungary	0.96577	0.8475
	Poland	0.89257	0.3702
	Slovakia	0.9721	0.8886

Source: own processing

Table 4 presents the results of the Shapiro - Wilk test, which show that, for both government gross debt and competitiveness for all countries, the p - value is greater than 0.05. It follows that the sample under examination comes from a sample with a normal segmentation.

Table 5 Pearson correlation coefficient

	Pearson correlation coefficient Correlation coefficient (r)	**p – value**	**Evaluation of correlation**	**p – value**
Czechia	-0.958316	0.01015	Almost perfect correlation	**p ≤0,05 H_1**
Hungary	-0.6477051	0.2373	High correlation	**p ≥0,05 H_0**
Poland	-0.2599686	0.6728	Small correlation	**p ≥0,05 H_0**
Slovakia	-0.9854158	0.00211	Almost perfect correlation	**p ≤0,05 H_1**

Source: own processing

Table 5 It shows us the strength of the relationship and the demonstration of the positive impact of gross government debt on the competitiveness of the V4 countries, based on the results of the Pearson correlation coefficient. We assess the strength of the relationship for V4 country as follows:

- almost perfect correlation was observed in the Czech Republic and Slovakia,
- high correlation has been demonstrated in Hungary,
- small correlation was found in Poland.

The output of the correlation analysis on the basis of the p-value at which Hungary and Poland reached a p-value of ≥ 0.05 implies that we cannot reject H_0, i. e. we have no reason to reject H_0. The level of gross government debt reliance on the

competitiveness of Hungary and Poland is statistically significant, thus the positive impact of gross government debt on the competitiveness of these two countries has been demonstrated.

On the other hand, in the Czech Republic and Slovakia the p-values were ≤ 0.05, which means that we cannot reject H_1, thus we have no reason to reject H_1, and therefore the level of government gross debt dependence on the competitiveness of the Czech Republic and Slovakia is not statistically significant. Thus, the positive impact of gross public debt on the competitiveness of the Czech Republic and Slovakia was not demonstrated.

Conclusion

The competitiveness of the countries is not only a number or position in ranking. It is a figure that evaluates a country compared to others. It gives us an initial signal about the state of the economy in the country. Based on the IMD assessment, we could see that the most competitive country was the Czech Republic and the least in 2018 was Slovakia. Government debt is undoubtedly an important indicator of the state of the economy. Analysis within the V4 shows that, the Czech Republic was the country where its GDP values were the lowest. The area of competitiveness was diminished on government debt and ranking, in this case we can state that low government debt helped the Czech Republic to be the most competitive country in the V4. However, based on the results of the Pearson correlation coefficient, the ratio of gross government debt to the competitiveness of the Czech Republic is not statistically significant.

In the case of Hungary, its competitiveness ability in the IMD ranking was rated low. At the same time, government debt as% of GDP was the highest. On the basis of the results of the Pearson correlation coefficient, the rate of dependence of gross government debt on Hungary's competitiveness is statistically significant, thus a positive impact of gross government debt on competitiveness has been demonstrated.

Based on our sample of V4 countries and diversity of results, we were not able to unequivocally confirm or refute the hypothesis. Nevertheless, in the reporting period of 6 years and the example of the V4 countries, we have achieved the objective that was set.

The diversity of the results obtained is a good starting point for the extension of the sample to a larger number of countries and at the same time to a larger time lapse of data, that could be an idea for further research and publication of new studies.

The issue of competitiveness and its influencing factors is currently very topical. It is a large area with many factors that affect it more or less. It is therefore necessary to look at it and examine in more detail the impact of several factors.

Acknowledgement

This work was supported by the Slovak Research and Development Agency under the contract No. APVV-15-0322.

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THE MACROECONOMIC BEHAVIOR IN THE BALTIC STATES: PRE- AND POST- ACCESSION TO THE EU APPROACH

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Received 14. June 2019, Reviewed 17. August 2019, Accepted 06. September 2019

Abstract

Previous studies on the importance of economic development and involvement in the global economy disclosed that accession to the free trade agreements creates conditions for trade liberalization, economic growth, labor productivity and high technology development. This paper is focused to Baltic states accession to EU and describes how international trade indicators – imports and exports - evolved in the Baltic States after 2004, and provides an econometric insight in contribution of these indicators to macroeconomic behavior. The methods of the research include regression model parameter stability analysis. However, study showed that only changes in Baltic states productivity was inspired of trade liberalization after accession to EU. To other macroeconomic indicators as FDI % GDP, unemployment, R&D % GDP accretion to ES has not had any significant influence.

Keywords: *Baltic States, economic integration, macroeconomic behavior, EU.*

JEL Classification: *L66, L81, N7*

Introduction

It would be difficult to find a country not conducting international trade in the 21st global economy century. Such conclusions can be made by looking at the latest decades, which are distinguished by plenty of free trade agreements (FTA). These are trade liberalization conducted by World Trade organization and separate countries joining such unions as EU, CETA, NAFTA etc.

There are plenty of articles in scientific literature aiming to evaluate what influence international trading expansion is making on the growth of economy,

country welfare, competitiveness, environmental protection, labor market, development of the new technologies and direct foreign investments. However, there are not many articles evaluating Baltic states trade liberalization influence on macroeconomic behavior. Therefore, the main aim of this research is to evaluate the influence made on Baltic states macroeconomic behavior by trade liberalization. In this case accession to EU in 2004 is the starting point of the Baltic states trade liberalization.

In the beginning of 21th century, trade flows in the Baltic States have significantly increased. The largest increase has been captured for Estonia, while the smallest – for Latvia. The improvement of trade flows in Estonia has been determined by the growth of FDI per capita, which has had a direct impact on the country's export volumes. Accession to the European Union in 2004 significantly contributed to the growth of trade flows in Lithuania and Latvia.

There are articles in scientific literature discussing if free trade agreements really determine international trade development. Kolh (2014) analyzed 150 counties which accessed unions from year 1950 till 2010 (in intervals of 5 years) and noticed that more than half of free trade agreements had no significant influence on international trade development while around one quarter of analyzed agreements had influenced international trade growth.

Demian (2011) analyzed Central and Eastern Europe entry into Europe Union and also noticed that accession to the union had no influence on trade relations development. The research showed that accession to EU was not the main factor leading to the integration of regions. Probably stock flows liberalization and direct foreign investments help to establish connections with developed regional and neighboring markets. However, according to Goschin (2014), EU countries members can be more vulnerable because of higher economic openness. The author emphasizes that accession to EU encourages direct foreign investments, nevertheless it can overload results of the local business companies' direct foreign investments and cause negative trade balance.

In order to evaluate the impact of the pre- and post- accession to the EU on the macroeconomic behavior of Baltic States, were estimated model of Chow Breakpoint test, which allows to assess two samples, in this case, pre- and post-accession to the EU.

The impact of accession to the EU on macroeconomic behavior of the Baltic States was researched by employing the following indicators: productivity, unemployment, FDI % GDP and R&D %GDP. The research allowed to assess whether the changes in import and export volumes had any significant effects on the indicators of macroeconomic behavior before and after accession to the EU, and whether the strength of these effects changed comparing pre- and post-accession periods.

The research presented in the article revealed the existence of strong direct connection between trade indexes (import and export) together with country productivity and R&D % GDP. However, Baltic states trade liberalization after EU accession in 2004 had influence only on productivity index alteration while international trade changes had no influence on R&D expansion.

The paper is organized as follows: section 1 presents a short theoretical conception of macroeconomic behavior in the view of economic integration; section 2 introduces the research data set, method, and variables; section 3 discusses the results of the parameter stability and regression analysis; the final section presents the conclusions of the research. It should be noted that the research does not cover all possible factors underlying the differences in external sector performance and thus may need to be complemented with country-specific analysis as warranted.

The macroeconomic behavior in the view of economic integration

There can be several views distinguished evaluating the impact of international trade liberalization for economic behavior. Some economists prove that preferential trade agreements are danger for open multilateral relations, others try to convince that those agreements are a step toward multilateral liberalization. Meanwhile there are plenty of articles in scientific literature aiming to evaluate the influence of trade integration on international trade, economic behavior and country prosperity.

Moldovan (2015) and Allard (2009) distinguished the following advantages of the membership in economic unions: a substantial increase in public income, promotion of FDI, export growth (determined by removal of customs within the union), the development of infrastructure, transportation, education and health care, greater labor mobility and higher efficiency of public administration. What is more, the growth of national competitiveness is to a large extent determined by structural funding, which is extremely important to transition economies. Structural funds support the development of infrastructure, education and innovation in new member states, which, in turn, prompts the growth of national competitiveness.

Furthermore, accession to the EU significantly contributes to trade liberalization by making preconditions for labor productivity, high-technology and economic growth (Lacka, 2013). While assessing the opportunities of Serbia to access the EU, Katic et al. (2011) emphasize the benefits of competitiveness inspired by promotion of innovations, technological advancement and improvement of human capital.

Nevertheless, scientific literature provides some evidence that integration may negatively affect the competitiveness of local business companies. For low-tech countries, accession to an economic union may generate some negative effects. The companies that prior to the accession to a union used to exploit outdated, non-innovative and/or polluting technologies, often face the problem of non-compliance with the standards required. For this reason, the companies that fail to reorganize their activities and replace their outdated technologies with more innovative and environmentally-friendly ones, are forced to leave the market as they do not comply with union standards (Moldovan, 2015).

As it was noted by Goschin (2014), EU member states may become more vulnerable due to their greater economic openness. The author emphasizes the fact that although accession to the EU promotes FDI, it can as well burden FDI-based performance of local business enterprises and lead to a negative balance of trade.

Meanwhile Kolh (2014) analyzed 150 counties which accessed free trade agreements from year 1950 till 2010 (in intervals of 5 years) and noted that more than half of economic integration agreements had no significant influence on international trade development while around one quarter of analyzed agreements had influenced international trade growth. Sensitivity analysis conducted by Kohl (2014) revealed that effectiveness of different free trade agreements for country economy depends on such significant aspects as membership period, number of countries participating in the agreement, how many of them belong to WTO as well, quality of institutional structure determined in the agreement and what is the dimension of the main trade policy areas determined in that agreement.

Furthermore, Demian's (2011) research of the co-integration in Central and Eastern Europe revealed that accession to the EU did not have any significant impacts on the number of relationships. The results of the research showed that EU membership did not serve as a decisive factor of the general integration in the region. It is likely that country factors, such as liberalization of capital flows and FDI, helped to make contacts with other markets, whether developed, neighboring or regional.

However, as observed by Goschin (2014), EU members could become more vulnerable because of higher economic openness. The author emphases that accession to EU encourages direct foreign investments, but it can overload the results of local business companies' direct foreign investments and cause negative trade balance. There are significant number of articles in scientific literature assessing connection between the international trade openness and economy growth. International trade inspires inflows of FDI, capital, goods and services which, in turn, makes preconditions for economic growth in developing countries (Yanikkaya, 2003; Adhikary, 2010; Cho, S.-W. (Stanley), Díaz, 2013; Jones, Serwicka, Wren, 2017). Fetahi-Vehapia, Luljeta Sadikub and others (2015) made a research and noticed that economy acquires growth acceleration after trade liberalization. That includes liberalization of international trade, which inspires industry specialization and creates conditions for reduction costs needed to produce one unit of a product. That's why countries characterized as having higher trade openness exploit technological potential which encourages faster growth of economy.

Nevertheless, Abbas (2014) by research of the impact of international trade openness on economic growth, found that trade liberalization might have negative effects on the competitiveness of the states where national economies are to a large extent dependent on the volumes of real exports. Lee and Itakura (2018) analyzed connection between trade liberalization, growth of economy and country prosperity and noticed that the growth of economy inspired by trade liberalization is faster in smaller population countries.

The analysis of the scientific literature has revealed that, with reference to endogenous growth theory, trade liberalisation provides benefits to the countries with a comparative advantage at particular industries. This theory proposes that faster economic growth depends on specialisation and reduction of product unit costs. Following endogenous growth theory, countries with high trade openness indices have more opportunities to adopt technological innovations, which, in turn, determines faster growth of their economies. It is important to note that international trade openness helps to minimise transportation and investment costs, and allows to attract necessary foreign resources (Waugh, 2016).

Blanchard (2005) together with Bartelsman and others (2009) have opinion that countries move resources to other countries with the help of international trade aiming to develop industry, companies and sectors. Technologies and trade liberalization interaction is one of the main growth elements of efficiency and economic growth inspiring process of resources movements between countries. The movement of resources can be evaluated in two ways. First, companies which moved manufacture /trade or service sectors into the countries ensuring processes' execution at lower costs contribute economy of scale and profit optimization. Countries where resources are moved into get benefit from new workplaces creation, new technologies dissemination and increased competition in the local market. Second, the move of the resources can have negative effect in the local market because of labor supply decrease. Spinanger (1999) agrees with this statement according to him research, which was focused to outsource of the textile factory from developed countries to developing inspired by trade liberalization. The results revealed that decrease of local employees and number of factories in textile and apparel sector was inspired by trade liberalization effect.

Le and Chang (2016) notice one more negative aspect of the resource's movement. Developing countries which have weak environmental laws often specializes to produce lower quality, nature polluting goods. Meanwhile developed countries having strong environmental basis specializes in the less polluting industrial

branches. Due to this reason polluting industry is being moved from developed countries to developing. Krugman, Obstfeld and others (2012) gave a name 'Pollution Paradise' for the countries into which industry was moved because of more flexible legislation. It is important to note that countries specializing in low quality goods manufacturing experience negative trade liberalization effect, it means that goods quality correlates directly with the economy growth (Huchet-Bourdon, Le Mouël).

Evaluating the influence of trade openness for country prosperity should be noted that trade liberalization correlates directly with poverty reduction. The economy of developing countries which drastically reduced trade rates grew significantly faster and poverty decrease was faster as well comparing with the countries which didn't apply such an extreme trade opening policy. It's noticeable that due to the increased general economy growth emerging from free trade the income of poor people is increasing as well. This is being proved by international trade results which showed the decrease of inequality between countries from 1990 (International Monetary Fund, 2001). OECD, ILO and others conducted analysis (2010) on world countries trade, economy growth and employment tendencies. They noticed that the growth of the economy inspired by trade liberalization which is often accompanied by investment reformation promotes formation of human capital, neutral education towards gender equality and investments to the infrastructure.

Meanwhile connection between trade liberalization and employment is complex which means that workplaces inspired by trade openness are created and destroyed naturally at the process of economy progress. Economic and technologic changes are sometimes named as "*creative destruction*". Trade is one of the aspects helping to experience positive and negative consequences for the international economy. Dutt and others (2009) notice that trade opening have negative impact on employment. It means that in short period unemployment is increasing but it is important to mention that in long period perspective unemployment had decrease tendency inspired by trade liberalization. Western Europe countries analysis evaluating trade openness connection with wage showed that exporting companies pay 10-20 percent bigger salaries comparing with companies which are working just in the local market (Mayer ir Ottaviano, 2007).

According Ma, Dai, Wenm (2019), connection between trade openness and human capital can be described as follows:

- Wage mechanism. Scientists conducted research and made a conclusion that trade openness has influence on skills formation, it encourages investments into human capital and thus, allows formation of human capital.
- Technological progress mechanism. Trade openness can be the force of technical progress which generates demand of the human capital and encourages growth of the human capital. It is noticed that the growth of efficiency and complexity of export technologies is not only friendly to investments into human capital in cities and rural areas but also helps to increase investments into youth education and long-term human capital investments for employees.
- Fund consumption mechanism. Trade openness not only makes influence on human capital personal investments decisions but also makes influence on human capital investment decisions in all country, society and companies was noted by Chen and Zhao (2014) in their research. They also noticed that trade openness raises countries' financial investment into education and encourages further investments into human capital.
- Credit limitations mechanism. Empirical results of the research conducted by Chen and Zhao (2014) showed that the growth of the GDP to one resident caused by trade liberalization decreased limitations of human capital investments and in this way helped human capital formation.

Surveying scientific articles, the following conclusion can be made: trade liberalization is closely linked to macroeconomic country behavior, which is described by economy growth, promotion of competitive ability, country welfare and employment inducement. Therefore, the main aim of this study is to evaluate what influence Baltic states trade liberalization has on their macroeconomic behavior.

Research methodology

Research sample. This research is focused on the situation in three Baltic States – Lithuania, Latvia and Estonia. The analysis was conducted leaning on the data for 1995 – 2017, extracted from The World Bank and Eurostat data bases. The impact of accession to the EU on macroeconomic behavior of the Baltic States was researched by employing the following variables:

- Import - Imports of goods and services (Current US$)
- Export - Exports of goods and services (current US$)
- FDI - Foreign direct investment, net inflows (% of GDP)
- R&D - Research and development expenditure (% of GDP)
- Unemployment - Unemployment, total (% of total labor force)
- Productivity - GDP per hour worked

The research allowed to assess whether the changes in import and export volumes had any significant effects on the indicators of macroeconomic behavior before and after accession to the EU, and whether the strength of these effects changed comparing pre- and post-accession periods.

Research hypotheses:

H_0: accession to the EU has not had any significant impact on the link between trade and macroeconomic indicators in the states under research.

H_a: accession to the EU has had a significant impact on the link between trade and macroeconomic indicators in the states under research.

Research model. The linear models with import (IM) and export (EX) as independent variables, and FDI % GDP, R&D % GDP, productivity and unemployment as dependent variables were developed for each of the states:

$$R\&D\ \%\ GDP = \beta_0 + \beta_1 \cdot IM + \beta_2 \cdot EX \quad (1)$$
$$FDI\ \%\ GDP = \beta_0 + \beta_1 \cdot IM + \beta_2 \cdot EX \quad (2)$$
$$Productivity = \beta_0 + \beta_1 \cdot IM + \beta_2 \cdot EX \quad (3)$$
$$Unemployment = \beta_0 + \beta_1 \cdot IM + \beta_2 \cdot EX \quad (4)$$

β_i marks the parameters of the regression model.

In order to assess whether accession to the EU has had any significant impacts on the changes in trade (exports and imports) as an indicator of the macroeconomic behavior of the Baltic States, the methods of time series and model parameter stability were employed (a year of the accession to the EU was treated as a pseudo-variable).

Model parameter stability analysis allows to assess two independent samples, in this case, pre- and post-accession to the EU. In this analysis was applied Chow Breakpoint Test. The total of residual error sum of squares for both samples

reveals the value of Fisher's statistics which is compared with the corresponding critical value 0,05. When the value of Fisher's statistics is lower than the critical value, model parameters are treated as unstable. This means that the impact of trade on macroeconomic behavior of the Baltic States after their accession to the EU has not significantly changed, i.e. H0 is accepted.

The data were processed by employing the econometric software 'SAS'.

Research results

Baltic states trade openness (import plus export divided by GDP) change of index alteration in 1996-2017 shown in the Graph 1. It can be seen in the Figure that Lithuanian, Latvian and Estonian trade openness indexes were ranged in similar directions. It can be seen that Lithuania experienced more significant trade openness growth comparing with other Baltic states after 2004 accession to EU. Meanwhile, in 2009 Latvian trade openness index inspired by global economy crisis decreased, but not significantly compared with Lithuanian and Estonian indexes. Reviewing Baltic states trade openness indexes alterations, the following question can be raised: were trade indexes inspired by trade liberalization in 2004 or there were other factors?

Chow Breakpoint Test results and composed models R-squared values are shown in the Table 1. When evaluating Lithuania, it is visible that zero hypothesis is rejected - accession to EU had significant influence on macroeconomic indexes. Evaluated connection between productivity and international trade indexes (import, export), the result of F static value is equal to 0.001 and is smaller than confidence level α=0,05. Composed model R-squared value is equal to 0,93, i.e., international trade (import and export) alteration of indexes explain productivity changes in Lithuania even by 93 pc. R-square value 0.85 was calculated by analyzing R&D % GDP and import and export model. After evaluation of this model stability zero hypothesis was accepted, i.e. joining EU had no influence on R&D % GDP value dispersion, the conclusion was made because F-statistic value (0,057) was smaller than confidence level α (0,05). Evaluating unemployment level and FDI % GDP alteration in the analyzed period zero hypothesis was accepted because F-statistics > 0,05. Thus, parameters of the models are stable i.e international trade indexes inspired by accession to EU had no influence on unemployment and FDI % GDP alteration.

Graph 1. The dynamics of changes of Baltic States trade openness index over the period 1996 to 2017.

Source: created by authors

Latvian case is quite similar to Lithuanian, it is visible that alterations of international trade indexes inspired by accession to EU had influence on alteration of productivity index, in this case F- statistic <0,05, zero hypothesis is rejected. It's important to notice that composed model is significant i.e. indexes of international trade explain even 91 % of productivity dispersion in Latvian case. Important R – square index is calculated by composing R&D % GDP and international trade model of indexes, but evaluating this model zero hypothesis is accepted i.e. international trade indexes inspired by accession to EU had influence on R&D dispersion (F-statistics 0,701>0,05, but had no influence on alteration of unemployment (F – statistics 0,737>0,05). Zero hypothesis is rejected evaluating influence of the dispersion of international trade indexes FDI pc. from GDP, in this case F – statistic < 0,05, but model R – square index is equal to 0,52 i.e. alteration of Latvian import and export explains only 52 % of FDI % GDP index alteration.

Table 1. The results of the correlation analysis and Chow Breakpoint test.

Country	Indicator	Variable			
		Productivity	Unemployment	FDI	R&D
Lithuania	F- Statistic prob.	0,001	0,727	0,288	0,057
	Model R-squared	0,93	0,51	0,33	0,85
Latvia	F- Statistic prob.	0,000	0,737	0,017	0,701
	Model R-squared	0,91	0,52	0,35	0,75
Estonia	F- Statistic prob.	0,000	0,942	0,026	0,199
	Model R-squared	0,87	0,53	0,03	0,75

Source: Computed by authors.

According to the worked results Estonia is not significantly different from two other Baltic states. In this case alterations of international trade after accession to EU had influence on productivity and R&D % GDP alteration F – statistic < 0.05, zero hypothesis is rejected. But zero hypothesis is accepted when evaluating unemployment and FDI % GDP indexes F – statistics > 0,05. Very low R - square index equal to 0.03 validates that alterations of international trade had no influence for FDI so it can be stated that in Estonian case alterations of international trade have no linear connection with FDI % GDP, so accession to EU in 2004 did not have any impact on FDI % GDP index in Estonian case.

After reviewing Chow Breakpoint test and R-square results it can be stated that it would be the most right to evaluate composed models which have R – square index higher than 0.07 i.e. indexes of international trade explain analyzed indexes more than 70%. After evaluation of such results it was noticed that alterations inspired by accession to EU in all three Baltic States had impact on productivity, but not on R&D % GDP.

Model improvement. With the view to evaluate if accession to EU had really no impact on unemployment and FDI % GDP it would be worth to investigate the following: existence of connection between trade openness and unemployment and FDI % GDP also what are the variables influencing those indexes.

Conclusion

The variety of the scientific studies, which analyze the effects of economic unions, substantiates the relevance of this topic. Integration in economic unions, such as the EU, makes preconditions for promotion of macroeconomic indicators in particular FDI growth, export growth (determined by elimination of custom duties within a union), infrastructure, transport, education, health care development, labor force mobility and efficient public administration.

There are many scientific articles which analyze if trade liberalization agreements are really encouraging free trade development because one of the main purposes of free trade agreements is to encourage trade. On the other hand, numerous of studies justify that free trade agreements purpose is not necessarily implemented in real economy.

In this article, the links between economic integration and macroeconomic behavior indexes were analyzed by considering the case of the Baltic States and developing regression parameter stability models for each of the states. The correlation analysis, which disclosed the links between trade indicators (import and export) and macroeconomic behavior indexes in the Baltic States, and the model parameter stability analysis, which helped to assess the impact of import and export changes on the indicators of macroeconomic indexes before and after accession to the EU, have shown that accession to the EU has had significant impacts on the productivity index in all Baltic states. Moreover, export and import changes has not had any impact to R&D % GPD development. Meanwhile it is not expedient to value unemployment and FDI % GDP indexes because of low R-square index received after making regression equation with variables. It would be worth to explore the connection between trade indexes and unemployment and FDI % GDP for more dense analysis of this question because this article analyzed only linear connection between variables.

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RELATIONS BETWEEN PERFORMANCE TOURISM POTENTIAL AND ECONOMIC OUTPUTS OF THE REGIONS IN THE SLOVAK REPUBLIC

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Received 03. May 2019, Reviewed 20. September 2019, Accepted 30. September 2019

Abstract

Tourism considered as a complex global phenomenon is one of the most important economic sectors worldwide. The objective of this paper was to determine the extent of the impact of the capacity and profit potentials of tourism on the economic potential in the Slovak Republic on average for the period 2008 to 2017. The partial objective was to identify the mutual performance disparities among individual regions. We analysed the following indicators of the capacity potential: the number of accommodation facilities within tourism, the number of beds, the number of visitors, and the number of overnight stays by tourism visitors. Taking into account all the mentioned indicators, we state that the Žilina Region achieved the best capacity potential, while the Trnava Region achieved the weakest capacity potential. The succeeding metrics were analysed in assessing the profit potential at the regional level: average price for accommodation, revenues from accommodation, and net expenditures. The persisting existing disparities between the East and West of the country have been proven, as the Bratislava Region reached the best profit potential and the worst profit potential was noted in the Košice Region. The economic potential expressed by the average nominal wage and net money income confirmed the first rank for the Bratislava Region, while the lowest indicator values were found in the Prešov Region. In determining the impact of the output potential (capacity and profit) on the economic potential, the existing significant impact of the tourism profit potential on the economic potential of the Slovak Republic was confirmed. Based on the results, we can conclude that in order to increase the economic prosperity, especially in the context of indicators linked to wage, attention should be focused mainly on the service quality and price of accommodation, which is reflected in the achieving revenues analogically.

Keywords: *tourism, capacity and profit potential, economic outputs, regional disparities.*

JEL Classification: *O12, O50, Z32*

Introduction

Tourism is one of the most dynamically developing sectors and through its revenues it is already a separate section of the economy today. Although the link between economic growth and tourism development is obvious, Karaoulanis (2018) emphasizes that tourism development is a product of the economic growth, not vice versa. As Ševčík (2012) points out, tourism spans several sectors of the economy, and as part of the national economy it belongs to the tertiary sector (service sector). Tourism is therefore an intersectoral sector which also falls directly into the spheres of economy, industry, trade, finance, transport, culture, health care, education, regional development, sport, environmental protection, and employment.

By definition, the World Tourism Organization (UNWTO) refers to tourism as the activity of people traveling temporarily to a place outside their usual environment, with the main purpose of their journey being other than to pursue a gainful activity at the place visited. Based on regional results compiled by the UNWTO (2018), Europe has been the most visited region in the world for the eighth consecutive year. The total number of arrivals in Europe increased by 8% (52 million people) in 2017 compared to the previous year, reaching a total of 672 million tourists in that period. The increasing number of visitors was subsequently reflected in the total revenue in tourism, which in 2017 also increased by 8% to $ 519 billion.

In recent decades, tourism and its related areas have been an important source of economic growth on the global scale, contributing more than 10% to the world GDP, creating 1 in 10 jobs on the planet, accounting for around 30% of the sector's exports. Nonetheless, tourism does not receive sufficient economic or political recognition. In the context of international monitoring of the development of tourism, the World Economic Forum (WEF) proposed the so-called Travel & Tourism Competitiveness Index (TTCI), which regularly evaluates over 130 countries worldwide. The index is here to provide a comprehensive strategic tool for measuring a set of factors and policies that will enable the sustainable development of tourism, which in turn contributes to developing the competitiveness of countries (WEF, 2017).

The development of tourism is closely linked to new trends, which are determined mainly by social, economic, social-welfare, political, and demographic changes. The European Commission has defined 10 basic trends in the field of tourism, which will significantly influence its future development (Kotíková, 2013):

- demographic change,
- education and access to information
- increasing travel experience,
- information technology,
- sustainable development,
- emphasis on health and wellness,
- extending leisure time,
- lifestyle,
- transport,
- certainty and security.

In Slovakia, thanks to its natural and cultural potential, tourism has a strategic position in the national economy and society. For the purposes of monitoring the overall economic benefits of tourism in Slovakia, a Satellite CR Account was created, the creation of which was commissioned to the Statistical Office of the Slovak Republic. The Ministry of Transport, Construction, and Regional Development and the National Bank of Slovakia are involved in the cooperation. The basic objective of

the national tourism policy is to attract new markets and optimally meeting the needs of both national and international tourism visitors in a sustainable environment so as to ensure and improve the quality of life of the national population and for the national economy to benefit from it as much as possible.

In Slovakia, according to Kuhn, Tomášová (2011), tourism has been underestimated for a long time and it is seldom believed that the sector is a substantial source of income and may be instrumental in increasing the country's economic prosperity. Today, Slovakia is lagging behind especially in systemic solutions (the fields of innovations, management or quality certification of tourism services), but also in the area of cooperation of entities and visitor care. The structure of tourism in the territory of Slovakia is contained in Law Act No. 91/2010 Coll. on the Promotion of Tourism. The Law Act defines that the fulfilment of tasks in tourism is ensured at the State level by the Ministry of Transport, Construction, and Regional Development and other relevant entities. The exact classification of the structure of State authorities in the Slovak Republic (SR) is given in the following section.

Table 1 Structure of tourism authorities in SR

Level	**Entity/Organisation**
National	Ministry of Transport, Construction, and Regional Development
Regional	HTUs Regional Tourism Organizations (RTOs)
Local	Areal Tourism Organizations (ATOs) Tourist Information Centres Municipalities

Source: MTCRD 2016

Participant in tourism (as a subject) and the motivation of their travel should be the essential component of the whole process. Participant is a person who stays at a place outside his/her permanent residence for at least 24 hours, while the visited area has become an essential feature of the monitoring (Gregorová et al., 2015). The interest of the tourism client (participant) depends on the country's potential, the offer of accommodation and the overall attractiveness as the main prerequisites for carrying out any form of tourism.

Assessing and monitoring the benefits of tourism plays a key role in the overall assessment of the resulting effects. Tourism creates several economic, social-welfare, and environmental benefits (Roy, Roy, 2015). According to Nejdl (2011), the economic benefits of participating in value creation (e.g. price for accommodation and total revenue for accommodation) and creating business and job opportunities. Ali (2018) adds that the overall monetary revenue and expenditure in tourism also play an important role as important components in assessing the level of tourism maturity. Social-welfare benefits relate to increasing workers' knowledge, awareness of the culture, and pride of residents. Ecological benefits are given by the care of the territory, as the unfavourable environment prevents the development of tourism (Nejdl, 2011). In addition to the positive effects, tourism also has negative impacts. In the area of economic impacts, Holešinská (2012) advises e.g. the evasion of revenue generated from tourism outside the region's economy or the seasonality of travel. Page (2015) explains that seasonality of visitors is a typical feature of tourism and is a long-standing problem. Service providers need to look for ways to reduce the effects of seasonality

(market diversification, price adjustment or event organization). The question of the sustainability of tourism development is thus becoming increasingly important.

As reported by Badelescu (2015), tourism has a considerable capacity to support regional development, stimulate the development of the related sectors and has a major impact on the life and economic development. Within the country, however, each part of its territory has a different potential and different prerequisites for the development of tourism. It is therefore clear that the very preconditions for development (whether natural, economic or social) generate regional disparities, as the position of tourism in different regions is at a different level of significance. According to Jáč et al. (2010), regional differences in tourism are defined as differences mainly between economic performances of the relevant regions. The evaluation of various aspects determining the development of tourism in terms of regional development is dealt with, for example, by Schmude et al (2018); Sultana (2016); Pratt (2015); Petrevska, Gerasimova (2012). At the same time, it should be pointed out that the regions in the tourism sector do not function as enclosed entities and thus, if one region is prospering, the poorer region in its vicinity may gain some benefits (convergence). However, there is often a reverse effect (divergence), where an increase in investor interest in a region will widen the gap between the more developed and the lagging region (Franke et al., 2012).

Material and Methods

The aim of the research was to determine the extent of the impact of the capacity potential of tourism and the profit potential of tourism on the economic potential of the SR. Data for individual regions of the SR from 2008 to 2017 were entered into the analyses. The partial objective of the paper was to analyse the indicators reflecting the tourism performance potential (as to both capacity and profit) and economic performance indicators (economic potential) with the aim to identify mutual performance disparities in a comparative view among all the regions of the SR.

The data database consisted of different variables reflecting the prosperity of tourism and economic development of the country. The monitored units included individual regions of the SR (those of Bratislava - BA, Trnava - TA, Trenčín - TC, Nitra - NI, Žilina - ZI, Banská Bystrica - BC, Prešov - PV, and Košice - KI). The relevant data were obtained from the Statistical Office of the Slovak Republic and the MTCT databases.

Prosperity of tourism performance was monitored through capacity and profit potential, the level of which we quantified on the basis of seven selected indicators. The economic development of the country was quantified by means of two chosen economic performance indicators participating in the development of tourism. The following Table provides an overview of each performance indicator that we have divided into 3 categories for the needs of this paper.

Table 2 Overview of indicators of tourism performance and economic prosperity

Performance area	Indicator	Unit of measure
Capacity potential P_Cap	Number of accommodation facilities (AFs)	number in units
	Number of beds in AFs	number in units
	Number of visitors to AFs	person
	Number of overnight stays in AFs	number in units
Profit potential P_Profit	Average price per accommodation	€
	Revenues from visitors' accommodation	€
	Net financial expenditures	€
Economic potential E_FWD	Average nominal wage per employee	€
	Net financial receipts	€

Source: Our own elaboration

The value of the average nominal wage in the year 2008 is not available and for the completeness of the set its values in the relevant regions were estimated based on a linear trend.

The selection of variables in the area of capacity and profit potential was carried out on the basis of available statistical data representing the performance of tourism. Within the sectoral statistics, the Statistical Office of the Slovak Republic monitors the capacities and performance of accommodation facilities and related indicators for the heading of Tourism. In this context, we consider it important to define the terminology in this area:

- *Tourism accommodation facility* - a facility that regularly (or occasionally) provides temporary accommodation to visitors. This includes hotels, botels, motels, guest houses, tourist hostels, cottage settlements, campsites, other collective establishments and private accommodation.
- *Beds in accommodation facilities* - these include all the beds for guests' night rest, including occasional beds. It does not include beds intended for the owner and staff of the accommodation.
- *Visitor to a tourist accommodation* - a person who uses the services of a temporary accommodation facility regardless of the country of residence. Children are included in the number of visitors. The visitor uses accommodation services for holidays, tours, business trips, attendance at sports meetings, trainings and courses, spa stays, visits to relatives, etc.
- *Net money outflows* - include consumer spending and other net outlays. Consumption expenditure is the amount of expenditure on goods and services. Other net expenses are obtained from other gross expenses by deducting income tax and compulsory personal insurance
- *Net money receipts* - are calculated from gross money receipts by deducting income tax and mandatory personal insurance (i.e. statutory payments to health insurance companies/agencies and the Social-Welfare Insurance Agency).

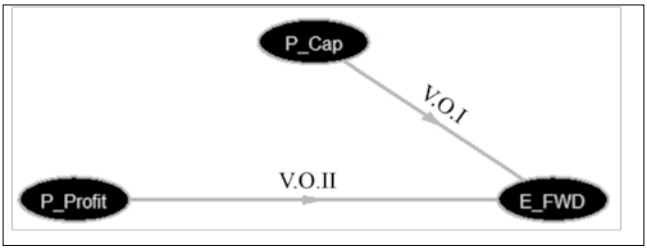
The choice of profit and economic potential variables was made on the basis of household income and expenditure statistics - *"Family Accounts"* monitored by the Statistical Office. The Partial Least Squares Path Modelling method was used for processing.

In accordance with the stated objective of the paper, the following 2 research questions were formulated (Scheme 1):

RQ 1: Is there a significant impact of the capacity potential of tourism on the economic potential of the Slovak Republic?

RQ 2: Is there a significant impact of the profit potential of tourism on the economic potential of the Slovak Republic?

Chart 1 View the research questions of the paper



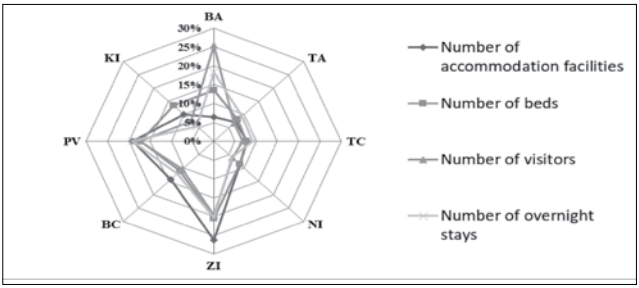
Source: Our own elaboration

Results and Discussion

The partial objective of the paper was to analyse selected indicators representing the tourism performance potential (categorized into capacity and profit ones), and indicators expressing economic potential for the period between 2008 and 2017 in order to identify the existing performance disparities based on the comparison of the relevant regions of the SR. An overview of the analysed indicators of tourism performance is given in the methodological part of the paper.

In the following section, we focus on a brief description of the indicators in terms of their average value over the period. We have processed the results in various forms of presentation based on the character of the indicators, while analysing and comparing the data for the relevant regions.

Chart 2 Structure of capacity potential indicators for the regions of the SR (%)



Source: Our own elaboration

The average number of accommodation facilities in the Žilina Region (891) was the highest in the analysis of the ***capacity potential*** in 2008–2017, while their share in the total number of accommodation facilities in the SR was up to 26.19%. On the other hand, the lowest number of accommodation facilities was noted in the Bratislava Region (221), which indicates only a 6.50% share in the total number for Slovakia. We have quantified about a third lower number of accommodation facilities compared to the Žilina Region for the Trnava, Trenčín and Nitra Regions. Overall, there were 3,402 accommodation facilities operating in the Slovak Republic on average over the period under review, which represents 425 facilities per region. Based on the analysis of the number of beds, the highest number of beds (39,258), of course, was found for the Žilina Region, while in the structure of the total number it is approximately 20.45%. Paradoxically, the second highest number of beds was provided in the Bratislava Region (26,043), despite the lowest total number of accommodation facilities compared to individual regions of the Slovak Republic. In addition to the aforementioned regions, more than 20,000 beds were also created within the Banská Bystrica, Prešov, and Košice Regions. Contrary to the above, accommodation facilities in the Trenčín Region offered the least beds to visitors (14,833). According to the data determined for tourism it can be stated that, on average, accommodation facilities in one region provided approximately 23,999 beds in the region and the total number in the Slovak Republic was 191,989 beds. In the context of capacity potential, the visitor count indicator also plays an important role. On the average during the period 2008 - 2017, the Bratislava Region noted the highest number of visitors in the comparison of regions (1,032,393), which represented roughly ¼ of all the visitors to Slovakia. No other of the surveyed regions has crossed the 1 million visitors' value threshold. The imaginary last place in the ranking of visitors was occupied by the Nitra Region (253,500), which only indicates 6.23% of the total number of visitors to the Slovak Republic. Similarly low values of visitors rate were also quantified in the Trnava and Trenčín Regions. During the period under review, the accommodation facilities in the Slovak Republic were visited by 4,070,708 visitors on average in one year, while there were approximately 508,839 persons per region. The last indicator in the evaluation of the capacity potential was the number of overnight stays by visitors. Within this indicator, values above the level of 2 million overnight stays were noted in the Bratislava (2,157,661), Žilina (2,393,684), and Prešov (2,288,664) Regions. Over 1 million overnight stays were made by visitors in Trnava (1,117,674), Trenčín (1,083,568), and Banská Bystrica (1,437,582) Regions. The lowest number of overnight stays was noted in the Košice Region with a share of only 5.57% in the total number of overnight stays. Overall, in the period from 2008 to 2017, on average 11,846,771 overnight stays were noted by visitors to accommodation facilities. Taking into account all the indicators, we may state that the best capacity potential was attained by the Žilina Region, while the weakest capacity potential was reported by the Trnava Region.

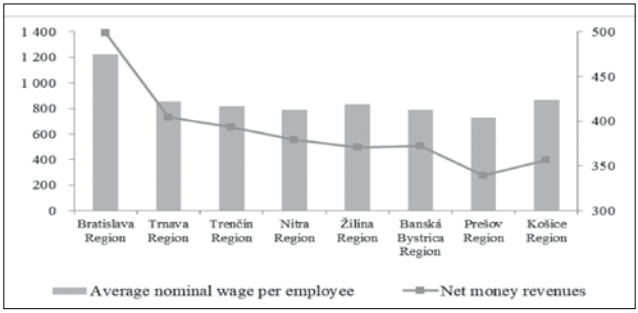
Table 3 Average values of profit potential indicators for regions of the SR (in €)

Region/Indicator	The average price per accommodation	Revenues from accommodation	Net money outlay
Bratislava	35.17	75,357,207	416.30
Trnava	24.64	27,593,596	348.60
Trenčín	22.20	24,061,550	343.94
Nitra	23.67	16,701,582	328.33
Žilina	22.74	57,716,184	332.47
Banská Bystrica	20.02	28,870,914	317.21
Prešov	20.38	46,903,758	283.63
Košice	24.82	16,316 365	298,73

Source: Our own elaboration

In the area of assessing the ***profit potential*** of the relevant regions of the Slovak Republic, we paid attention to the analysis of the average price of accommodation, the total revenues from accommodation, and net money expenses. Based on the well-known existing economic disparities between East and West of Slovakia, it is clear (and could be anticipated) that the highest price for accommodation on average in 2008-2017 was paid by visitors to accommodation facilities in the Bratislava Region, while the least paid price was by visitors to the Banská Bystrica and the Prešov Regions. The average price of accommodation in Slovakia in the period under review was at € 24.20. According to the results determined, it can be further stated that marked differences among the regions were noted in the achieved revenues from accommodation. During the analysed period, the highest revenues were generated by accommodation establishments in the Bratislava Region at the level of up to 25.67% in relation to the total revenues of this sector in Slovakia. The second highest value of revenues was found in the Žilina Region in the share of 19.66% in the revenues of the Slovak Republic. In total, up to 5 regions (those of Trnava, Trenčín, Nitra, Banská Bystrica, and Košice) earned revenues for accommodation below the 10% share in Slovakia. On a per-region basis, revenues were on average at the level of € 36,690,145 over the period under review, while the total revenues for the Slovak Republic reached an average of € 295,521,157 for 2008 to 2017. The analysis of profit potential was concluded by the indicator of the net money expenditure, which reached the lowest value in the Prešov Region, and vice versa, the highest values were found in the Bratislava Region. On average, the money expenditure per one region amounted to approximately € 334 over the period analysed. In the context of all the indicators, it may be concluded that the Bratislava Region has been the region with the best profit potential in the last 10 years, while the Košice Region can be described as the region with the worst profit potential.

Chart 3 Average values of indicators of economic potential by regions in the SR (in €)



Source: Our own elaboration

The last group analysed were indicators reflecting the economic potential of the Slovak regions. In this area, we focused on evaluating the indicators of the average nominal wage of the employee and the net money income. Based on the resulting values, the highest nominal wage (above € 1,000) was noted for the Bratislava Region, with the wage already below the threshold in all other regions. In the ranking of regions, the second place was taken by the Košice Region, followed by the Trnava Region. On the other hand, the lowest nominal wage in the period under review was noted for the Prešov Region. In terms of all the regions, the average wage of an employee in Slovakia was € 864 on average for the years 2008 to 2017. According to the net money income indicator, we revealed the same results as the Bratislava Region was again indicated as the best one and the Prešov Region closed the scale. In comparing the regions, we also found that the average money income in one region on average amounted to € 289 for the period under review. Taking into account the overall results, the same conclusions can be drawn as for the average nominal wage of an employee.

In the next part of the paper we focused on the analysis of the impact of the capacity potential of tourism and profit potential of tourism on the economic potential of the Slovak Republic in the analysed period 2008 to 2017 in accordance with the set research questions in the paper. In conclusion, we also monitored the impact of selected indicators with respect to the relevant potential category.

Table 4 Analysis of reliability of the model proposed

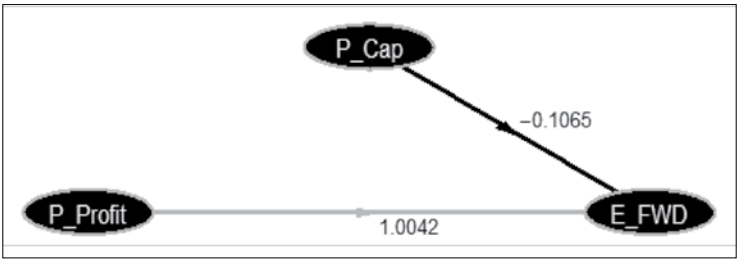
UNIDIMENSIONALITY	Mode	MVs	C.alpha	DG.rho	eig.1st	eig.2nd
P_ Capacity potential	A	4	0.902	0.933	3.11	0.720
P_ Profit potential	A	3	0.817	0.892	2.20	0.518
E_ Economic potential	A	2	0.960	0.980	1.92	0.077

Source: Our own elaboration

A particularly important activity for the credibility of the proposed model is the reliability analysis based on Crobnbach's α and Dillon-Goldstein's ρ. In both cases, the output is acceptable (very good). The last two columns point to eigenvalues,

which confirm unidimensionality. For the sake of completeness, it should be added that R2 is equal to 0.846 to three decimal numbers, which can be interpreted as a relatively high value. The following figure visualizes the inner model output.

Chart 4 Display the created model output



Source: Our own elaboration

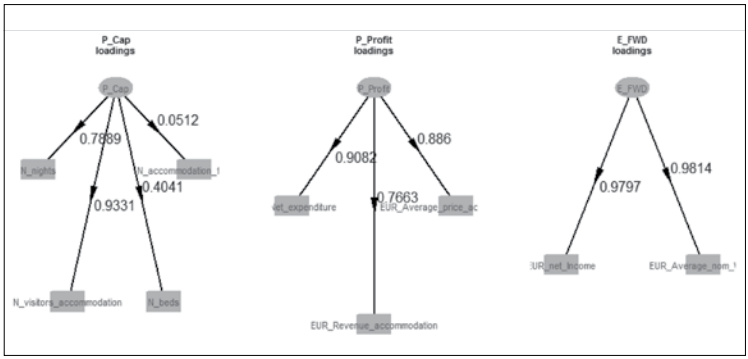
Table 5 Statistical characteristics of the model created

INNER MODEL	Estimate	Std. Error	t value	Pr(>|t|)
P_Cap	-1.07e-01	0.0768	-1.39e+00	1.69e-01
P_Profit	1.00e+00	0.0768	1.31e+01	3.06e-21

Source: Our own elaboration

The previous table shows in the last column the value of p, which is higher than the level α = 0.05 for the variable P_Cap (capacitance potential). It should be noted from the above that a positive answer is possible only in the case of the second research question. This means that the existing significant impact of the profit potential (P_Profit) of tourism on the economic potential (E_FWD) of the SR has been demonstrated.

Chart 5 Impact of indicators on the relevant potential monitored



Source: Our own elaboration

The previous diagram presents the degree of correlation between the selected indicators and the respective overall potential. On the basis of the results, we may interpret that the level of mutual relations ranged from weak to strong intensity. In terms of the capacity potential, the statistically strongest correlation was confirmed for the visitor count indicator (0.9331), while a negligible correlation was shown for the accommodation indicator (0.0512). In assessing the profit potential, we observed the strongest link for the indicator of net monetary expenditure (0.9082), while moderate dependencies were also revealed for the indicators of average accommodation prices and accommodation revenues. The results of the analysis within the last group confirmed the strong interconnection of both indicators to the economic potential at an average level of 0.9806.

A lot of research is devoted to the evaluation of tourism from the macroeconomic as well as microeconomic points of view and the study of its benefits in increasing the economic prosperity of the country. An example is represented by Latifian et al. (2018), who developed their own model to analyse the impact of tourism on the development of sustainable economic growth. The results confirmed that the impact of the sector is considerable and tourism is a strong driving force in the process. Our claim that tourism in terms of its economic benefits has a major impact on the economic growth has also been confirmed by Kadria (2016). In the paper, the author followed the economic impact of tourism on the growth and development of the selected country, in connection with various economic factors.

Conclusion

Despite many challenges, tourism, influenced by globalization trends, economic developments or the political situation in the world, is becoming increasingly important in the services sector. For this reason, it is essential to constantly work to strengthen its dominance in the national economy, to increase the attractiveness of Slovakia as a targeted holiday destination, to improve the structure of international visitors and to exploit the natural and cultural-historical potential of the country. All these starting points prompted us to carry out the research.

In the methodological part of the paper, a research objective was set, which was to determine the extent of the impact of tourism capacity and profit potential on the economic potential of Slovakia on average for the period 2008-2017. At the same time, the partial objective was to analyse indicators reflecting the performance and economic potential of tourism in order to reveal the existing performance disparities when comparing the regions of the SR among themselves.

The results of the first part of the evaluation within the capacity potential of the regions of the SR using selected indicators showed that the Žilina Region achieved the best potential, while the Trnava Region was indicated as the region with the lowest potential. Based on the analysis of the region's profit potential, the Bratislava Region reported the most favourable values for the period under review, while the ranking was closed by the Košice Region. According to the overall findings in the case of the economic potential examination, the Bratislava Region was the leader and the Prešov Region was the weakest.

The existing significant impact of the profit potential (P_Profit) of tourism on the economic potential (E_FWD) of the Slovak Republic was proven within the scope of determining the impact of the performance potential (capacity and profit) on the economic potential of tourism. In this context, in the context of the outputs

presented in the paper, it may be assumed that if we want to focus on increasing the economic development, especially in the context of indicators linked to wages, attention should be focused mainly on the quality and price of accommodation which is, by way of analogy, reflected in the revenues earned

This research paper has been elaborated within the framework of the APVV-17-0166 project, *„Economic and psychological factors of tourist expenditures: microeconometric modelling"*.

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SHOULD UNIVERSITIES IN THE FIELD OF MANAGEMENT STUDIES INFLUENCE THE ETHNOCENTRISM OF STUDENTS?

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Received 22. September 2019, Reviewed 14. November 2019, Accepted 29. December 2019

Abstract

The willingness to buy domestic products can predict the behaviour of future managers thus, the paper aims to examine the students - future managers' ethnocentrism. Consequently, the study also verified the reliability and validity of the CETSCALE in the Slovak language. An online questionnaire survey was conducted with 181 usable responses. The reliability of the CETSCALE in the Slovak language was acceptable (Cronbach $\alpha = 0.93$). The factor analysis results indicates the construct validity of Slovak version CETSCALE. The average level of ETC in the study was 74.376 points (out of 119). The results of ANOVA showed that only the differences between full-time and part-time students are statistically significant ($p < .0001$). The differences in ETC manifested according to gender ($p = 0.6642$) and generation ($p = 0.2263$) cannot be considered as statistically significant.

Keywords: *consumer ethnocentrism; CETSCALE; managers*

JEL Classification: *M53, M310, A20*

Introduction

The economic downturn in Europe has heightened the need to protect local economies and has revived consumers' tendencies at the expense of foreign products (Balabanis & Siamagka, 2017). These tendencies are highlighted with the common market (Stoklasa & Starzyczna, 2017), which increasing competition (Taborecka-Petrovicova & Gibalova, 2014), and moreover because it is one of the most lasting non-tariff barriers (Stamule, 2018). ETC is present with varying intensity in all European countries (Zalega, 2017).

The willingness of consumers to buy domestic products is a critical issue (Lesáková, 2016) for understanding how an individual makes buying decisions in a competitive environment (Wanninayake, 2014). Young consumers have been the focus of numerous studies like that because they represent far more potential than any other age segment (Spielmann et al., 2016).

Our view of the issue differs because we assume that consumer ETC affects individuals behaviours more broadly and thus we are not looking at young people as customers, but rather as future managers. Consequently, the study aim to verify the reliability and validity of the CETSCALE in the Slovak language and to examine the future managers' ethnocentrism (ETC) by their gender, generation, and the study form.

The paper structure is as follows. It opens with a literature review on ETC. Next, we explain the methodology and present the results of the statistical analyses. Finally, we draw some conclusions and discuss its implications.

Theoretical background

The concept of ETC first appeared in 1906 in the papers of William Graham Sumner. Shimp and Sharma (1987) adopted the ETC construct to marketing and defined it as "*the beliefs held by consumers about the appropriateness; indeed morality, of purchasing foreign made products*". Ethnocentric behaviour of consumers implies giving priority to purchasing domestic rather than foreign products (Vranješ et al., 2017). Moreover, as Sharma (2014) adds, high ETC consumers may even chastise others for purchasing imports. Highly ethnocentric consumers even feel that imports are wrong, not only because it is unpatriotic, but it will result in loss of jobs (Ramsaran-Fowdar, 2010), and in general, it harms the overall development of domestic economy (Matića, 2013). On the contrary, Guo and Zhou (2017) confirmed that consumer ETC has a positive influence on domestic product judgment and willingness to buy, while it has a negative influence on foreign product judgment but not on willingness to buy the foreign product.

The researchers have used CETSCALE (Shimp & Sharma 1987) as a tool for measuring consumer attitudes regarding ETC (Lumb & Kuperman, 2012) since its introduction. Most items in CETSCALE either prescribe what American consumers should do (Sharma, 2014). The scale was developed from 180 items in the United States and was then divided into two successive studies on large samples (Nadimi et al., 2012). The value of the scores defined by consumers designates the magnitude of ETC. Consumers who enjoy strong ETC beliefs are more akin to assess foreign made products negatively. Those who enjoy a lower level of ETC would be indifferent or score positively on foreign-made products (Nakip & Gökmen, 2017).

The CETSCALE was used in several studies in the Slovak condition (Taborecka-Petrovicova & Gibalova, 2014; Lesáková, 2016), but the reliability of the instrument was addressed only partially, and validity was not addressed at all.

The influence of age and gender have been analysed in several consumer ETC studies but with contradictory results. Awdziej et al. (2016) suggest that consumer ETC is not affected by gender and age. Matića (2013) stated that consumers' ethnocentric tendencies differ according to age, education level and level of household income. He did not find any significant difference between females and men. Neese and Davis (2017) results showed that female respondents exhibit significantly higher CETSCALE means as a group compared to their male counterparts. Pentz et al. (2014) results of the test of differences indicate that there does not seem to be a difference between the ethnocentric tendencies of women and men. Ethnocentric tendencies are more prevalent among men than women (Vranješ et al., 2017). According to Zalega (2017) women surveyed exhibit greater ethnocentric tendencies than men.

According to Stamule (2018), the Millennials are less ethnocentric than the Non-Millennials. Young consumers aged between 18 and 35 years show lower ETC than the midpoint value of the CETSCALE. Simultaneously, they show significantly lower ETC tendencies than consumers aged 36 years and above (Taborecka-Petrovicova & Gibalova, 2014). The empirical research has shown that demographic factors strongly affect the level of consumer ETC of people aged 65+. (Zalega, 2017).

We assume, in our case, that there is a relationship between customer ETC and his/her future employee behaviour because ETC can lead to disregard or contempt for other cultures (Murmu, 2014). It leads individuals to think that the beliefs, behaviours and values of his/her group are more positive than those of others who are out-group individuals. The implications for business are enormous given that being labelled as an organisation that encourages discriminatory company policies will certainly attract negative corporate image. It can be predicted that organisations that are not committed to at least reducing discrimination inside their structures and human resources policies will attract growing negative feelings, perceptions and opinions (Vasconcelos, 2015). On the other hand, according to Mura et al. (2017), the Visegrad Group countries apply the region-centric approach towards human resources management. Its advantage is knowing the regional conditions and hiring employees who are fully aware of the regional facts and are qualified. The exception is micro businesses with the comprehensive ethnocentric approach. Unfortunately, there is still very little research on the ETC of Slovak consumers subject (Taborecka-Petrovicova & Gibalova, 2014). It is also related to the fact that there has not yet been published a study about the validity of the Slovak version of CETSCALE.

Used data and methodology

The research utilised a quantitative design. An online questionnaire survey was used to obtain data. The survey was conducted during the winter semester of the academic year 2018/2019. There were 181 usable responses. In the sample, 65.75 per cent were women (N=119), 34.25 per cent were men (N=62), 20.99 per cent were full-time students (38), 79.01 per cent were part-time students, and most respondents belonged to the Generation Y. The full respondents' characteristics are presented in Table 1.

We used the 17-item CETSCALE (Shimp & Sharma, 1987) to measure ETC on a seven-point Likert scale with 1 being strongly disagreed and 7 being strongly agreed. This scale measures the tendency of consumers to submit to an ethnocentric purchasing behaviour towards outside products, and it has been validated in several studies (Chowdhury, 2015; Kalliny et al., 2017; Matića, 2013; Nadimi et al., 2012; Nakip and Gökmen, 2017). After translation of CETSCALE to the Slovak language, 5 participants focus group were asked about the understandability and ambiguity of the questions. Upon their opinion, the upgraded version of the questionnaire in the Slovak language was prepared. Additional questions addressing demographic information on gender, generation group, and the form of the study were added. Strategies and procedures for reporting and interpreting Likert scale scores were used following the Warmbrod (2014) recommendations. Appropriate Cronbach's α coefficient for the summated total score and any subscale scores (items) were calculated. To describe the reliability coefficients, they were compared with coefficients cited in the articles. The sum of the responses to a set of multiple items was calculated because it is a more stable and unbiased estimate than are responses to any single item in the set (Warmbrod, 2014).

Factor analysis of the CETSCALE was done to help explore latent factors that best accounts for the variations and interrelationships of the manifest variables. Kaiser-Meyer-Olkin (KMO) was used to measure of sampling adequacy (0.99385). Generally, a result greater than 0.5 is desirable. Bartlett's test of sphericity was used to test the null hypothesis about the appropriateness of factor analysis (<.0001*). The results of the statistical tests KMO and Bartlett's test of sphericity suggested that the Slovak version of CETSCALE was suitable for the factor analysis.

Shapiro-Wilk W normality test was used to determine if normal distribution models a data set. As Table 1 shows, Shapiro-Wilk W test supports the normal distribution hypothesis for all dataset, and also for partial data set tests. After that ANOVA was used to verify hypotheses stated as follows:

- **$H1_0$:** There is not a statistically significant difference in the ETC by gender. **$H1_A$:** There is a statistically significant difference in the ETC by gender.
- **$H2_0$:** There is not a statistically significant difference in the ETC by generation. **$H2_A$:** There is a statistically significant difference in the ETC by generation.
- **$H3_0$:** There is not a statistically significant difference in the ETC by the form of the study. **$H3_A$:** There is a statistically significant difference in the ETC by the form of the study.

Although this paper contributes to the literature in several ways, the described methodology has some limitations. Firstly, it is not easy to generalise results because of convenience sampling procedures were being used. Secondly, the self-reported questionnaire could cause response bias because of fear from reprisal. Thirdly, the small number (4) of Baby Boomers were compared with other generations because of the selected sample.

Table 1 Sample's descriptive statistics

	N	% of Total	Mean	Std Dev	Std Error	Lower 95%	Upper 95%	W	Prob<W*
Gender									
Man	62	34.25%	75.371	21.693	2.671	70.100	80.642	0.967	0.096
Woman	119	65.75%	73.857	20.685	1.928	70.052	77.662	0.989	0.468
Generation									
Baby Boomers	4	2.21%	77.000	11.431	10.452	56.374	97.626	0.908	0.472
Generation X	26	14.36%	74.423	23.736	4.099	66.333	82.513	0.979	0.851
Generation Y	106	58.56%	76.622	22.027	2.030	72.616	80.629	0.986	0.331
Generation Z	45	24.86%	68.822	16.458	3.116	62.673	74.972	0.962	0.142
The form of the study									
Full-time	38	20.99%	61.053	14.575	3.225	54.688	67.417	0.956	0.144
Part-time	143	79.01%	77.916	21.045	1.663	74.635	81.197	0.983	0.070
ETC									
(Total)	181	100.00%	74.376	20.988	1.560	71.297	77.454	0.990	0.228

**Note: H0 = The data is from the Normal distribution. Small p-values reject H_0.*
Source: Own calculation

Results and discussions

Table 2 presents the comparison of CETSCALE reliability expressed as Cronbach's alpha coefficient. Cronbach's alpha, as a function of the number of test items and the average inter-correlation among the items, measures the internal consistency of scale. A "high" value for alpha (more than 0.9), imply excellent internal consistency of the scale items.

Table 2 Comparison of CETSCALE reliability

Item					
Cronbach α	**Shimp & Sharma (1987)**	**Lesáková (2016)**	**Matića (2013)**	**Stoklasa & Starzyczna (2017)**	**Vranješ et al. (2017)**
1. Slovak people should always buy Slovakia-made products instead of imports.					
0.93	0.65				0.954
2. Only those products that are unavailable in Slovakia should be imported.					
0.93	0.63	0.946			0.954
3. Buy Slovakia-made products. Keep Slovakia working.					
0.93	0.51	0.947			0.954
4. Slovak products, first, last and foremost.					
0.93	0.65	0.948			0.953
5. Purchasing foreign-made products are un-Slovakian.					
0.93	0.64	0.949			0.954
6. It is not right to purchase foreign products.					
0.93	0.72	0.952			0.952
7. A real Slovak should always buy Slovakia-made products.					
0.93	0.7				0.951
8. We should buy products manufactured in Slovakia instead of letting other countries get rich off us.					
0.93	0.67				0.953
9. It is always best to purchase Slovak products.					
0.93	0.59				0.953
10. There should be very little trading or purchasing of goods from other countries unless out of necessity.					
0.93	0.53				0.953
11. Slovaks should not buy foreign products, because this hurts Slovakian business and causes unemployment.					
0.93	0.67	0.95			0.952
12. Curbs should put on all imports.					
0.93	0.52				0.954
13. It may cost me in the long run but I prefer to support Slovak product					
0.93	0.55				0.953
14. Foreigners should not be allowed to put their products on our markets.					
0.93	0.58				0.954

15. Foreign products should be taxed heavily to reduce their entry into Slovakia.					
0.93	0.6				0.955
16. We should by from foreign countries only those products that we cannot obtain within our own country.					
0.93	0.6	0.951			0.952
17. Slovaks consumers who purchase products made in other countries are responsible for putting their fellow Slovaks out of work.					
0.93	0.65				0.952
Entire set					
0.93	0.94 - 0.96*	0.949*	0.963***	0.802 - 0.843****	0.956

**Authors reported overall scores for four studies. Seven points Likert scales were used.*
***Author used modified seven items CETSCLE with responses from 1 = strongly disagree to 5 = strongly agree.*
**** Author reported only overall score. Scales with five points responses were used.*
***** Authors presented overall scores for studies from 2013 and 2017. Five points Likert scale were used.*
Source: Own calculation and calculations of cited scholars

We chose five studies to compare our results of reliability. The first study (Shimp & Sharma, 1987) presents the results of CETSCALE authors. Other four studies represent Slovak or linguistically similar versions of CETSCALE. Lesáková (2016) examined Slovak consumers´ ethnocentric tendencies in the dairy product category. She collected data from the sample of 265 respondents with modified seven items five points CETSCLE. Matića (2013) studied the impact of demographic, socio-psychological factors and the intensity of ethnocentric tendencies among Croatian consumers on a sample of 1000 respondents in Croatia. Autor used five points Likert scale and reported only overall Cronbach alpha score.

Stoklasa and Starzyczna (2017) measured the consumer ETC in the Moravian-Silesian region in the Czech Republic in 2017 on the 439 respondents. Five points Likert scale were used. Results from 2017 were compared with their previous research from 2013 on the 414 respondents. Authors presented only overall Cronbach alpha scores. Vranješ et al. (2017) determined the level of consumer ETC in Serbia on the 168 respondents. Five points Likert scale were used. Authors presented overall and also items Cronbach alpha scores. We also found several other studies with similar Cronbach alpha scores (Taborecka-Petrovicova & Gibalova, 2014; Wanninayake, 2014). According to the results, the reliability of the CETSCALE in the Slovak language was acceptable.

The objective of our factor analysis was to explore underlying latent dimensions in the Slovak version of the CETSCALE. According to Peterson (2000), this objective is accomplished when a set of factors, smaller in the number of variables has been extracted that conveys all or at least what is deemed to be an acceptable amount of the variance contained in the variables. Unfortunately, the consensus in the questions of what percentage of variance should be considered "*acceptable*" and what constitutes a "*high*" factor loading, does not exist. Factor analysis revealed the presence of three components with eigenvalues exceeding 1, but inspection of the scree plot revealed a clear break after the first component. The results presented in table 3 suggest the interpretation, that only one factor, namely ETC, should be extracted. Thus, also Slovak version of CETSCALE indicate the construct validity.

Table 3 CETSCALE eigenvalues

Number of factors of variance	Eigenvalue	Per cent	Cum Percent
1	8.2915	48.773	48.773
2	1.5753	9.266	58.04
3	1.0492	6.172	64.212
4	0.8371	4.924	69.136
5	0.7258	4.269	73.405
6	0.6607	3.886	77.291
7	0.5187	3.051	80.342
8	0.479	2.818	83.16
9	0.4657	2.739	85.899
10	0.4151	2.442	88.341
11	0.3552	2.09	90.431
12	0.3445	2.026	92.457
13	0.3219	1.894	94.351
14	0.2889	1.699	96.051
15	0.2678	1.576	97.626
16	0.2141	1.259	98.885
17	0.1895	1.115	100

Source: Own calculation

As Table 1 presents, the average level of ETC in the study was 62.5% (74.376 points out of 119). It places the result close to the middle of the proposed scale and is consistent with the results of other studies (Awdziej et al., 2016; Stamule, 2018; Taborecka-Petrovicova and Gibalova, 2014).

The respondents most agreed with the statement *"3. Buy Slovakia-made products. Keep Slovakia working."* (91.16%) most disagreed with the statement *"14. Foreigners should not be allowed to put their products on our markets."* (70.17%). Values for individual CETSCALE items are presented in Table 4. Presented results also indicate preferred respondents solutions because the second most preferred statement (81,22%) was *"12. Curbs should put on all imports"*.

Table 4 Individual CETSCALE items results

Item	1+2+3		4		5+6+7	
	N	% of Total	N	% of Total	N	% of Total
1	9	4,97%	28	15,47%	144	79,56%
2	22	12,15%	17	9,39%	142	78,45%
3	6	3,31%	10	5,52%	165	91,16%
4	28	15,47%	37	20,44%	116	64,09%
5	93	51,38%	38	20,99%	50	27,62%
6	118	65,19%	30	16,57%	33	18,23%
7	110	61,11%	32	17,78%	38	21,11%
8	41	22,65%	25	13,81%	115	63,54%
9	46	25,41%	42	23,20%	93	51,38%
10	47	25,97%	31	17,13%	103	56,91%
11	54	29,83%	44	24,31%	83	45,86%
12	16	8,84%	18	9,94%	147	81,22%
13	31	17,22%	31	17,22%	118	65,56%
14	127	70,17%	23	12,71%	31	17,13%
15	93	51,38%	24	13,26%	64	35,36%
16	47	25,97%	19	10,50%	115	63,54%
17	118	65,19%	29	16,02%	34	18,78%

Source: Own calculation

Further analysis shows the results of ANOVA between examined variables and tendencies of the future managers' ETC. Results were computed for each variable as shown in table 5. Based on findings only the differences between full-time and part-time students are statistically significant therefore we can reject the hypothesis $H3_0$. According to table 5, the p-values for hypothesis $H1_0$ and $H2_0$ shows, that we failed to reject both hypotheses, and therefore, we cannot consider the differences in ETC manifested according to gender ($p = 0.6642$) and generation ($p = 0.2263$) as statistically significant. Since part-time students are already mostly employed individuals, the results may indicate that the ETC is affected just by this factor.

Our results confirm the earlier Awdziej et al. (2016) study and partially confirm results of Pentz et al. (2014) and Taborecka-Petrovicova and Gibalova (2014). Results are in contradiction with the findings of Lesáková (2016) or Ramsaran-Fowdar (2010).

Table 5 Analysis of variance tendency of the future managers' ETC and examined variables

Hypothesis	Variable	dF	Sum of Squares	Mean Square	F	Significance	Result
$H1_0$	Gender	1	0.28983	0.28983	0.1891	0.6642	Supported
$H2_0$	Generation	3	6.64593	2.21531	1.463	0.2263	Supported
$H3_0$	The form of the study	1	28.66665	28.6667	20.8596	<.0001*	Rejected

Source: Own calculation

Conclusion

The study showed that CETSACLE is applicable in Slovak conditions. Its reliability was acceptable (Cronbach α = 0.93) and factor analysis indicated its construct validity. The average level of ETC in the study was 62.5% (74.376 points out of 119). The respondents most agreed with the statement "3. Buy Slovakia-made products. Keep Slovakia working." (91.16%). Most disagreed with the statement "14. Foreigners should not be allowed to put their products on our markets." (70.17%). Presented results indicate solution preferred by respondents because the second most preferred statement (81,22%) was "12. Curbs should put on all imports". The results of ANOVA showed that the differences between full-time and part-time students are statistically significant (p <.0001). The differences in ETC manifested according to gender (p = 0.6642) and generation (p = 0.2263) we cannot consider as statistically significant. Since part-time students are already mostly employed individuals, the results may indicate that the ETC is affected just by this factor. Results also confirmed, that characteristic such as age and gender is less important, thus in the future psychographic variables should be addressed.

Because universities are considered as a great platform to polish intercultural skills (Pragash et al., 2018) and managers with a higher degree of intercultural sensitivity are less apprehensive in intercultural interaction (Chen, 2010) we recommend to measure and deal with students' ETC. However, the required results depend on the fact for whom the universities prepare graduates (Csehné Papp et al., 2017). If it is multinational companies, the goal should be to decrease students' ETC otherwise especially if it is micro businesses they could increase it.

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RESEARCH ON FACTORS AFFECTING THE SELECTING INTENTION COMMERCIAL BANK IN DANANG CITY,VIETNAM

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Received 26. October 2019, Reviewed 15. December 2019, Accepted 30. December 2019

Abstract

It is important that banks now need to know clearly about the psychology and needs of customers, what customers really think, what they need and how they are affected by the surrounding environment that will help the bank adopt policies to attract and develop appropriate products in the competitive market today. Convenient sampling methods were implemented using 200 questionnaires to collect data from customers with at least one time in using bank service. Descriptive statistical analysis, cronbach's alpha reliability analysis, EFA factor analysis, linear regression analysing were all used to determine which factors affecting the selecting intention Commercial Bank in Da Nang City. The results show that employees quality is the most important factors affecting the selecting intention Commercial Bank in Danang City. Based on the results of this study, we hopes that contributing to the orientation of construction, development and increasingly perfect to meet the needs of customers in order to improve business efficiency and competitive efficiency of Commercial Bank.

Key words: *Selecting intention, Cronbach's Alpha, EFA, Linear regression*

JEL Classification: *C30, C32, L23*

Introduction

The outburst of the commercial banking system has put customers in front of many opportunities to choose rich products and services that are more diverse and easier to change banks.This requires domestic banks in general and commercial banks in Da Nang to do their best in improving their capacity to improve competitiveness, make a difference to collect attracting new customers and maintaining old customers, which is what most businesses now care about not only commercial banks. It is important that banks now need to know clearly about the psychology and needs of customers, what customers really think, what they need and how they

are affected by the surrounding environment that will help the bank adopt policies to attract and develop appropriate products in the competitive market today.

The study of Pham Thi Tam and Pham Ngoc Thuy (2010) seeks to the factors influencing customers' intention to choose banks. The results show that brand awareness factor has the strongest impact on the intention of bank selection, followed by factors such as convenient location, troubleshooting, the influence of relatives and appearance and finally, marketing. This study provides certain results in determining the factors that affect the tendency to select a bank. However, the scope of research is limited to the central wards of Da Lat city and data were collected by a convenient sampling method, so the market is quite homogeneous, the sample is not highly representative.

The study of Ha Nam Khanh Giao and Ha Minh Dat (2014), when evaluating the elements of selecting commercial banks of the elderly in the city Ho Chi Minh pointed out that there are 7 factors that elderly customers are interested in when selecting banks, including Quality of employees, price, reputation, experience, facilities, incentives, and references... When distinguishing customers by income or service use, all seven factors have similar interests of groups. When distinguishing age, sex or working status, there will be differences in the level of interest in the seven banking options of groups. The significance of this study has yielded certain results in identifying and evaluating the factors that elderly customers are interested in when choosing a bank. This partly helps banks understand the attitudes and expectations of consumers when choosing banks.

Material and Methods

Individual customers are one of the important customer groups of the retail market segment that banks are targeting. "Bank customers are anyone who has an account with a bank" (United States Commercial Law of 1957). Or "*Customers must have an existing account, or deposit or some similar relationship, to make a person a customer of a bank"* (Goiteom, 2011).

The process of selecting customers' banks takes place with the influence of complex social relationships (between customers and relatives, friends, colleagues, other relationships) These relationships impact on students' awareness, needs, motivation, interest and career interest

When it comes to the process of selecting a bank of customers, it refers to the combination of individual needs and aspirations with the requirements of a career, other factors affecting. Not any customer choice is easy to accept, but they are subject to certain external factors. In society, each individual has a definite position, with that position individuals who enjoy benefits at the same time also need to be responsible for the community where they live, community and society.

Selecting a bank is an activity that has an audience. The object is the banks that customers will choose to deposit. Selected banks become the purpose of customer operations. To achieve the goal, customers need to understand the object. The more fully understanding this is, the faster the ability to choose the bank.

Behavioral intent is defined as the subjective intention of the customer in carrying out a specific action. Behavioral intent includes and is measured through specific manifestations: the intention to positively act tends to attract consumers with the product, increase the amount of purchase, speak well of products and suppliers, Ready to pay higher fees to use the product. Conversely, the intention to negatively act causes consumers to reduce or stop using the product, even switching to competing

products and saying badly about products and suppliers (Saha and Theingi, 2009). According to Ajzen (1991), behavioral intent includes motivational factors that can affect the behavior of each individual. These factors indicate the level of readiness or effort that each individual will spend on behavior.

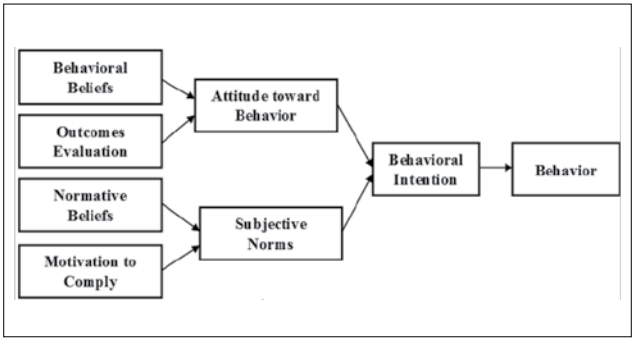
Behavioral intent is human action guided by considering three factors: belief in behavior, belief in norms and belief in control. The greater this belief, the greater the intention to act (Ajzen, 2002). According to Kotler et al. (2001), there are two factors that may hinder the intention to become actual behavior: attitudes of the surrounding people and unexpected situations.

In studies of consumer behavior, some researchers such as Zeithaml et al (1996), Cronin et al. (2000) use the behavioral intent variable as a dependent variable and focused on this variable research. Intention plays a decisive role in influencing actual behavior, as well as a close relationship with actual behavior (Suki, 2011). Predicting intention is the first step in predicting real behavior (Howard and Sheth, 1967). Therefore, the intention to use is described as consumer willing in using the product (Elbeck and Tirtiglu, 2008). So the intention to use is more important than actual behavioral research, especially with predictive studies, studies to find solutions ...

Zeithaml and many other researchers use behavioral intention terms that include and measure by positive behavioral intentions (such as saying good things about businesses, willing to spend money to buy products and services of an enterprise,…). In a study of factors affecting the transformation of mobile telecommunications service networks of Jordan, Awwad and Neimat (2010), the concept of behavioral intention is positive. That scale is expressed as referring others to services, maintaining and being satisfied with the service and continuing to use other services from the service provider. In his study, the author used the term intention to use with the same positive meaning. Consumers can formulate their intentions based on factors such as income, age, gender, ...

The theory of reasoned action (TRA) was built by Aen and Fishbein in 1975 and is considered a pioneering doctrine in the field of social psychology research. The theory of reasoned action asserts that people often consider the results of different actions before implementing them and they will choose to take actions that will hopefully lead to the desired results

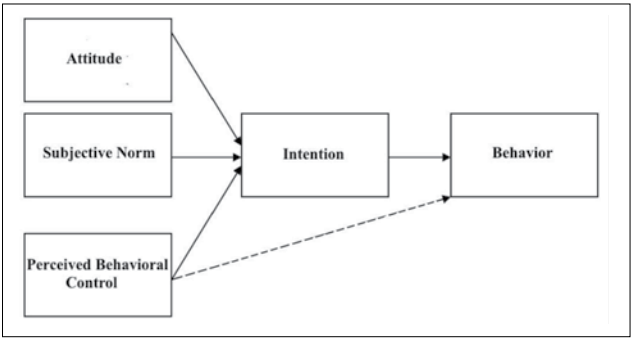
Figure 1 The theory of reasoned action (TRA)



Source: Ajzen, I. & Fishbein, M. (1975), Belief, Attitude, Intention and Behavior. An Introduction to Theory and Research, Mas: Addition - Wesley

Theory of Planned Behavior by Ajzen (1991) is an extended and improved theory of reasoned action theory.

Figure 2 The theory of Planned Behavior (TPB)



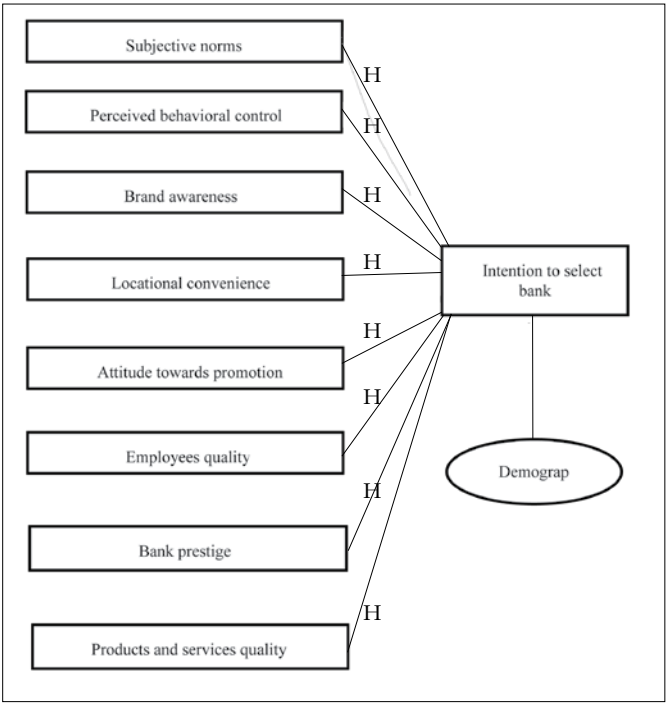
Source : Ajzen, I. (1991), The theory of Planned Behavior, Organizational Behavior and

Human Decision Processes

Based on the studies presented above, the Attitude factor has been interpreted, analyzed into elements, showing the attitude of customers to the bank. That is, perceive the convenience of location and brand awareness. These factors play an important role in the process of finding information about the bank, which on the basis of the intention to select and is believed to have a direct impact on the intention to use and abandon the intermediate role of attitude factor. Therefore, the proposed TPB model to be revised into this study includes the intention to select banks as the central factor, the impact factors are subjective norms, perceived behavioral control and attitude factors interpreted, analyzing into elements. That is, perceive the convenience of location, brand awareness.

In addition to the above-mentioned factors of the TPB model, the study considers a number of other factors that are likely to affect the customers' intention to select banks in Da Nang, which are referenced from recent studies. On the basis of identifying the factors affecting the intention of selecting customers' banks in Da Nang, as presented above, the proposed research model is illustrated in Figure 3.

Figure 3 The proposed research model



Based on the proposed research model shown in Figure 3, the thesis presents research hypotheses, specifically as follows:

1. Subjective norm
   Hypotheses 1 (H1): *Subjective norm and intention to choose banks have positive relationships.*
2. Perceived behavioral control
   Hypotheses 2 (H2): *Perceived behavioral control and intention to choose banks have a positive relationship*
3. Brand awareness
   Hypotheses 3 (H3): *Brand awareness and intention to choose banks have a positive relationship.*
4. Locational convenience
   Hypotheses 4 (H4): *Locational convenience and intention to choose banks have a positive relationship.*
5. Attitude towards promotion
   Hypotheses 5 (H5): *Attitude towards promotion and intention to choose banks have a positive relationship.*
6. Staff quality
   Hypotheses 6 (H6): *Quality of and intention to choose banks have a positive relationship.*

7. Bank prestige
   Hypotheses 7 (H7): *Bank prestige and intention to choose banks have a positive relationship.*
8. Quality of the bank's products and services
   Hypotheses 8 (H8): *Quality of the bank's products and services and intention to choose banks have a positive relationship.*

Research process: Synthesis of theoretical content related to the topic and overview of recent studies to propose research models suitable to the context in Da Nang. After that, taking the main steps are qualitative research, preliminary quantitative research and official quantitative research.

Qualitative research is conducted by in-depth interviews with some experts in the banking and finance industry. The results of qualitative research help the author to adjust the research model, scale and preliminary confirm the factors included in the research model in accordance with the conditions of Da Nang.

Preliminary quantitative research was carried out to evaluate the reliability of the scale and preliminary suitability of each observed variable, conducted by interviewing individual customer groups at transaction points of Commercial Bank, Da Nang branch.

Official quantitative research is conducted with consumers through questionnaires by questionnaires. With the support of SPSS software, collected data is used to test the scale value by EFA factor analysis method, evaluate the reliability of the scale through Cronbach's Alpha coefficient, correlation analysis, multiple regression analysis to test the model and research hypothesis, as well as assess the impact of each independent variable on the dependent variable; testing group comparison by ANOVA (Hair et al, 1998).

Results and Debate

Results of qualitative research

Through qualitative research independent variables are filtered and re-examined the relationship with the dependent variable. Qualitative research results are useful for building and completing the scale.

Table 1 Scale after adjusting

Scale before adjusting	Scale after adjusting
Locational Convenient	
Convenience location of Commercial Bank 's transaction	Commercial Bank 's are located in many convenience locations for customers
Products and services quality	
Competitive interest rates meet the requirements of your	Competitive interest rates meet your requirements
The intention to choose a bank	
I intend to choose a regular TPank bank in the near future	I intend to transfer to Commercial Bank regularly in the near future.

Source: SPSS analysis

Table 2 Results of preliminary assessment of reliability with Cronbach's Alpha

Scale	Scale Mean if Item Delected	Scale Variance If Item Delected	Corrected Item - Total Correlation	Cronbach's Alpha If Item Deleted
Subject norms – CM: Cronbach's Alpha = 0,918				
CM1	9.10	13.656	0.748	0.937
CM2	8.50	9.389	0.854	0.880
CM3	8.90	8.767	0.880	0.875
CM4	8.6	9.822	0.900	0.862
Perceived behavioral control – HV: Cronbach's Alpha = 0.933				
HV1	3.80	1.067	0.875	
HV2	3.20	1.067	0.875	
Brand awareness – TH: Cronbach's Alpha = 0.798				
TH1	5.30	3.122	0.701	0.712
TH2	5.40	1.822	0.696	0.732
TH3	4.70	2.9 00	0.639	0.763
Locational convenient – VT: Cronbach's Alpha = 0.937				
VT1	5.90	4.544	0.882	0.900
VT2	5.40	4.933	0.854	0.919
VT3	6.10	5.211	0.878	0.904
Attitude toward promotion - CT: Cronbach's Alpha = 0.865				
CT1	13.30	12.456	0.653	0.854
CT2	13.60	12.044	0.852	0.803
CT3	13.40	14.933	0.704	0.837
CT4	13.10	15.878	0.532	0.862
CT5	14.30	14.900	0.648	0.845
CT6	14.30	15.567	0.676	0.844
Employee quality – NV: Cronbach's Alpha = 0.901				
NV1	6.70	6.011	0.776	0.887
NV2	6.70	4.011	0.909	0.776
NV3	7.00	5.778	0.774	0.885
Bank prestige – UT: Cronbach's Alpha = 0.909				
UT1	6.90	5.878	0.773	0.907
UT2	6.60	5.600	0.888	0.810
UT3	6.70	6.011	0.795	0.887

Products and services quality – LI: Cronbach's Alpha = 0.910				
LI1	6.20	6.400	0.793	0.896
LI2	6.50	4.722	0.900	0.809
LI3	6.50	6.278	0.796	0.892
Intention to choose a bank – NH: Cronbach's Alpha = 0.898				
NH1	6.70	4.678	0.804	0.855
NH2	6.40	4.711	0.847	0.811
NH3	6.70	6.011	0.772	0.887

Source: SPSS analysis

The scale is subjective norms when selecting Commercial Bank with Cronbach's Alpha coefficient = 0.852. The total correlation coefficients of the observed variables CM1, CM2, CM3 are greater than 0.3 so they are satisfactory to carry out the next analysis.

The scale of perceived behavioral control and the intention to select Commercial Bank has Cronbach's Alpha coefficient = 0.301 (<0.6). The total correlation coefficient of observed variables HV1, HV2 is less than 0.3 so the author decides this type of scale in the next analysis.

The scale brand awareness and intention to select Commercial Bank have Cronbach's Alpha coefficient = 0.505 (<0.6). The total correlation coefficient of the observed variables TH2 is less than 0.3 so this scale is not satisfactory to carry out the next analysis.

The scale of convenient location and intention to select Commercial Bank bank has Cronbach's Alpha coefficient = 0.569 (<0.6) so this scale is not satisfactory to carry out the next an alysis.

The scale of Attitude towards promotion and the intention to select Commercial Bank with Cronbach's Alpha coefficient = 0.933. The correlation coefficients of the observed variables CT1, CT2, CT3, CT4, CT5, CT6 are greater than 0.3, so it is satisfactory to carry out the next analysis.

The scale of employees quality and intention to select Commercial Bank bank with Cronbach's Alpha coefficient = 0.898. The correlation coefficient of the sum of observed variables NV1, NV2, NV3 is greater than 0.3, so it is satisfactory to carry out the next analysis.

The scale of bank prestige and intention to select Commercial Bank have Cronbach's Alpha coefficient = 0.877. The correlation coefficients of the observed variables UT1, UT2, UT3 are greater than 0.3, so it is satisfactory to carry out the next analysis.

The scale of products and services quality and the intention to select Commercial Bank with Cronbach's Alpha coefficient = 0.911. The correlation coefficient of the observed variables LI1, LI2, LI3 is greater than 0.3 so it is satisfactory to carry out the next analysis.

The scale of intention to select Commercial Bank bank is Cronbach's Alpha coefficient = 0.955. The correlation coefficients of the observed variables NH1, NH2, NH3 are greater than 0.3, so it is satisfactory to carry out the next analysis.

Table 3 Assessing the reliability of the official scale with Cronbach's Alpha

Scale	Scale Mean If Item Delected	Scale Variance If Item Delected	Corrected Item – Total Correlation	Cronbach's Alpha If Item Deleted
Subjective norms – CM: Cronbach's Alpha = 0,852				
CM1	6,03	4,416	0,688	0,826
CM2	6,00	4,010	0,759	0,758
CM3	6,10	4,348	0,723	0,793
Perceived behavioral control – HV: Cronbach's Alpha = 0,301				
HV1	2,55	1,284	0,179	
HV2	2,61	1,656	0,179	
Brand awareness – TH: Cronbach's Alpha = 0,505				
TH1	5,54	4,290	0,346	0,377
TH2	5,58	3,683	0,240	0,573
TH3	5,49	3,729	0,402	0,270
Locational convenient – VT: Cronbach's Alpha = 0,569				
VT1	5,38	3,844	0,370	0,481
VT2	5,58	4,205	0,316	0,561
VT3	5,31	3,855	0,455	0,353
Attitide toward promotion – CT: Cronbach's Alpha = 0,933				
CT1	14,96	21,255	O,807	0,921
CT2	14,94	19,886	0,843	0,916
CT3	15,06	20,670	0,801	0,921
CT4	15,41	22,272	0,796	0,924
CT5	14,89	20,340	0,792	0,923
CT6	14,77	19,887	0,809	0,921
Employees quality – NV: Cronbach's Alpha = 0,898				
NV1	6,10	4,915	0,784	0,870
NV2	5,94	4,268	0,821	0,836
NV3	5,99	4,442	0,797	0,856
Bank prestige – UT: Cronbach's Alpha = 0,877				
UT1	6,03	4,260	0,792	0,801
UT2	6,06	4,163	0,769	0,822
UT3	5,94	4,604	0,731	0,855
Products and services quality – LI: Cronbach's Alpha = 0,911				
LI1	6,00	4,266	0,823	0,872
LI2	5,99	3,945	0,839	0,856
LI3	6,01	3,919	0,804	0,877

Intention to choose a Commercial Bank – NH: Cronbach's Alpha = 0,955				
NH1	7,30	8,050	0,898	0,938
NH2	7,16	7,837	0,934	0,911
NH3	7,16	8,028	0,880	0,952

Source: SPSS analysis

After analyzing Cronbach's Alpha coefficients for all scales of the research model, the thesis obtained 6 groups of scales with good reliability corresponding to 21 observed variables. The scales and observed variables given by the author fully meet after analyzing Cronbach's Alpha coefficients and the author has removed three factors that are perceived behavior control, Locational convenience and Brand awareness.

These observed variables will continue to be used in the Exploratory Factor Analysis.

Table 4 Rotated Component Matrix of the independent variables

Rotated Component Matrix					
	Component				
	1	**2**	**3**	**4**	**5**
CT2	0,872				
CT6	0,869				
CT5	0866				
CT3	0,857				
CT4	0,849				
CT1	0,842				
LI2		0.923			
LI1		0,918			
LI3		0,912			
NV3			0,920		
NV1			0,904		
NV2			0,898		
UT1				0,909	
UT2				0,890	
UT3				0,872	
CM3					0,888
CM2					0,864
CM1					0,820

Source: SPSS analysis

There were 18 observed variables included in the analysis with KMO coefficient = 0.809 which satisfies KMO condition from 0.5 to 1. At the same time, Bartlett's test results showed that the statistical significance of sig = 0.000 is less than 5%. Thus, it can be concluded that factor analysis is appropriate for existing data, variables are related to each other and are eligible for factor analysis by EFA testing.

Factor analysis with independent variables with Eigenvalue > 1 produces 5 factors groups with a total cumulative of 80.149% (> 50%). Most variables with load factors greater than 0.5 satisfy convergent values and discriminant values. The scales are highly valuable for measuring the corresponding variables. The scales are of high value to measure for the corresponding variables, follows:

- Group 1 has 3 criteria for measuring attitudes towards promotion, downloaded by one factor. Load factors from 0,842 to 0,872 meet the set criteria and show the observed variables with a significant relationship with the factor. This group of factors has kept the 5 observed variables and names compared to the original proposal: Attitude towards promotion (CT).
- Group 2 has 3 criteria for measuring the factors of products and services quality and is downloaded to one factor. Load factors with values from 0.912 to 0.923 meet the proposed standards and show the observed variables with a significant relationship with the factor. This group of elements is kept the same 3 variables and the original name products and services quality (LI).
- Group 3 has 3 criteria of employees quality measurement, which is downloaded to a factor. Load factors from 0.898 to 0.920 meet the proposed standards and show the observed variables with a significant relationship with the factor. This group of elements is kept the same 3 variables and the original name employees quality (NV).
- Group 4 has 3 criteria to measure Bank prestige factor, downloaded to one factor. The load factors from 0.872 to 0.909 have reached the set and show the observed variables with a significant relationship with the factor. This group of factors is kept the same 3 variables and the original name Bank prestige (UT).
- Group 5 has 3 criteria to measure the subjective norms, downloaded to one factor. The load factors from 0,820 to 0,888 have reached the set criteria and show the observed variables with a significant relationship with the factor. This group of elements is retained in 3 observable variables and original names Subjective norms (CM).

EFA analysis for dependent factors

EFA results show that the KMO coefficient is 0.753> 0.5 satisfying the condition; In Bartlett's test, Sig = 0.000< 0,05, it can be seen that the Barlett test is statistically significant, showing that the observed variables are correlated on a global scale. The total variance extracted by 91,706% indicates that 91,706% of data variability is explained by the group of micro-selections. The coefficient representing the variation is explained by each factor (Eigenvalue) reaching 2.751> 1, which satisfies the data requirement.

Table 5 Rotated Component Matrix of the dependent variable

	Component
	1
NH2	0,972
NH1	0,955
NH3	0,946

Source: SPSS analysis

Correlation analysis

Table 6 Correlation analysis

		CM	CT	NV	UT	LI	NH
CM	Pearson Correlation	1					
	Sig. (2- tailed)		0,000	0,634	0,025	0,098	0,004
	N	200	200	200	200	200	200
CT	Pearson Correlation	0,324**	1	0,116	-0,101	0,051	-0,342**
	Sig. (2- tailed)	0,000		0,102	0,153	0,475	0,000
	N	200	200	200	200	200	200
NV	Pearson Correlation	0,034	0,116	1	0,038	0,070	0,600**
	Sig. (2- tailed)	0,634	0,102		0,596	0,322	0,000
	N	200	200	200	200	200	200
UT	Pearson Correlation	-0,159*	-0,101	0,038	1	-0,114	0,208**
	Sig. (2- tailed)	0,025	0,153	0,596		0,108	0,003
	N	200	200	200	200	200	200
LI	Pearson Correlation	0,117	0,051	0,070	-1,114	1	0,203**
	Sig. (2- tailed)	0,098	0,475	0,322	0,108		0,004
	N	200	200	200	200	200	200
NH	Pearson Correlation	0,201**	0,342**	0,600**	0,208**	0,203**	1
	Sig. (2- tailed)	0,004	0,000	0,000	0,003	0,004	
	N	200	200	200	200	200	200

Source: SPSS analysis

The coefficient of correlation analysis shows the degree of correlation between the independent variable and the dependent variable and they are measured by the absolute value of pearson. The closer this value is, the closer the two variables are. According to the correlation matrix, there is a linear correlation between the dependent variable NH and the independent variables because of the significance level Sig. less than 0.05. The correlation coefficient (Pearson Correlation) between the dependent variable NH and independent variable NV is the highest of 0.600, followed by CT, UT, LI, and CM.

Regression analysis

Table 7. Model summary

Model	R	R square	Adjusted R square	Std. Error of the estimate
1	0,725	0,525	0,513	0,97450

Source: SPSS analysis

The regression results report shows that the R square is 52.5%, which indicates the model's appropriateness of 52.5% or in other words 52.5% of the variation of Y explained by 5 independent variables CM, CT, NV, UT, LI. The adjusted R square value reflects more accurately the fit of the model for the whole, we have an adjusted R value of 0.513 (or 51,3%).

Table 8 ANOVA

Model	Sum of squares	Df	Mean squre	F	Sig
Regression	203,561	5	40,712	42,870	0,000
Residual	184,234	194	0,950		
Total	387,795	199			

Source: SPSS analysis

We see in the test results according to ANOVA table, the significance level is Sig. = 0.000 <0.01 (α = 0.01) show that the regression model has just been built is suitable for the overall research and can be used.

Table 9. Coefficient in the regression equation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std.Error	Beta			Tolerance	VIF
Constant	-2,041	0,455		-4,488	0,000		
CM	0,168	0,074	0,120	2,258	0,025	0,872	1,147
CT	0,396	0,081	0,257	4,868	0,000	0,881	1,135
NV	0,732	0,067	0,545	10,899	0,000	0,979	1,021
UT	0,370	0,070	0,251	4,973	0,000	0,960	1,042
LI	0,236	0,071	0,167	3,317	0,001	0,972	1,029

Source: SPSS analysis

The results of the regression analysis showed that regression has not been excluded by sig, the T-test of each independent variable is less than 0.05. Looking at the last row of the regularized results we see all VIF (Variance Inflation Factor) <2, this shows that the multicollinearity of the independent variables is negligible and the variables in the model are acceptable. The standard beta gives us the importance of each independent variable for the dependent variable. Here, the importance of

the variables in descending order relative to the dependent variable is employee quality, Attitudes towards promotion, Bank prestige, products and services, and subjective norms.

The relationship between the dependent variable and the independent variables is represented as the standardized regression equation as follows:

NH = 0.545NV + 0.257CT + 0.251UT + 0.167LI + 0.120CM (1)

NH: The intention to choose Commercial Bank bank

NV: Employees quality

CT: Attitude towards promotion

UT: Bank prestige

LI: Products and services quality

CM: Subjective norms

According to the standardized regression equation, when the quality of employees increases (or decreases) 1 unit of standard deviation, the intention of selecting customers' banks will increase (or decrease) 0.545 units. standard deviation.

When the attitude towards marketing promotion increases (or decreases) by 1 standard deviation, the intention of selecting customers' Commercial Bank will increase (or decrease) 0.257 units of standard deviation.

When the prestige of the bank increases (or decreases) 1 unit of standard deviation, the intention of selecting a bank of Commercial Bank will increase (or decrease) 0.251 units of standard deviation.

When the quality of service products increases (or decreases) by 1 standard deviation, the intention of selecting customers' Commercial Bank will increase (or decrease) 0.167 standard deviation units.

When subjective standards increase (or decrease) 1 unit of standard deviation, the intention of selecting customer bank Commercial Bank will increase (or decrease) 0.120 standard deviation units.

Conclusion

This study has analyzed the theory and previous studies in the country on the intention to select banks, applied with conditions in Da Nang. Therefore, this study is suitable for the context of Da Nang. The research has confirmed five important factors affecting customers' intention to choose Commercial Bank , which are subjective standards, attitude towards marketing, staff quality and reputation of the bank. goods and benefits from products and services. These five factors have explained 51.3% of the changes in customers' intention to choose Commercial Bank, the remaining 48.7% of the variation in the intention to choose Commercial Bank bank is explained by individuals. The other factor that the research has not yet discovered.

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ANALYSIS OF THE MOTIVATIONAL FACTORS AFFECTING UNIVERSITY CHOICE OF ETHNIC HUNGARIAN SECONDARY SCHOOL STUDENTS FROM SLOVAKIA

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Received 31. July 2019, Reviewed 12. November 2019, Accepted 28. December 2019

Abstract

Research problem: Choosing a university is a key step in each individual's life because it can have a significant impact on the opportunities presented to him in life for decades to come. The students' choices are of equal significance to the higher education institutions too because the university's development but even its very survival could depend on the number and the talents of the students choosing the given institution. In our study, we aim to find out which factors have the strongest influence on the university choice of ethnic Hungarian secondary school students from Slovakia.

Methods and the study sample: Based on the studied international literature, we compiled a written questionnaire to assess the role of the individual motivational factors in university choice. In order to be able to generalize our conclusions, we needed to learn the opinions of as many students as possible. For this reason, we contacted every secondary school in Slovakia with classes where the language of instruction is Hungarian. We were allowed to carry out our survey in a total of 22 institutions (31.42 percent). We included final-year students attending classes with Hungarian as the language of instruction who planned to go to university. In the end, we managed to collect 393 usable responses, which corresponds to 23.06 percent of the entire population. To determine the significance of the individual motivational factors, we used 10 point Likert scales to analyze a total of 12 factors. Based on the available international literature, we used simple descriptive statistics to evaluate the results.

Results: We were successful in determining which motivational factors influence the university choice of ethnic Hungarian secondary school students from Slovakia to the highest degree. These are the chances of graduating, the perceived certainty of being admitted, the reputation of the university and the level of external recognition of the cultural life inside the institution. These are the factors higher education institutions need to focus on if they wish to reach out to secondary school students.

Key words: *university choice, secondary school students, motivational factors*

JEL Classification: *I20, I23, I29*

Introduction

Our study is aimed at assessing the motivations behind the university choice of ethnic Hungarian secondary school students from Slovakia. Based on our assessment of the international literature, we are attempting to find out which factors have the strongest influence on the university choice of secondary school students. In the course of one's studies, choosing a higher education institution is a uniquely complex, lengthy, multistep process (Chapman, 1986; Moogan et al., 1999; Perna, 2006) because such a decision has a very serious impact on the individual's life. It affects your chances of finding a job in the labour market, your future salary and your group of friends. Our working conditions can even affect our health (Seilerová, 2019). As you can see this decision can affect virtually every aspect of your life. Making such a big decision is not easy at all. We wanted to understand the factors that have the biggest influence on this decision. In the process of exploring these motivational factors, we have hence decided to ask the people who are affected the most - the secondary school students themselves.

Our survey was conducted among the final-year students because we could not expect anybody else to supply us with more reliable data. In Slovakia, a total of 1704 Hungarian high school graduates had to decide on further education in the 2018/2019 school year. Among many others (getting a job, further studies which do not offer a university diploma), one of the options for them is to apply to university.

Our study might also be valuable to higher education institutions. The budget of Slovakian universities is greatly influenced by the number of students attending the courses of the given institution. This means that it's in the best interest of universities to get more students to apply for the study programmes they offer. Today this requires a well-built university brand and very effective marketing. A well-established university brand can have a significant impact on the number of applicants because it serves to promote the institution (Minjung & Sung-Un, 2008). In Slovakia, several higher education institutions provide education in Hungarian language. These institutions are specifically aimed at Hungarian high school students in Slovakia. Our research can be especially valuable for them.

In the process of our assessment of the existing literature, our attention was captured by the fact that certain factors (e.g. the reputation of the university, the geographical proximity of the institution) can be found in one of the first places in most studies. This led us to find publications focused specifically on the reputation of the institutions (Baker & Brown, 2007). On the other hand, certain factors can usually be found on the end of the rankings. One such factor is the choice of the individual's friends. As an example, we cite a study conducted in Vietnam, which involved 174 people (Do Thi Hong et al, 2015). These trends are independent from the time and place of the study, so we were especially interested whether similar trends can also be found among the ethnic Hungarian students from Slovakia.

Our study was aimed at finding the motivational factors that influence the university choice of ethnic Hungarian students from Slovakia to the greatest degree. It was our goal to learn the opinion of as many students as possible. To achieve this, we - either personally or via email or phone - contacted all secondary educational institutions in Slovakia with classes where the language of instruction is Hungarian. In many cases our request was received positively. The Hungarian secondary schools are located in the southern regions of Slovakia, as the Hungarian ethnicity in Slovakia mostly lives clustered along the line of the Hungarian border. This made it easier for us to get to these schools. In the end, we managed to carry out our survey among students planning higher education studies in 22 of these institutions.

Material and Methods

We strove to study the most significant international publications on the topic. To achieve this goal, we used the two largest scientific databases: that of Scopus and of Web of Science. We selected and ordered the publications by three criteria:

- relevant hits: to the two keywords: "university choice" and "university selection".
- date of publication: we queried 20 years of publications and divided them into two 10-year periods: 1998-2008 and 2009-2018.
- number of citations: we ordered the hits by this criterion. A descending list based on the number of citations.

We studied the first 10 hits for both 10-year periods for both databases. An important note is that there were publications that were present in the resulting lists for both databases. Counting these doubles only once, we studied 25 publications in total. The studied scientific papers used a variety of ways to collect their data. The study with the largest sample was a gravity model conducted in the Netherlands with 30,037 movement patterns analyzed (Sa et al., 2004). The study with the smallest sample-size involved in-depth interviews with as few as 13 people (Baker & Brown, 2007). We also encountered a study where in-depth interviews were used to separate the intrinsic motivational factors into two groups: pull factors and push factors. An example of a pull factor is geographical proximity and career opportunities can given as a push factor (Eder et al., 2010). During our research we also met a motivational model which examined the connection between the individual motivational factors (Horváth & Hollósy, 2019). Our analysis also included a specific study aimed at assessing how higher education institutions react to higher education rankings in 41 countries (Hazelkorn, 2008). From all the studies included in our analysis, this last one has the second highest number of citations in the Scopus database. Felix Maringe made a similar choice to our own when he used 10 point Likert scales in his study that was conducted in England with a sample size of 378 and in which he identified a total of 35 motivational factors (Maringe, 2006). This study is especially significant for us because it has the largest number of citations among publications in both large scientific databases. The sample size and the research methods are both comparable to the ones we use. Katrin Obermeit aimed to create a German university choice model; we considered her work particularly noteworthy because she included the richest set of referenced literature (Obermeit, 2012). We would not omit the literature review referenced many times in both databases: the work of Hemsley-Brown and Oplatka that we also found especially significant because they analyzed 75 scientific papers between 1992 and 2013. The studies covered in this paper included 45 cases where - similarly to our own present study - a questionnaire survey was conducted (Hemsley-Brown & Oplatka, 2015).

We considered such a systematic approach to the literature so important mainly in order to use the international literature as a means to acquaint ourselves with the research methods others have used to answer research problems similar to ours. The following breakdown can be given based on the 25 pieces of literature we analyzed:

Table 1 - A summary table describing the research methods used in the publications we analyzed

Research method used	Referenced study	Total number
Questionnaire, Student Survey	Metcalf, 2003 Raey, 2004 Veloutsou et al., 2004 Holdsworth & Nind, 2005 Veloutsou, 2005 Maringe, 2006 Yamamoto 2006 Eliophotou et al., 2007 Jetten et al., 2008 Keskinen et al., 2008 Mangan et al., 2010 Dunnet et al., 2012 Joseph et al., 2012 Sojkin et al., 2012 Gibbons et al., 2015 Macmillan et al., 2015	16
Data analysis	Drewes & Michael, 2006 Eder et al., 2010 Hemsley-Brown, 2012	3
Literature analysis	Obermeit, 2012 Hemsley & Oplatka, 2015	2
In-depth interview	Baker & Brown, 2007 Sojkin et al., 2012	2
Gravity model	Sa et al., 2004	1
Not relevant	Hazelkorn, 2008 Herrenkohl & Mertl, 2010	2

Source: own compilation

Table 1 includes a systematized representation of the 26 research methods used in the 25 scientific papers. The difference of one can be accounted for by the fact that the 2012 work by Sojkin included a questionnaire survey and in-depth interviews also. It is clear that written surveys were the most frequently used research method in the international studies. We found this method suitable for our purposes too.

Results and Debate

We would like to answer the question of why our study might be significant to the universities. The budget of a university is comprised of countless items and it is not at all obvious how one can calculate the exact amount of government subsidy an institution receives per student (Klátik & Tunega, 2017). A well-established university "brand" can have a significant impact on the number of applicants because it serves to promote the institution (Minjung & Sung-Un, 2008).

Table 2 clearly shows the level of significance one graduated student can have in the budget of an institution. This is the reason why we consider it especially

important for higher education institutions that we learn which motivational factors influenced the university choice of final-year secondary school students in the past.

Table 2 - Data about the three most generously subsidized bachelor's degree programs in Slovakia in 2017.

Rank	University	Degree course	Length of the degree course (in years)	The total cost of the education of a graduated student during the whole of his/her studies
1.	University of Veterinary Medicine and Pharmacy in Košice (Univerzita veterinárneho lekárstva a farmácie v Košiciach)	Cynology	3	EUR 11,738
2.	Technical University of Košice (Technická univerzita v Košiciach)	Free Fine Art	4	EUR 11,432
3.	Technical University in Zvolen (Technická univerzita vo Zvolene)	Interior Design	4	EUR 11,396

Source: Klátik & Tunega, 2017, page 29 – table re-edited

In the following part of our study, we would like to give a short description of the schools providing secondary education in Slovakia. The currently effective legislation is Act No 245/2008 (Coll.) on Education (Schools Act). Section 32 of this act gives an itemized list of the secondary school types in existence in Slovakia. Giving a short description here is important because of the many times a misconceived breakdown of these institutions can be found, even in the literature:

a) gymnasium (gymnázium)
b) secondary vocational school (stredná odborná škola),
c) secondary sports school (stredná športová škola),
d) secondary school of arts (škola umeleckého priemyslu),
e) secondary music school (konzervatórium)

After a successful school leaving exam, students of all secondary school types are eligible to apply for higher education degree courses. Slovakian universities have the right to set the criteria of admission themselves.

Sampling: we contacted all institutions with classes where the language of instruction is Hungarian. The ethnic Hungarian students attending secondary schools where Slovak is the language of instruction have been entirely left out of the sample because we could not have found any database to identify them.

Table 3 - The number of students attending secondary schools in Slovakia in the 2018/19 school year

Class	first	second	third	fourth	fifth	sixth	seventh	eighth	total:
Number of students:	54558	50277	46694	39703	7374	2901	2619	2591	206717
Hungarian students:	2819	2556	2214	1654	165	66	45	50	9569
Percentages:	5.17%	5.08%	4.74%	4.17%	2.24%	2.28%	1.72%	1.93%	4.63%

Source: own calculation based on „Prehľad stredných škôl" [an overview of secondary schools] - www.cvtisr.sk [2019.8.1.]

The aforementioned assessment of the existing literature also gave us the opportunity to encounter numerous motivational factors and suggested groupings thereof (James et al., 1999; Maringe, 2006; Hemsley-Brown & Oplatka 2006). After careful consideration we settled for the following 12 motivational factors that we think could have had an impact on university choice:

- The university's reputation
- The choice of friends/acquaintances
- The chances of graduating
- The geographical proximity of the university
- The university's information events
- The level of external recognition of the cultural life inside the institution
- Positive experiences from the open day
- Perceived certainty of being admitted
- The level of Slovak language proficiency
- Financial possibilities
- Secondary school results
- The advice of secondary school teachers

In order to study the listed motivational factors, we considered one particular exploratory method - written questioning - to be the most effective. We have chosen the written questionnaire method because this procedure is indeed suitable to map the joint opinion, customs and attitudes of individuals or groups. It can be used to attempt to find a connection and also to produce evidence of the existence of a rule. This might be the reason why it was most popular among the research methods used in the international studies we covered, too. In order for our results to be generalizable, we needed to learn the opinions of as many students as possible. The most efficient way of doing so was via written questions.

Our questionnaire was constructed using various kinds of question types. The questions related to the respondent's studies (name and type of school) were followed by the choice questions. We made an attempt to create a combination of Likert scales and interval scales as efficiently as possible. The choice of 1 in the 10 point Likert scales meant that the given factor did not influence the choice at all. On the other hand, choosing the value 10 meant that the given factor had the most influence. This is also important because - with regard to the individual motivational factors - finding the mode bears significance for it shows that the given factor was the most important factor to the most people. To evaluate the results, we used simple descriptive statistics: averages, standard deviations, median and modal values.

We compiled a summary table based on the studied factors in a similar way as the authors of the studies cited in the previous parts of this paper (Table 1). Here, we not only give the average scores for the individual options, but also the standard deviations and standard errors we measured for the individual answers because this additional information is also important to correctly interpret the data.

Table 4 - The averages, standard deviations and standard errors of the studied motivational factors

	Average:	**Standard deviation:**	**Std. Error**
The university's reputation:	6.2404	2.1563	0.1091
The choice of friends/acquaintances:	4.5791	2.4835	0.1254
The chances of graduating:	7.2737	2.4452	0.1237
The geographical proximity of the university:	5.7296	2.7576	0.1393
The university's information events:	6.0000	2.4299	0.1250
The level of external recognition of the cultural life inside the institution:	6.1532	2.2442	0.1144
Positive experiences from the open day:	6.0697	2.5810	0.1336
Perceived certainty of being admitted:	6.3178	2.7409	0.1393
The level of Slovak language proficiency:	5.3000	2.7547	0.1395
Financial possibilities:	5.3444	2.5829	0.1305
Secondary school results:	5.8159	2.4634	0.1246
The advice of secondary school teachers:	4.0612	2.5948	0.1311

Source: author survey data (2019), n=393

We would like to point out the three highest ranked motivational factors influencing university choice: these are the chance of graduating, perceived certainty of being admitted and the university's reputation. Similarly to the international studies, reputation also plays an important role here. Nevertheless, the motivational factors in the first two places of the list are a surprise. These two factors rank significantly higher here in comparison to the international studies. The Slovakian admission system no doubt plays a significant role in this. The Slovakian higher education admission system is self-regulating one characterized by open competition. It is in such a system that aspects like perceived certainty of being admitted can have a decisive role, in contrast with centralized admission systems such as the one in Hungary. The lower part of the list contains the influence of teachers, friends and acquaintances and the level of Slovak language proficiency. The insignificant influence of teachers and that of the choice of friends/acquaintances fits in well with international trends. With regards to the level of Slovak language proficiency, for obvious reasons, we cannot compare to international surveys, but would like to point out the fact that the secondary school students were not particularly influenced by the level of their proficiency in the official language of the country. We also find it interesting that the university's geographical proximity only reached eighth place on the 12-long list.

Table 5 - Calculating the median and the mode for the motivational factors

	Median:	Mode:
The university's reputation:	7	7
The choice of friends/acquaintances:	5	5
The chances of graduating:	8	10
The geographical proximity of the university:	6	5
The university's information events:	6	5
The level of external recognition of the cultural life inside the institution:	7	7
Positive experiences from the open day:	6	5
Perceived certainty of being admitted:	7	5
The level of Slovak language proficiency:	5	5
Financial possibilities:	5	5
Secondary school results:	6	5
The advice of secondary school teachers:	4	1

Source: author survey data (2019), n=393

Table 5 is suitable to supplement the aforementioned data and help get a more comprehensive understanding. The exceptionally high score of the chance of graduating for both the median and the mode indicates that this is clearly one of the most important motivational factors for secondary school students. At other end of the scale we find the advice of secondary school teachers. Students have most frequently indicated that it "had no influence on my choice". The cultural life inside the given institution only reached fourth place in the ranking of the averages, but this later table shows it in second place drawn with university reputation.

Conclusion

We have analyzed the motivational factors influencing the university choice of secondary school students from three aspects: average score, median and mode. From the studied motivational factors, the following were ranked in the first third of the list indicating that they are the most important factors for secondary school students:

- The chances of graduating
- Perceived certainty of being admitted
- The university's reputation
- The level of external recognition of the cultural life inside the institution

The least important aspects for ethnic Hungarian secondary schoolers regarding their university choice (these were placed in the lowest third of the summary assessment):

- Financial possibilities
- The level of Slovak language proficiency

- The choice of friends/acquaintances
- The advice of secondary school teachers

We found trends that were in line with the findings in the international literature (an example is that university reputation is also important for ethnic Hungarian secondary school students from Slovakia). Other results seem to explicitly contradict the international trends (examples are the geographical proximity of the university or the financial possibilities of the students). In the future, we would like to expand our study with the interpretation of the answers given to the remaining questions in our survey. We would also like to explore the differences in motivation between the students attending the various school types.

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Name of the publication: **ACTA OECONOMICA UNIVERSITATIS SELYE**
International scientific journal

Editor – in – Chief: **Ladislav Mura**

Authors:

Year: 2019
Volume 8.
No. 2
The Journal is published twice a year.
This issue was published in December 2019.
Publisher: J. Selye University, Faculty of Economics, Bratislavská cesta 3322, 945 01 Komárno, www.ujs.sk, IČO: 37961632

Prepared and printed by: Grafis Media, s.r.o.
ISSN 1338-6581, e-ISSN 2644-5212, EV 4538/12 MK SR
Price: 12,- EUR