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# INTERNATIONALIZATION OF SLOVAK UNIVERSITIES IN THE LIGHT OF GRADUATES' EMPLOYABILITY

## INTERNACIONALIZÁCIA SLOVENSKÝCH VYSOKÝCH ŠKÔL VO SVETLE ZAMESTNATEĽNOSTI ABSOLVENTOV

*Aneta BOBENIČ HINTOŠOVÁ – Michaela BRUOTHOVÁ*

### **Abstract**

The paper is focused on the issue of internationalization of Slovak universities in relation to the success of their graduates on the labor market. The aim of the paper is to examine whether advanced internalization of Slovak universities is leading to greater interest of employers in their graduates. The paper also provides the overview of the development of the number of incoming and outgoing students and trainees under Erasmus+ program. The results show that the interest of employers in particular graduates is basically not dependent on the level of internalization of the internal environment of the particular faculty.

**Keywords:** internationalization, universities, Slovak Republic, employers, graduates

### **Abstrakt**

Príspevok je zameraný na problematiku internacionalizácie slovenských vysokých škôl vo vzťahu k úspešnosti ich absolventov na trhu práce. Cieľom príspevku je preskúmať, či pokročilá internacionalizácia slovenských vysokých škôl vedie k väčšiemu záujmu zamestnávateľov o ich absolventov. Príspevok takisto poskytuje prehľad o vývoji počtu prichádzajúcich a odchádzajúcich študentov a stážistov v rámci programu Erasmus+. Výsledky ukazujú, že záujem zamestnávateľov o jednotlivých absolventov v podstate nezávisí od miery internacionalizácie vnútorného prostredia danej fakulty.

**Kľúčové slová:** internacionalizácia, vysoké školy, Slovenská republika, zamestnávatelia, absolventi

### **Introduction**

The growing global competition of the educational institutions, often questioned quality of domestic educational institutions, as well as the problematic applicability of graduates have led many students to the decision to complete their entire university studies abroad. In response, many higher educational institutions began to take systematic steps to make their internal environment more attractive for students. One of the possible means is a stronger internationalization of universities, which, as pointed out by Mok and Han (2016), can help to lead from “brain drain” to “brain bridging”. Nghia, Giang and Quyen (2019) also showed that advanced study programs enriched with cultural understanding through mobility could help students improve their career prospects and develop a professional adaptability.

The present paper is aiming to investigate outlined aspects in more details, especially with regard to Slovak universities and their faculties. In the center of our interest is to answer the research question, whether the advanced

internalization of Slovak universities is leading to a greater interest of employers in their graduates. For this purpose, the level of internationalization of universities' internal environment is evaluated through the portion of foreign students studying at particular faculty, which is taken into relation with the score of employers' interest in graduates. Moreover, we also provide the overview of the development of the number of incoming and outgoing students and trainees under Erasmus+ program. The rest of the paper is organized as follows: The literature review part brings some considerations on the importance of internationalization activities in cultivating students' global competence and fostering their future employability. The methodological part introduces sources of data and procedures used in the processing of this study, followed by achieved results and their discussion. The last part of the paper brings conclusion.

## **1 Literature Review**

Since global competence is considered a key competence for postgraduate students in a globalized world, higher educational institutions should develop students' global competence and thus prepare them for global competition not only on the labor market (Liu, Yin, Wu, 2020). There are number of studies that have empirically evaluated the impact of various study-related activities with an internationalization element, on the cultivation of the global competence of the students concerned. Li (2013) developed a pedagogical activity that enabled students from the U.S. and China to establish virtual contact in order to work collaboratively on research papers related to international business issues. The results showed a significantly lower performance of American students in the field of global knowledge and attitudes, which findings are similar as indicated by Zhang, Hsu, Wang (2010). At the same time, the author confirmed that the proposed pedagogical activity is an easy-to-use and effective supplement for the development of students' global competence. Thus, the author concluded that by providing students with appropriate international learning opportunities the global competence is teachable phenomenon through international contacts, which do not necessarily have to be face-to-face.

Schenker (2019) evaluated the effects of a short-term study abroad program (four weeks in Germany and four weeks in the U.S.) on students' global competence, which was measured before and after the eight-week summer program. The results revealed that despite a decline in one area, the students reported statistically significant progress in several dimensions of global competence and thus confirmed achievement of positive effects on intercultural competence through short-term study abroad programs indicated also by other studies (e.g., He, Lundgren, Pynes, 2017). On the other hand, the author points out to the fact that a longer time period spent abroad might be needed for students to develop in all dimensions of global competence, which, in accordance with the study by Vande Berg, Connor-Linton, Paige (2009) should be in the range of 13-18 weeks.

Hence, we further turn our attention to the studies that evaluated the effect of longer-term study abroad programs on students' future global career. Murphy et al. (2014) conducted a survey on a sample of 1,283 alumni of a large U.S. public university and concluded that alumni who participated in study abroad programs as undergraduates showed higher levels of global engagement in most of the investigated domains. Meng, Zhu, Cao (2017) investigated the effects of internationalization efforts at domestic universities and concluded that, among others, experiences with foreigners through campus activities as well as enrollment in internationalization-related courses predict students' global competences. However, there is a lack of similar studies conducted in conditions of Slovakia and with this study, we would like to contribute to filling this gap.

## **2 Data and Methodology**

Going out of the outlined considerations, we pose the research question whether higher level of internalization of Slovak universities is leading to greater interest of employers in their graduates. The level of internationalization of Slovak universities and their faculties was evaluated through the development of number of incoming as well as outgoing students and trainees under Erasmus+ program. As the primary source of data served The Erasmus + Annual Reports issued by the European Commission.

Moreover, we further analyzed in more details the portion of foreign students studying at certain faculties and we put it in relation to the score of interest of employers in the graduates. We used data from Statistical yearbooks of education publishes by Slovak Centre of Scientific and Technical Information. We also used the ranking of public universities and faculties compiled by the job portal Profesia.sk according to employers' interest in graduates. We constructed a matrix that put into relation two indicators, namely the share of foreign students and employers' interest in graduates. The share of foreign students was specified through the percentage share of foreigners studying at individual faculties of Slovak public universities in the total number of students studying full-time at the first and second level of higher education. The employers' interest in graduates was expressed through the score that the faculties obtained in the ranking mentioned above. The classification of faculties into quadrants was performed on a basis of critical values, which refer to the average value of both indicators.

Table 1 shows the list of faculties of Slovak public universities, which ranked first to twentieth in the ranking compiled according to the interests of employers. It also contains the abbreviation that was used when processing the matrix.

**Table 1 Top 20 faculties according to employers' interest in graduates and abbreviations used in matrix**

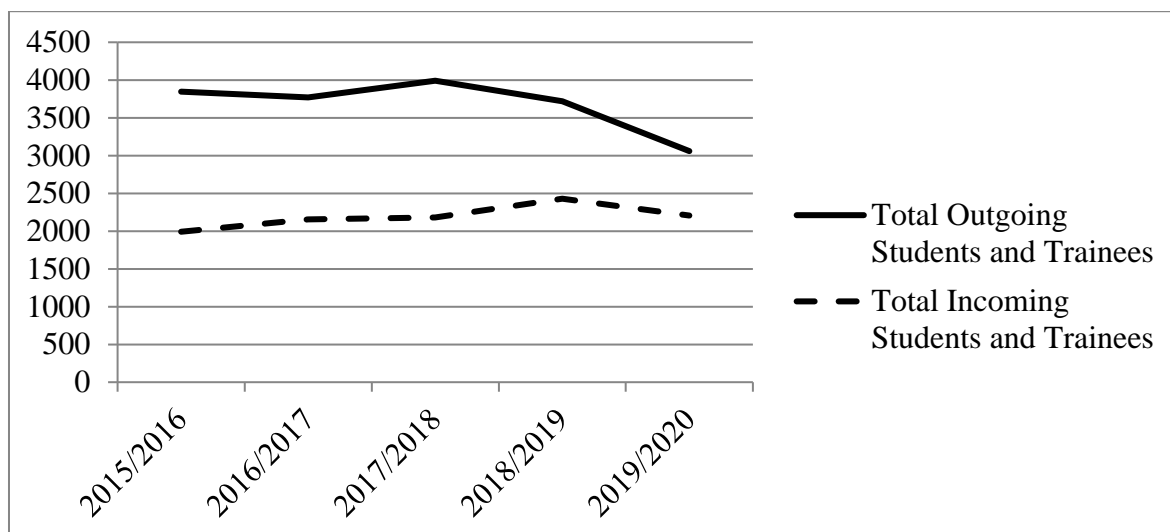
<b>Faculty</b>	<b>Abbreviation used in matrix</b>
Faculty of Informatics and Information Technologies, Slovak University of Technology in Bratislava	FIIT SUT
Faculty of Economic Informatics, University of Economics in Bratislava	FEI UEB
Faculty of Electrical Engineering and Information Technology, Slovak University of Technology in Bratislava	FEEIT SUT
Faculty of Mathematics, Physics and Informatics, Comenius University Bratislava	FMPI CUB
Faculty of Management Science and Informatics, University of Žilina	FMSI UZ
Faculty of Electrical Engineering and Information Technology, University of Žilina	FEEIT UZ
Faculty of Electrical Engineering and Informatics, Technical University of Košice	FEEIT TUK
Faculty of Pharmacy, Comenius University Bratislava	FP CUB
Faculty of International Relations, University of Economics in Bratislava	FIR UEB
Faculty of Business Management, University of Economics in Bratislava	FBM UEB
Faculty of National Economy, University of Economics in Bratislava	FNE UEB
Faculty of Management, Comenius University Bratislava	FM CUB
Faculty of Material Science and Technology, Slovak University of Technology in Bratislava	FMST SUT
Faculty of Civil Engineering, Slovak University of Technology in Bratislava	FCE SUT
Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava	FME SUT
Faculty of Economics and Management, Slovak University of Agriculture in Nitra	FEM SUA
Faculty of Commerce, University of Economics in Bratislava	FC UEB
Faculty of Civil Engineering, University of Žilina	FCE UZ
Faculty of Economics, Technical University of Košice	FE TUK
Faculty of Civil Engineering, University of Košice	FCE TUK

*Source: own processing*

### 3 Results and Discussion

The development of the level of internationalization of Slovak universities and their faculties evaluated through the number of incoming as well as outgoing students and trainees under Erasmus+ program is shown in Figure 1. The number of incoming students and trainees has a decreasing tendency since the academic year 2018/2019, while the number of outgoing students and trainees started to decrease already in the previous academic year. These results may indicate a decreasing rate of internationalization of higher education in Slovakia. On the other hand, it may also indicate a slightly decreasing attractiveness of the Erasmus+ program compared to other opportunities for studying abroad. However, these considerations require further investigation within future research.

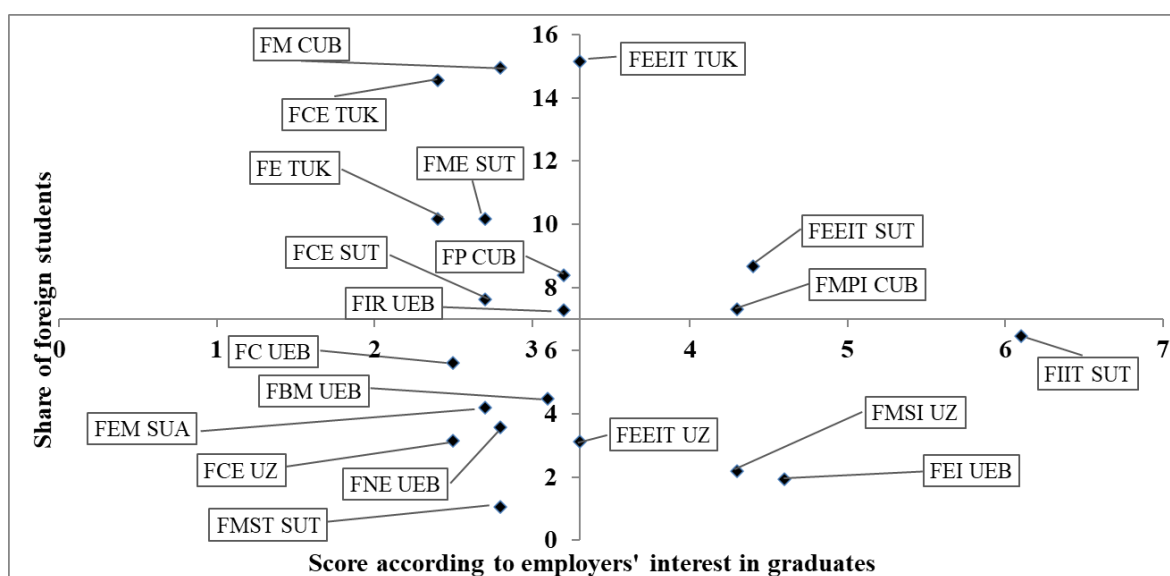




**Figure 1 Level of internationalization of Slovak universities**

*Source: own processing*

Figure 2 shows the position of the selected faculties in terms of their share of foreign students in relation to score according to employers' interest in graduates. The results show that the interest of employers in particular graduates is basically not dependent on the level of internalization of the internal environment of the particular faculty. The majority of faculties showing an above-average share of foreign students (i.e. share above 7%) at the same time face a below-average interest of employers in their graduates. On the other hand, majority of faculties attractive for employers report rather below-average share of foreign students. Hence, the field of study seems to be a more significant factor influencing employers' interest in university graduates. Currently, employers are mainly interested in graduates of fields of study focused on informatics and/ or electrical engineering.



**Figure 2 Share of foreign students and employers' interest in graduates' matrix**

*Source: own processing*

Despite the attractiveness of the Slovak Republic for foreign investors and the related support for the creation of new jobs (for more details see e.g. Bobenič Hintošová, Bruothová, Barlašová, 2021), this is not significantly reflected in the interest of employers in graduates coming from a more international university environment. One potential reason for this may be focus on creation of such jobs that primarily require technical and analytical background at the expense of global competences. Similar considerations are offered by Nováčková (2017), who points to the fact that Slovakia has become an assembly workshop for the automotive industry with a constant demand for experts with a technical focus, especially in mechanical engineering, electrical engineering, mechatronics, etc.

However, plenty of authors (e.g. Ortiz-Marcos et al., 2020) highlighted the importance of global competence education for engineering students especially as a tool for enhancing the value of their international experience. Hence, the international student mobility, which is regularly seen as an important mean to foster global competence, should be assessed in terms of qualitative student development. At the same time, employers can play more active role in this regard and should, as stated by Nerlich (2021), recognize studying abroad as a benefit to a graduate's resume and thus motivate students more to participate on such programs. At the same time, this would cause more significant transfer of international knowledge and experience and would also contribute to a greater degree of internationalization of the internal environment of Slovak universities and their faculties.

## **Conclusion**

The present paper was focused on evaluation of the level of internalization of Slovak universities and their faculties in the light of graduates' employability in terms of interest of employers in particular graduates. For this purpose, the specific two-dimensional matrix was constructed. Our analysis revealed that there is a gap between internationalization of faculties' internal environment and students' employability, respectively employers' interest in graduates of certain faculties. It seems that the attractiveness of graduates for particular employer is primarily motivated not by their level of international study background, but rather by the field of study oriented towards computer science and electrical engineering. Hence, we find it important to motivate the employers to recognize in a larger extent the relevance of international experience as one of the key aspects of building a stronger professional profile.

## **Acknowledgement**

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## References

1. BOBENIČ HINTOŠOVÁ, A., BRUOTHOVÁ, M., BARLAŠOVÁ, T. 2021. Efektívnosť investičnej pomoci optikou tvorby nových pracovných miest. In: *Sociológia*, vol. 53, No. 6, p. 523-548.
2. EUROPEAN COMMISSION. 2020. *The Erasmus+ Annual Report 2019*. Available at: <https://wayback.archive-it.org/12090/20211005162738/https://ec.europa.eu/assets/eac/factsheets/pdf/sk-erasmus-plus-2019-in-numbers.pdf>. [accessed 20.06.2022]
3. EUROPEAN COMMISSION. 2020. *The Erasmus+ Annual Report 2020*. Available at: <https://ec.europa.eu/assets/eac/factsheets/pdf/sk-erasmus-plus-2020-in-numbers.pdf>. [accessed 20.06.2022]
4. HE, Y., LUNDGREN, K., PYNES, P. 2017. Impact of short-term study abroad program: Inservice teachers' development of intercultural competence and pedagogical beliefs. In: *Teaching and Teacher Education*, vol. 66, p. 147-157.
5. LI, Y. 2013. Cultivating student global competence: A pilot experimental study. In: *Decision Sciences Journal of Innovative Education*, vol. 11, No. 1, p. 125-143.
6. LIU, Y., YIN, Y., WU, R. 2020. Measuring graduate students' global competence: Instrument development and an empirical study with a Chinese sample. In: *Studies in Educational Evaluation*, vol. 67, No. 100915, p. 1-13.
7. MENG, Q., ZHU, C., CAO, C. 2017. An exploratory study of Chinese university undergraduates' global competence: Effects of internationalization at home and motivation. In: *Higher Education Quarterly*, vol. 71, No. 2, p. 159-181.
8. MOK, K. H., HAN, X. 2016. From 'brain drain' to 'brain bridging': transnational higher education development and graduate employment in China. In: *Journal of Higher Education Policy and Management*, vol. 38, No. 3, p. 369-389.
9. MURPHY, D., SAHAKYAN, N., YONG-YI, D., MAGNAN, S. S. 2014. The Impact of Study Abroad on the Global Engagement of University Graduates. In: *Frontiers: The Interdisciplinary Journal of Study Abroad*, vol. 24, No. 1, p. 1-24.
10. NERLICH, S. 2021. Outcomes-focused evaluation of study abroad experiences. In: *Journal of Higher Education Policy and Management*, vol. 43, No. 2, p. 166-181.
11. NGHIA, T. L. H., GIANG, H. T., QUYEN, V. P. 2019. At-home international education in Vietnamese universities: Impact on graduates' employability and career prospects. In: *Higher Education*, vol. 78, p. 817-834.
12. NOVÁČKOVÁ, D. 2017. Globalisation and its impacts on the Slovak labor market. In: *Sociálno-ekonomická revue*, vol. 15, No. 2, p. 66-72.

13. ORTIZ-MARCOS, I., BREUKER, V., RODRÍGUEZ-RIVERO, R., KJELLGREN, B., DOREL, F., TOFFOLON, M., URIBE, D., ECCLI, V. 2020. A framework of global competence for engineers: The need for a sustainable world. In: *Sustainability*, vol. 12, No. 22, 9568.
14. SCHENKER, T. 2019. Fostering global competence through short-term study abroad. In: *Frontiers: The Interdisciplinary Journal of Study Abroad*, vol. 31, No. 2, p. 139-157.
15. SLOVAK CENTRE OF SCIENTIFIC AND TECHNICAL INFORMATION. *Statistical yearbooks of education*. Available at: [https://www.cvtisr.sk/cvti-sr-vedecka-kniznica/informacie-o-skolstve/statistiky/statisticka-rocenka-publikacia/statisticka-rocenka-vysoke-skoly.html?page\\_id=9596](https://www.cvtisr.sk/cvti-sr-vedecka-kniznica/informacie-o-skolstve/statistiky/statisticka-rocenka-publikacia/statisticka-rocenka-vysoke-skoly.html?page_id=9596). [accessed 23.06.2022]
16. VANDE BERG, M., CONNOR-LINTON, J., PAIGE, R. M. 2009. The Georgetown consortium project: Interventions for student learning abroad. In: *Frontiers: The Interdisciplinary Journal of Study Abroad*, vol. 18, p. 1-75.
17. ZHANG, R., HSU, H.Y., WANG, S. K. 2010. Global literacy: Comparing Chinese and US high school students. In: *Multicultural Education & Technology Journal*, vol. 4, No. 2, p. 76-98.

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# STARTING A BUSINESS PROCEDURE, CORRUPTION AND BRIBERY PERCEPTION IN V4 COUNTRIES

## PROCEDÚRA ZAČATIA PODNIKANIA, KORUPCIA A VNÍMANIE ÚPLATKÁSTVA V KRAJINÁCH V4

*Mária DOLNÁ*

### Abstract

Corruption and bribery have negative impact on business environment and affect productivity of economies. Based on the analysis, synthesis and comparison of secondary data, in this thesis levels of bribery and corruption as well as required starting a business bureaucratic procedure in V4 countries are evaluated and compared. Some differences in the approaches of individual economies when starting a business, as well as the perceived situation of bribery and corruption while using a public service are pointed up. The chosen sources are indexes used to evaluate business environment and corruption level in general: Corruption Perception Index, Global Corruption Barometer and Doing Business Index.

**Keywords:** Doing Business Index, Corruption Perception Index, business environment, corruption, starting a business score

### Abstrakt

Korupcia a úplatkárstvo majú negatívny vplyv na podnikateľské prostredie a ovplyvňujú produktivitu ekonomík. Na základe analýzy, syntézy a porovnania sekundárnych údajov sú v tejto práci hodnotené a porovnávané úrovne úplatkárstva a korupcie, ako aj požadované procedúry pri začatí podnikania ako súčasť byrokracie v krajinách V4. Poukazuje sa na niektoré rozdiely v prístupe jednotlivých ekonomík pri zakladaní podniku, ako aj na vnímanú situáciu úplatkárstva a korupcie pri využívaní verejnej služby. Zvolenými zdrojmi sú indexy používané na hodnotenie podnikateľského prostredia a úrovne korupcie vo všeobecnosti: Index vnímania korupcie, Globálny barometer korupcie a Doing business index.

**Kľúčové slová:** Index Doing Business, Index Vnímania Korupcie, podnikateľské prostredie, korupcia, skóre pre začatie podnikania

## Introduction

Corruption and bribery affect every nation. There is no doubt, that they influence economies and business environment in which businesses operate, or future entrepreneurs will do. Slovak republic, Czech Republic, Poland and Hungary – the V4 countries share some economic similarities. The challenge of this thesis is to evaluate and compare levels of bribery and corruption as well as required starting a business bureaucratic procedure.

## 1 Definition of corruption and bribery

Corruption seems to be one of the most significant problems the world economy faces (Köbis – Troost – Brandt – Soraperra, 2019). While some researchers argue that corruption might increase efficiency most agree that

corruption has a negative effect on economic growth and development because it increases inequality (Policardo – Carrera, 2018). Moreover, corruption also hurts private ownership, investment rate, export intensity, innovation, leverage, employment growth, and profitability. Corruption has an economically and statistically significant negative effect on firm productivity as well. Furthermore, corruption leads to lower domestic private ownership and higher public ownership (Demir – Hu – Liu – Shen, 2022).

Bahoo, Alon and Paltrinieri (2020) define corruption as an illegal activity, which could be bribery, fraud, financial crime, abuse, falsification, favoritism, nepotism, manipulation, conducted through misuse of authority or power by public or private officeholders for private gain and benefit, financial or otherwise. The definition captures three important characteristics of corruption. The first is that the person or firm is conducting some form of illegal activity. The second is that the person or firm is misusing authority in violation of existing rules and regulations. The third characteristic is that the person or firm is using a position of power to reap personal benefits.

Subsequently, bribery may be defined as the promise, offer or gift, to a public official, or the solicitation or acceptance by a public official, directly or indirectly, of an undue advantage, for the official himself or another person or entity, in order that the official act or refrain from acting in the exercise of his official duties. The act of offering a bribe is recognized as active bribery and the act of accepting the bribe as passive bribery (Drapalova, 2019).

Indeed, to undertake a business is a decision that possible entrepreneurs make, and it depends on internal factors of each individual (such as capabilities, attitudes, perceptions and aspirations), resourcing (such as human, social and financial capital) and environmental conditions (such as social, political, legal, economic, etc.) (Lin - Peña – Chen, 2017).

## **2 Methodology**

Based on the analysis, synthesis and comparison of secondary data, we tried to point out the differences in the approaches of individual economies when starting a business, as well as the perceived situation of bribery and corruption while using a public service. Chosen sources for evaluation are indexes used to evaluate business environment and corruption level in general: Corruption Perception Index, Global Corruption Barometer and Doing Business Index.

To compare corruption, we used secondary data from Corruption Perception Index (CPI). CPI by Transparency International scores and ranks countries or territories according to how corrupt a country's public sector is perceived to be by experts and business executives. The CPI is the leading measurement for public sector corruption worldwide. The reason is, that it combines many different manifestations of corruption into one globally comparable indicator. Subsequently it provides a much more comprehensive picture of the corruption in

a particular country or territory than would each source taken separately. The CPI 2021 is calculated using 13 different data sources from 12 different institutions as listed in the table below. That institutions record perceptions of corruption for the past two years. After collecting, the received data are standardized to a scale of 0-100 where a 0 equals the highest level of perceived corruption and 100 equals the lowest level of perceived corruption. The process involves subtracting the mean of each source in the baseline year from each country score and then dividing by the standard deviation of that source in the baseline year. The baseline year parameters usage provides that the CPI scores are comparable year on year since 2012. After that, the standardized scores are transformed to the CPI scale 0-100 scale (Transparency International 2022a).

**Table 1 Data sources used to construct the Corruption Perceptions Index (CPI) 2021**

DATA SOURCE CPI 2021	COUNTRY COVERAGE	TYPE OF ASSESSMENT
<b>1. African Development Bank Country Policy and Institutional Assessment 2020</b>	<i>37 African countries</i>	<i>Expert evaluations</i>
<b>2. Bertelsmann Stiftung Sustainable Governance Indicators 2020</b>	<i>41 EU and OECD countries</i>	<i>Combination of quantitative data and qualitative expert assessments</i>
<b>3. Bertelsmann Stiftung Transformation Index 2022</b>	<i>137 countries and territories</i>	<i>Qualitative expert survey</i>
<b>4. Economist Intelligence Unit Country Risk Service 2021</b>	<i>131 countries/territories</i>	<i>Risk evaluations based on qualitative and quantitative indicators</i>
<b>5. Freedom House Nations in Transit 2021</b>	<i>29 countries/territories</i>	<i>Qualitative expert assessment</i>
<b>6. Global Insights Business Conditions and Risk Indicators 2020</b>	<i>205 countries/territories worldwide</i>	<i>Commercial business expert assessment</i>
<b>7. IMD World Competitiveness Yearbook 2021</b>	<i>64 countries/territories around the world</i>	<i>Executive opinion survey</i>
<b>8. Political and Economic Risk Consultancy 2021</b>	<i>16 Asia Pacific countries/territories plus the United States</i>	<i>Executive opinion survey</i>
<b>9. The PRS Group International Country Risk Guide 2021</b>	<i>140 countries</i>	<i>Risk assessment</i>
<b>10. World Bank Country Policy and Institutional Assessment 2020</b>	<i>73 countries</i>	<i>Expert assessment</i>
<b>11. World Economic Forum Executive Opinion Survey 2020</b>	<i>14,303 business executives in 126 economies</i>	<i>Business executive survey</i>
<b>12. World Justice Project Rule of Law Index 2021</b>	<i>139 countries</i>	<i>Expert survey</i>
<b>13. Varieties of Democracy Project 2021</b>	<i>179 countries</i>	<i>Expert survey</i>

Source: Own data processing from Transparency International, 2022a

In Slovak republic, Czech republic, Poland and Hungary data were collected within 10 sources: Bertelsmann Stiftung Sustainable Governance Indicators, Bertelsmann Stiftung Transformation Index, Economist Intelligence Unit Country Risk Service, Freedom House Nations in Transit, Global Insight Country Risk Ratings, IMD World Competitiveness Center World Competitiveness Yearbook Executive Opinion Survey, The PRS Group International Country Risk Guide, World Justice Project Rule of Law Index Expert Survey, Varieties of Democracy, World Economic Forum Executive Opinion Survey (Transparency International, 2021b). The CPI is accompanied by a standard error and confidence interval associated with the score, which captures the variation in scores of the data sources available for that country or territory. Standard error for Slovak republic is 2.01, for Czech Republic 1.28, for Poland 1.22, for Hungary 1.30(Transparency International, 2021c).

The second methodological tool used in evaluation to assess bribery is the Global Corruption Barometer (GCB). It is a survey carried out since 2003 containing a summary of the experiences of everyday people confronting corruption around the world. The Global Corruption Barometer (GCB) – European Union 2021 provides an in-depth look at people's views on corruption, moreover their experiences of bribery and as well favouritism. Based on fieldwork conducted between October and December 2020, the GCB surveyed more than 40,000 people in 27 countries across Europe (Transparency International, 2021).

In the survey participated the general population aged 18 and older in all European regions. All the interviews were conducted via computer assisted telephone interviews using random digit dialing sample generation. The efficiency of the result is subject to the sample size and the observed percentage. The confidence interval of results can be therefore estimated. The following table summarizes information related to the fieldwork execution, sample size, coverage and accuracy of the samples.

**Table 2 Global corruption barometer - European Union 2021**

COUNTRY	FIELDWORK DATES	SAMPLE SIZE	MARGIN OF ERROR
<b>Slovak republic</b>	<i>13.10 – 23.11.2020</i>	2000	2.19
<b>Czech republic</b>	<i>13-10. – 5.11.2020</i>	1000	3.10
<b>Poland</b>	<i>13-10. – 5.11.2020</i>	2100	2.14
<b>Hungary</b>	<i>13-10. – 5.11.2020</i>	900	3.27

*Source: Own data processing from Transparency International, 2021*

To compare accessibility and ease of starting a business there were used secondary data from Doing Business Index (DB). DB measures aspects of business regulation affecting small domestic firms located in the largest business city of 190 economies. DB includes 12 areas of business regulation - starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across



borders, enforcing contracts, and resolving insolvency, employing workers and contracting with the government. More than 48 000 professionals in 190 economies have assisted in providing the data that inform the DB indicators (The World Bank, 2020a).

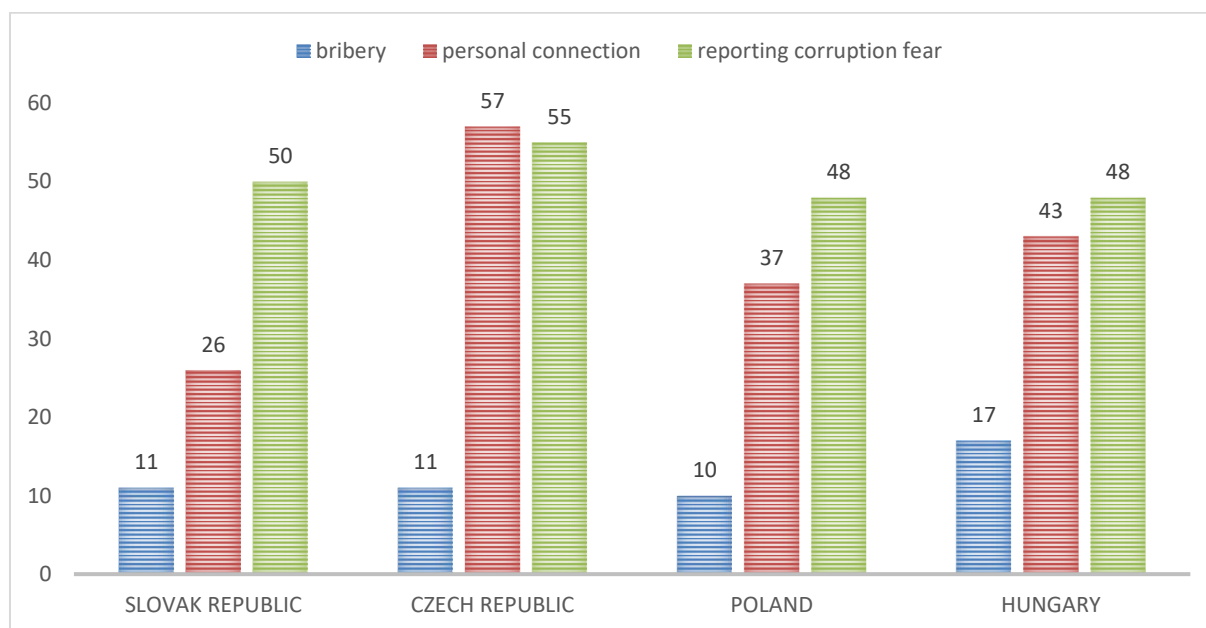
For the purposes of this work, secondary data within the category starting a business were selected. DB records all procedures officially required, or commonly done in practice, for an entrepreneur to start up and formally operate a business. Specifically, the time and cost to complete the procedures and the paid-in minimum capital requirement. These procedures include all the processes entrepreneurs are supposed to undergo when obtaining all necessary approvals, licenses, permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities. After collecting data, the scores are produced. These scores are the simple average of the scores for each of the component indicators (The World Bank, 2022a).

### **3 Perception of bribery and corruption in V4 countries**

Experiencing COVID-19 pandemic, CPI 2021 reveals that corruption levels have stagnated worldwide. Despite commitments, 131 countries have made no significant progress against corruption over the last decade, moreover 27 countries are at historic lows in their CPI score (Transparency International, 2022d). The Slovak republic gained score 52 (52/100) which ranked Slovakia 56<sup>th</sup> (56/180). The CPI score of the Slovak republic has improved compared to 2020 by 3 points. While in 2012 was Slovak republic evaluated with 46 points, subsequently continuous growth till the year 2021 has brought historical maximum (score 52) (Transparency International, 2022d). One of the no change countries is the Czech Republic. Compared to the year 2020 the score did not change but stayed at 54 which ranked Czech Republic 49<sup>th</sup> (from 180 countries). The Czech Republic reached its maximum in 2018 (score 59) followed by gradual fall since it reached its bottom in 2013 (score 48) (Transparency International, 2022e). The best rated V4 country appears to be Poland with its score 56 ranked 48<sup>th</sup> just after Czech Republic as well experiencing no change since last year. The score of Poland is slightly decreasing since it reached its maximum in 2015 (score 63) (Transparency International, 2022f). On the other hand, the worst ranked among V4 countries is Hungary which scored 43 and was placed 73<sup>rd</sup>. Last decrease from 2020 by 1 point just follows gradual continual decline since the year 2012 (score 55) (Transparency International, 2022c) (Transparency International, 2022g).

While there is no country in which a majority of citizens think that corruption is decreasing, the most positive results come from Slovak republic, where 39% of citizens see corruption declining. 11% of citizens paid a bribe for using a public service. Personal connections for public services report 26% of Slovaks and 50% of citizens suppose, they are not able to report corruption because of the fear. Similarly, in the Czech Republic 11% of citizens refer in last 12 months paying a bribe while using a public service. Moreover, the highest use of personal

connections within European Union was documented in the Czech Republic (57%) followed by France and Portugal (48%). In addition, 55% perceive fear of retaliation for corruption referring. 60% of respondents or more in Poland and Spain think that their government's management of the pandemic lacks in transparency. In Poland 10% of citizens paid a bribe, 37% used a personal connection to receive social service however 48% of Polish feel fear of reporting corruption. Finally, Hungarian in 17% of cases used a bribe, in 43% of cases used a personal connection and the same as in Poland 48% of citizens perceive fear of corruption reporting (Transparency International, 2021).



**Figure 1 Rate of perceived bribery, personal connection and fear of retaliation for reporting corruption by Global Corruption Barometer 2021**

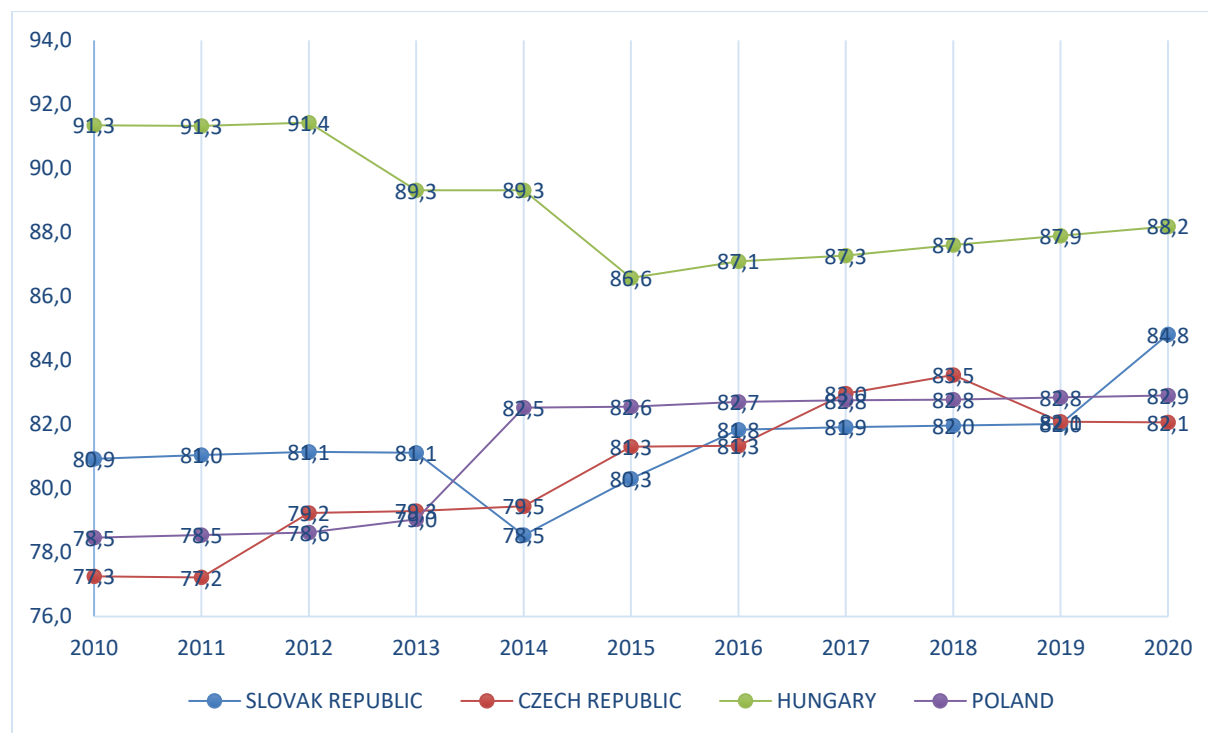
*Source: Own data processing from Transparency International, 2021*

#### **4 Starting a business procedure in V4 countries**

In Slovak republic, there has been made some changes since 2010. Some of them make it easier to start a business, some do the opposite. In 2013 Slovak republic speeded up the processing of applications at the one-stop shop for trading licenses, income tax registration and health insurance registration. On the other hand, in 2014 by adding a new procedure for establishing a limited liability company the score has worsen. After that, changes in 2015, 2016 and 2020 have slightly helped, specifically Slovak Republic reduced the time needed to register with the district court and eliminated the need for the verification of signatures by a notary public, simplified the process of starting a business by introducing court registration at the one-stop shop and abolished the requirement to obtain and submit information on tax arrears (The World Bank, 2020b).

In Czech Republic within category starting a business there has been notable almost continuous gradual growth since 2010 thanks to some changes in the years 2015, 2017 and 2018. Czech Republic has kept in cost and minimum capital

reduction. There has been made significant time reduction change to register a company in commercial courts by allowing notaries to directly register companies through an online system (The World Bank, 2020c).



**Figure 2 Starting a business score by Doing Business Index 2010-2020 for V4 countries**

*Source: Own data processing from The World Bank, 2022b*

Starting a business score of Poland tends to stagnate, however in 2010 Poland made starting a business easier by reducing the minimum capital requirement and consolidating company registration with registration with the tax, social security and statistics authorities, as well as in 2014 by eliminating the requirement to register the new company at the National Labor Inspectorate and the National Sanitary Inspectorate (The World Bank, 2020d). The only V4 country with an apparent declining trend is Hungary. In 2013 Hungary increased the registration fees for limited liability companies and added a new tax registration at the time of incorporation and enforcing a requirement for mandatory registration with the Hungarian Chamber of Commerce and Industry. Moreover, in 2015 Hungary has increased the paid-in minimum capital requirement (The World Bank, 2020e).

In the Slovak republic for limited liability company (Spolocnost s Rucenim Obmedzenym) is required paid-in minimum capital 2 500 EUR. Evaluated city is Bratislava. The starting a business procedure consists of 7 partial procedures (score 64.71): checking the uniqueness of the proposed company name, notarizing articles of association and related documents, paying capital contributions and receiving an affidavit from a custodian of funds, applying at the One-stop shop for trade license, register for income tax and with the District Court, registering for VAT, registering with pension, sickness, and disability insurance and

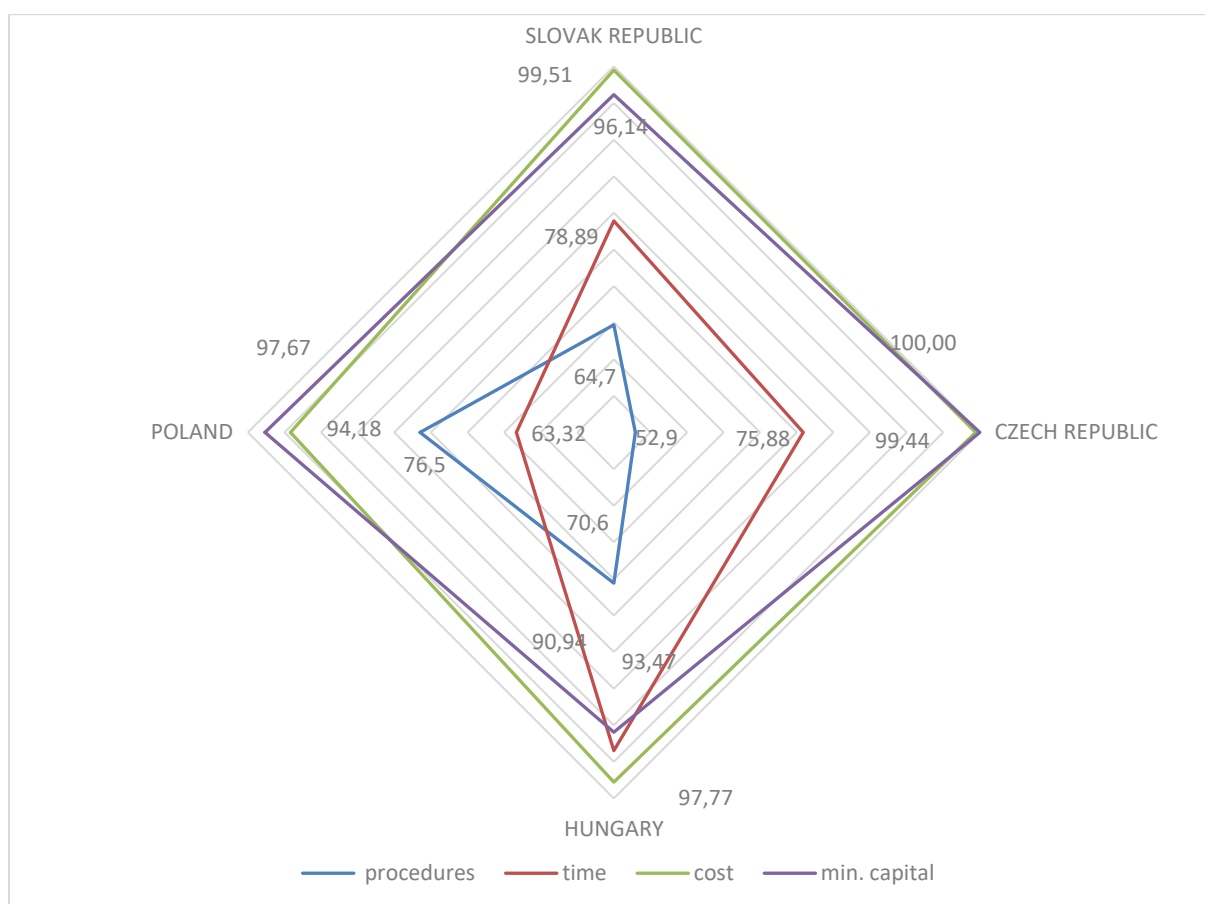
unemployment insurance at the local social insurance company (Socialna poistovna), registering for health insurance. To conclude all mentioned procedures it usually takes 21.5 days in comparison to New Zealand, where the procedure time is 0.5 day. Nearly all of procedures are free of charge thanks to what was the Slovak republic evaluated well for the cost of starting a business procedure (score 99.51).

**Table 3 Selected indicators measured within category Starting a business 2010-2020 for V4 countries**

	SLOVAK REPUBLIC				CZECH REPUBLIC				HUNGARY				POLAND			
	procedures	time - days	cost - % of income	paid in min. capital	procedures	time - days	cost - % of income	paid in min. capital	procedures	time - days	cost - % of income	paid in min. capital	procedures	time - days	cost - % of income	paid in min. capital
<b>2020</b>	7	21.5	1	15.4	9	24.5	1.1	0	6	7	4.5	36.2	5	37	11.6	9.3
<b>2019</b>	8	26.5	1	16.4	9	24.5	1	0	6	7	4.9	40.1	5	37	11.8	10
<b>2018</b>	8	26.5	1.1	17.2	8	24.5	1	0	6	7	5.4	43.8	5	37	12	10.7
<b>2017</b>	8	26.5	1.1	17.8	8	24.5	5.7	0	6	7	7.1	45.5	5	37	12.1	10.9
<b>2016</b>	8	26.5	1.5	18.5	8	30.5	6.7	0	6	7	7.5	47.7	5	37	12.2	11.4
<b>2015</b>	9	26.5	1.5	19.2	8	30.5	6.9	0	6	7	8.5	54	5	37	12.9	12.3
<b>2014</b>	9	33.5	1.5	19.3	8	30.5	7	29.5	6	7	8.8	9.4	5	37	13.1	12.6
<b>2013</b>	8	28.5	1.8	21.3	8	30.5	8.1	29.7	6	7	8.9	9.4	7	39	13.2	13
<b>2012</b>	8	28.5	1.8	20.9	8	30.5	8.1	30.7	5	5	7.6	9.7	7	39	16	14
<b>2011</b>	8	28.5	1.9	22.2	9	32	9.3	30.9	5	5	8.2	10.2	7	39	16.3	14.7
<b>2010</b>	8	28.5	2	23.8	9	32	9.2	30.5	5	5	8	10.2	7	39	16.7	15.3

Source: Own data processing from The World Bank, 2022b

Limited liability company (Společnost s Rucením Omezeným) in Czech republic is charged 5 CZK (Prague – covered city) what is the reason for full score (score 100). The highest number of procedures (9) has, on the other hand, brought the lowest rating (score 52.94): check the uniqueness of the company's name, notarize Articles of Association and Lease Agreement, obtain confirmation of the administrator of the capital contribution of the company, along with the confirmation of the bank that the capital contribution is held in the company's special bank account, register with the Trade Licensing Office and obtain extract of the trade license, register in the Business Registry of the Regional Commercial Court through a notary – a fee has to be paid, register for income tax and VAT, register beneficial owners with the local registry court – another fee has to be paid, register for social security, register for health insurance. The whole procedure takes 24.5 days.



**Figure 3 Score for procedures, time, cost and minimum paid capital for starting a business in V4 countries according Doing Business Index 2020**

*Source: Own data processing from The World Bank, 2022b*

Since 2014 the process of starting a business consists just of 5 procedures and consequently the V4 best score for number of procedures (score 76.47) belongs to Poland: notarize company agreement – associated with charges, file for company registration at the National Court Register, register for taxes and VAT, register employees with the Social Security Agency (Zakład Ubezpieczeń Społecznych - ZUS). On the other hand, the procedures are very time consuming, it takes about 37 days, which is the longest time period within V4 (score 63.32). Evaluated legal form (Sp z o.o. - Limited Liability Company) is connected with paid-in minimum capital requirement 5 000 PLN (covered city – Warsaw).

For limited liability company (Korlatolt Felelossegu Tarsasag) required paid-in minimum capital is 1 500 000 HUF. Starting a business consists of 6 procedures: hire a lawyer who will represent the company, create the company deed and prepare any other necessary legal document – charged with fees, open a bank account and deposit the capital, apply for registration at the Registration Court (simplified electronic registration), register with the National Office for Health Insurance, registration for Municipal Business Tax, register with the Hungarian Chamber of Commerce and Industry – which involves annual contribution. Thus, to undergo all required procedures it takes just 7 days,

Hungary was given the best rating (score 93.47) for time – starting a business within V4 countries (The World Bank, 2022b).

## Conclusion

Starting a business terms, corruption and bribery play inevitable part of business environment and as well an important component of decision-making process of potential entrepreneurs. Indeed, it could either play the role of positive motivation or demotivating factor of future entrepreneurs. Evaluation of V4 countries: Slovak republic, Czech Republic, Poland and Hungary in the light of Corruption Perception Index, Global Corruption Barometer and Doing Business Index has shown on the one hand, that all four countries seem to report similar results in perceived corruption, bribery and corruption referring fear categories. The exception is just Hungary evaluated by CPI worse than others and as well Czech Republic exceeds other countries in the level of personal connection importance. According DBI the worst evaluated category remains the number of procedures required to start a business, especially in Czech Republic, where potential entrepreneurs are required to undergo 9 procedures.

## References

1. BAHOO, S. - ALON, I. - PALTRINIERI, A. 2022. Corruption in international business: A review and research agenda. vol. 29. is. 4. ISBN: 0969-5931.
2. DEMIR, F. - HU, CH. - LIU, J. - SHEN, H. 2022. Local corruption, total factor productivity and firm heterogeneity: Empirical evidence from Chinese manufacturing firms. In *World Development*. vol. 151. ISSN 0305-750X.
3. DRAPALOVA, E. 2019. Corruption and the crisis of democracy. Available at [https://knowledgehub.transparency.org/assets/uploads/helpdesk/Corruption-and-Crisis-of-Democracy\\_2019.pdf](https://knowledgehub.transparency.org/assets/uploads/helpdesk/Corruption-and-Crisis-of-Democracy_2019.pdf)
4. KÖBIS, N. – TROOST, M. – BRANDT, C. O. – SORAPERRA, I. 2019. Social norms of corruption in the field: social nudges on posters can help to reduce bribery. In *Behavioural Public Policy*. p. 28.
5. LIN, L. L. – PEÑA, A. V. – CHEN, CH. 2017. Factors related to the intention of starting a new business in El Salvador. In *Asia Pacific Management Review*. vol. 22. iss. 4. p. 212-222. ISSN 1029-3132.
6. POLICARDO, L. – CARRERA, E. J. S. 2018. Corruption causes inequality, or is it the other way around? An empirical investigation for a panel of countries. In *Economic Analytical Policy*. Elsevier. p 92-102, vol. 59. ISSN: 03135926.
7. THE WORLD BANK. 2020a. Doing business index. 135 p. SBN: 978-1-4648-1440-2.
8. THE WORLD BANK. 2020b. Economic profile – Slovak republic. 66 p. ISBN: 978-1-4648-1440-2.

9. THE WORLD BANK. 2020c. Economic profile – Czech Republic. 66 p. ISBN: 978-1-4648-1440-2.
10. THE WORLD BANK. 2020d. Economic profile – Poland. 66 p. ISBN: 978-1-4648-1440-2.
11. THE WORLD BANK. 2020e. Economic profile – Hungary. 66 p. ISBN: 978-1-4648-1440-2.
12. THE WORLD BANK. 2022a. Methodology. Available on: <https://archive.doingbusiness.org/en/methodology/starting-a-business>
13. THE WORLD BANK. 2022b. Historical data. Available on: <https://archive.doingbusiness.org/en/data>
14. TRANSPARENCY INTERNATIONAL. 2021. Citizens' views and experiences of corruption. 72 p. ISBN: 978-3-96076-179-2.
15. TRANSPARENCY INTERNATIONAL. 2022a. Corruption Perceptions Index 2021: Full Source Description. Available on: <https://www.transparency.org/en/cpi/2021>
16. TRANSPARENCY INTERNATIONAL. 2022b. Corruption Perceptions Index 2021: Full Source Description. Available on: <https://www.transparency.org/en/cpi/2021>
17. TRANSPARENCY INTERNATIONAL. 2022c. CPI 2021 – Regional Tables. Available on: <https://www.transparency.org/en/cpi/2021>
18. TRANSPARENCY INTERNATIONAL. 2022d The Corruption Perception Index. 17 p. ISBN: 978-3-96076-198-3.
19. TRANSPARENCY INTERNATIONAL. 2022d. CPI 2021 – Country data Slovakia. Available on: <https://www.transparency.org/en/cpi/2021/index/svk>
20. TRANSPARENCY INTERNATIONAL. 2022e. CPI 2021 – Country data-Czech republic. Available on: <https://www.transparency.org/en/cpi/2021/index/cze>
21. TRANSPARENCY INTERNATIONAL. 2022f. CPI 2021 – Countra data Poland. Available on: <https://www.transparency.org/en/cpi/2021/index/pol>
22. TRANSPARENCY INTERNATIONAL. 2022g. CPI 2021 Country data Hungary. Available on: <https://www.transparency.org/en/cpi/2021/index/hun>

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# LEADERSHIP STYLE AND ITS IMPACT ON THE RELATIONSHIP BETWEEN LEADER AND EMPLOYEE IN SOUTH SLOVAKIAN REGION

## ŠTÝL VEDENIA A JEHO VPLYV NA VZŤAH LÍDRA A ZAMESTNANCA V REGIÓNE JUŽNÉHO SLOVENSKA

*Nikolett GYURLÁN NAGY – Norbert GYURLÁN*

### Abstract

The study examines the impact of leadership style on the relationship between leaders and employees. Leadership is an activity that influences members of an organization for a specific purpose in order to find a common solution to a task. A leader coordinates organizational functioning by considering several factors. Recently, researchers have categorized individual leaders in leadership style typologies. With the help of this, they were identified with personality traits and forms of behaviour. Nowadays, there is a growing interest in the impact of leadership style on organizational life as well as interpersonal relationships. The aim of the study is to prove the effect of leadership style, resp. its possible rejection of the relationship between employees and leaders. The research was conducted among companies in Southern Slovakia with the help of an employee and a leader questionnaire.

**Key words:** behaviour, employee, leader, leadership style, organization

### Abstrakt

Príspevok skúma vplyv štýlu vedenia na vzťah medzi lídrami a zamestnancami. Vedenie je činnosť, ktorá za konkrétnym účelom ovplyvňuje členov organizácie s cieľom nájsť spoločné riešenie úlohy. Líder koordinuje činnosť organizácie zohľadnením viacerých faktorov. Výskumníci nedávno kategorizovali jednotlivých lídrov v typológiách štýlu vedenia. Pomocou týchto topológií boli lídri stotožnení s osobnostnými črtami a formami správania. V súčasnosti rastie záujem o vplyv štýlu vedenia na činnosť organizácie, ako aj na interdisciplinárne vzťahy. Cieľom štúdie je preukázať, resp. zamietnuť vplyv štýlu vedenia na vzťah medzi lídrami a zamestnancami. Výskum bol realizovaný v kruhu firiem pôsobiach na Južnom Slovensku pomocou dotazníka pre lídrov a zamestnancov.

**Kľúčové slová:** líder, organizácia, správanie, štýl vedenia, zamestnanec

### Introduction

We chose this topic because in today's competitive environment, it is no longer enough for companies to meet basic requirements. With this, they can only sustain themselves, but do not achieve outstanding results. We believe that the key to lasting competitive advantage and success is an emphasis on the internal values of the organization, with a particular focus on the relationship between the employee and the leader. Each leader is a different individual, and his/her leadership technique is different. Different leadership behaviours can be grouped using leadership style typologies. The basic leadership style types are autocratic, democratic, and laissez-faire leadership, the impact of which we intend to

examine in this study. The way of leadership can influence the rules of equal treatment. If the leader is overly dominated by an autocratic style, mobbing at work can develop, which is a breach of responsibility of leader.

## 1 Theoretical background

We know a number of definitions of leadership. The oldest science is leadership and is also the latest art (*Torgensen-Weinstock, 1979; Bilanics, 2008*). Leadership is an activity that relies on a communication process to influence relationships and behaviors among people for a specific purpose. Leadership success can be achieved by the leader understanding people's past behavior, defining, directing, and potentially changing their future behavior (*Bayer, 1995*). According to Fayol, the components of leadership are planning, organization, regulation, control, activation (*Wood et al., 2002*). The relationship between leaders and those who are managed has existed since the beginning of history. It is common for leadership, management, and administration to be treated as related concepts in the literature. The concept of leadership and management has been debated in the literature for a long time, and then from the mid-1980s, the term management gained ground (*Carnall, Roebuck 2015*). Management covers all areas of organizational life and also plays a significant role in the innovation skills of companies. Leaders have a task to be innovators and their activity must be connected to motivating people (*Šimo, Mura, 2015; Mura et al., 2017*). In doing so, it also serves as a basis for organizational development and the main aim of each business is to achieve success and prosperity (*Kanter, 1983; Tang, 2015; Čaha, 2017; Carreras et al., 2018; Lorincová 2018*).

Communication between leaders and employees plays an extremely important role in the life of the organization. The issue of human resources is a highly perceived problem of professional circles in different fields of science (*Mura, Svec, 2018; Hitka et al. 2018*). A good leader needs to have adequate communication skills to be able to motivate and encourage good team performance as well (*Ahmad, 2012*). One of the most important motivating factors that create harmonious relationships in business is a mutually acceptable and effective system of remuneration (*Dugasová, Tkáčová, 2012; Takei, Ito, 2007; Pucko et al., 2013; Zauskova et al., 2013; Kubeš, Rančák, 2018; Mura et al., 2019*).

Each leader has a specific leadership style, although among these, specific patterns can be discovered, according to which we are able to categorize them (*Khan, 2015*). Researchers in management science have dealt with the problem that one person is a successful leader, while the other, who has a better understanding of the profession, fails as a leader. Management experts have been of the view that sound human resource practices help in improving organizational productivity (*Anyakoha, 2019; Horváth, Hollósy-Vadász, 2019*). The three basic leadership styles were formulated in 1939 by Lewin, Lippitt, and White (autocratic, democratic, laissez-faire). This early research had a great impact on

the scientific world. Lewin, Lippitt, and White identified three main leadership styles based on their studies: autocratic, democratic, and laissez-faire leadership style. (Peck, Dickinson 2009).

The **autocratic** leader is completely independent. As for his/her decision-making technique, he/she decides for him/herself, uniquely. They do not take into account the opinions of their employees or subordinates at all. They limit their information service of the members of the group by withholding information, not sharing the background of their decisions, thus creating a strong relationship of dependence between themselves and their subordinates. The allocation of tasks and control is arbitrary. Often the assigned task is not based on adequate competence, so its outcome is also uncertain. In an organization with autocratic leadership, members do not feel good, the atmosphere is tense, characterized by restrictions and rules. In contrast, yet Lewin's research proves that autocratically controlled organizations are the most effective.

It is characteristic of a **democratic** leader to involve employees at a high level in the decision-making process and to seek their opinions. This involvement can even extend to the decision-making process. The members of the group have enough room for maneuver, as well as the opportunity to study the decision options and select the options. In terms of criticisms and rewards, the leader strives for maximum objectivity. From the point of view of the employees, it can be said that taking their opinions into account has a particularly positive factor on themselves. In addition, the leader can hold employees accountable. Democratic leadership behavior is often characteristic of the preparation process as well as the problem-solving and decision-making process. In addition, the leader controls, expects efficient operation and outstanding performance. The task of the employee is to do the work, and the task of the leader is to ensure the conditions, control and support. It can be said that employees feel best with a democratic leader.

The laissez-faire leadership style covers a leader who is extremely lenient and not explicitly involved in the life of the group. His/her behavior is more of a "permissive" nature. He/she takes responsibility for the preparations and securing the conditions, but he/she does not care about the organization. He/she leaves the discussions to the group. No confirmation is given by him/her (Lewin et al., 1939; Lippitt, 1940; Lippitt, White, 1958; Iqbal, 2011; Bakacsi, 2018).

## 2 Material and methods

The research was conducted in two phases, by a leader and employee questionnaire. It included 25 questions on the structure of the *questionnaire for both leaders and employees*. The majority of the questionnaires contained closed-ended questions, but there were open-ended answer possibilities to some of the questions. In addition to the closed-ended questions, the questionnaire included five-grade Likert scale-type questions. The available company database was narrowed down to Southern Slovakia, and 500 companies were randomly

selected, of which 368 companies could be visited. During the period of our research, we received questionnaires from 118 leaders as well as 541 employees. The cleared sample consists of 106 leader questionnaires and 511 employee questionnaires. In the region of Southern Slovakia, our sample includes 106 company leaders and 4-5 employees per company. The questionnaires were obtained by visiting the companies, in person and by post, and were evaluated in the SPSS program.

*Research question:*

What is the relationship between democratic and autocratic leadership styles between leaders and employees in Southern Slovakia?

*Hypothesis:*

Democratic leadership style has a positive impact, autocratic leadership style has a negative impact on the relationship between leader and employees in Southern Slovakia.

### 3 Results and discussion

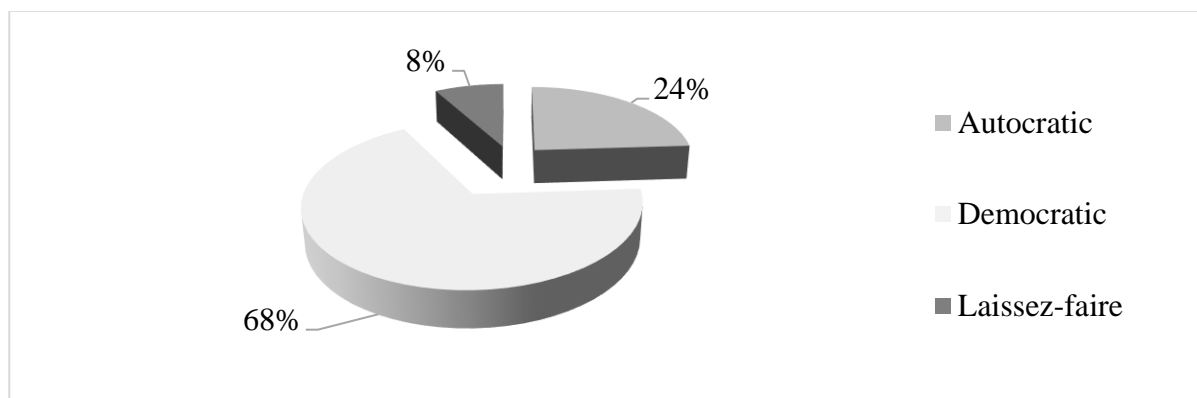
#### 3.1 Characterization of the sample

The research was carried out in the territory of Southern Slovakia. We can obtain results that are specific to this region in relation to the organizational life of the Hungarians in Slovakia. The vast majority (45%) of the **companies** participating in our research can be classified as large companies. Large companies are followed by medium-sized enterprises (30%) and then small enterprises (16%). Some micro-enterprises (4%) were also involved in our research. The remaining 5% of the sample classified themselves in the other category when completing the questionnaire. In terms of sectoral breakdown, most companies are in the industrial sector (39%) and the commercial sector (23%). These two sectors account for more than half of our sample. To a lesser extent, companies in the transport (11%), construction (7%), municipal / state (7%) or other categories participated in the research. Regarding the market operation of the companies in the sample, the vast majority of companies (42%) are present in the market between 10 and 20 years. 28% of the sample are companies that have been in the market for 20-40 years and 14% have been in business for more than 40 years.

51% of the **employees** in the sample are women and 49% are men. Employees can be divided into three categories of almost the same size in their age group: 36-45 years (31%), 26-35 years (28%), and 45-60 years (24%). There are quite a few employees in the 18-25 age group (14%). This is probably due to their participation in education. Most employees (64%) have a secondary education.

27% of the **leaders** in the sample are women and 73% are men. Regarding the age of leaders, most (41%) belong to the 36-45 age group, followed by the 46-60 age group (32%) and then the 26-35 age group (23%). The proportion is only 3%

for the 18-25 age group and 1% for the over 60 age group. 65% of leaders have a tertiary education and 35% have a secondary education. In the research, we used Lewin's leadership style typology. In the questionnaire, we developed groups of questions for the three leadership styles, which allowed us to classify leaders into each category. Thus, the result of the leadership style test, applied by the leaders in Southern Slovakia in the sample is shown in the figure below.



**Figure 1 Leadership style of leaders in Southern Slovakia**

*Source: own research*

In order to test our hypothesis, it is necessary to determine the proportion of autocratic, democratic or laissez-faire leadership in companies in Southern Slovakia. As shown in Figure 1, the vast majority of leaders in companies in Southern Slovakia use a democratic leadership style (68%). A democratic leader does not keep a long distance from employees, seeks communication with them, involves them in the decision-making process. Autocratic leadership style is less common in the region (24%). An autocratic leader makes decisions him/herself in all situations, he/she does not prefer to keep in touch with employees. Laissez-faire leadership is the least observed in the region (8%). This type of leader has a hard time making decisions and is reluctant to hand over the opportunity to others. In our research, we examine the relationships between autocratic and democratic leadership styles.

### 3.2 Analysis

The hypothesis was inspired by an interest in the workplace hierarchical relationship between leaders and employees. It can be read from many sources nowadays that the employment relationship between company leaders and employees is problematic. In some cases, the leader takes measures that are incompatible with the expectations of the unions. The question arose in us, how does leadership style affect the relationship between leaders and employees?

The question may arise as to whether the assumption that a democratic leader has a higher proportion of good relations with employees than an autocratic leader, is really true? Based on these questions, we set up the hypothesis: *Democratic leadership style has a positive effect, autocratic leadership style has*

*a negative effect on the relationship between leader and employees in Southern Slovakia.*

We primarily looked at the starting point of our study, the relationship between leaders and employees, from both directions.

**Table 1 Relationship between leaders and employees**

	Leader		Employee	
	Frequency	Percent	Frequency	Percent
Excellent	34	32.1	146	28.6
Mostly good	51	48.1	318	62.2
Saturated with conflicts	19	17.9	33	6.5
Extremely negative	2	1.9	12	2.3
Altogether	106	100.0	509	99.6
Missing	0	0	2	.4
Altogether	106	100.0	511	100.0

*Source: own research*

From Table 1, we can see that there is also a significant harmony in the responses of leaders and employees regarding their relationship to each other. We can state that the statement of the leaders is supported and confirmed by the employees. 80.2% of leaders say they have a positive relationship with employees (32.1% have excellent; 48.1% have mostly good relationship). In support of this, 90.8% of employees also say they have a positive relationship with their leader (28.6% have excellent; 62.2% have mostly good relationship). The rest of the respondents have a negative relationship with the leader / employee at work. However, the facts examined so far do not contain enough information to prove or disprove our hypothesis. It is necessary to perform tests to reveal whether there is a relationship between the relationship of the leaders and employees, and the leadership style.

**Table 2 Coefficients of the relationship between leaders and employees**

	Value	df	Sig.
Pearson Chi-Square	54.277 <sup>a</sup>	6	.000
Likelihood Ratio	54.719	6	.000
Linear-by-Linear Association	6.175	1	.013
Phi	.927		.000
Cramer's V	.831		.000
N of Valid Cases	509		

*Source: own research*

Table 2 illustrates three coefficients: Chi-square, Phi, Cramer's V. In all three cases, the values are below 0.05 at a significance level of 5%. Thus, we can conclude that there is a relationship between the factors examined. The value of

Phi is 0.927, which indicates a strong relationship. The value of Cramer's V is 0.831, which also indicates a strong relationship. In the next step, analysis of variance was performed.

**Table 3 ANOVA table of leadership style and leader-employee relationship**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.501	2	10.750	28.639	.000
Within Groups	189.937	506	.375		
Total	211.438	508			

*Source: own research*

From Table 3, we found a strong relationship between the relationship between leaders and employees and leadership style. In this sense, we consider it worthwhile to continue our research. Through the following cross-tabulation analysis, we can see exactly the extent to which an autocratic leader as well as a democratic leader maintains a good relationship with employees.

**Table 4 Cross-tabulation analysis of the relationship between leaders and employees**

		Leadership style			Altogether
		Autocratic	Democratic	Laissez-faire	
Relationships between leaders and employees	Excellent	16	125	5	146
	Mostly good	83	206	29	318
	Saturated with conflicts	17	10	6	33
	Extremely negative	6	3	3	12
Altogether		122	344	43	509

*Source: own research*

From cross-tabulation analysis presented in Table 4, it can be seen that the vast majority of leaders who adopt a democratic leadership style have a positive relationship with employees. Quantitatively, 96.22% of democratic leaders have a positive relationship with employees (36.34% have excellent; 59.88% have mostly good relationship). Only 3.88% of democratic leaders have a negative relationship with employees. In contrast, 81.15% of autocratic leaders have a positive relationship with employees. Here, it can be observed that the degree of a relationship, rated as excellent is lower and the relationship, rated as mostly good is higher. From this, we conclude that in the case of autocratic leadership, conflicts regarding democratic leadership are more common.

In the study, we highlighted the main factors that may underpin a positive leader-employee relationship. Such factors include leader feedback, task management according to competencies, ensuring employee well-being (e. g. work environment, fringe benefits), and the development of a motivation system. This can be interpreted or proved as follows:

- Regarding 85% of companies that provide feedback on employee performance, the relationship between leaders and employees is excellent.
- Regarding 81% of companies allocating tasks according to employee competencies, the relationship between leaders and employees is excellent.
- 85% of companies that value employee well-being have an excellent relationship between leaders and employees.
- 83% of companies that regularly use financial and / or verbal motivation have an excellent relationship between leader and employees.

**Table 5 Trials of the relationship between leadership style and internal marketing**

	Autocratic	Democratic	Sig.	Chi-square	Cramer's V
Informing about the goals and processes of the organization.	21%	70%	.036	99.422	.698
Incentives for quality work.	16%	78%	.000	103.533	.738
The importance of employee well-being for the leader.	14%	81%	.000	111.937	.751
Assignment of tasks according to competencies.	17%	79%	.000	96.008	.608
Feedback on work performance.	13%	80%	.000	112.693	.846

*Source: own research*

Table 5 shows strongly significant results. The values of the Chi-square test, the significance level and the Cramer's V association coefficient indicate a significant strong relationship in each case described in the table. From the table, we can conclude that autocratic leaders pay extremely little attention to the highlighted factors. Quantitatively, 21% of autocratic leaders inform employees about the processes taking place in the company and the goals to be achieved, in contrast, 70% of democratic leaders do so on a regular basis. Motivating employees to do quality work, which is perhaps the most important internal marketing goal, is considered important by only 16% of autocratic leaders. In contrast, 78% of democratic leaders encourage their employees in a variety of ways to achieve outstanding performance. Ensuring employee well-being in the workplace is one of the most sensitive topics in today's economic world. It is a proven fact that an employee who performs his/her duties in a calm, comfortable environment performs better than his/her counterparts working in poor working conditions. In our case, only 14% of autocratic leaders prioritize ensuring a positive workplace environment. In contrast, 81% of democratically-minded leaders consider it important to create well-being at work. The division of tasks according to competencies is preferred by 17% of autocratic leaders and 79% of democratic leaders. When there is provided feedback on work performance, we can discover higher contrast again. Only 13% of autocratic leaders value providing feedback to employees in some form of reward. In contrast, 80% of



democratic leaders incorporate a feedback and reward system into the day-to-day operations of the company. Our results suggest that although a small proportion of autocratic leaders, but some of them apply those factors.

#### 4 Conclusion

Overall, we can conclude that the effect of autocratic and democratic leadership style on the relationship factor does not differ significantly.

Furthermore, based on our research, it is concluded that the modern autocratic leader today is complemented by qualities that benefit the relationship with employees.

Based on the research results, we reject our hypothesis. Based on the results, we formulated the following theses:

1. *In Southern Slovakia, the relationship between leaders and employees is not influenced by leadership style.*
2. *In Southern Slovakia, a group / type of autocratic leaders can be observed who have expanded their tools with personality traits (some treat employees on an equal footing; others consider employee well-being, a third provide feedback on performance), which has a positive effect on their relationship with employees.*

From our results, we conclude that in addition to the division of autocratic and democratic leadership styles, it would be expedient to make further groupings and examine the influence of these groups with respect to the relationship between leaders and employees.

#### References

1. Ahmad, W. 2012. Leader's Interpersonal Skills and Its Effectiveness at different Levels of Management. *International Journal of Business and Social Science*: 3 (4) ISSN 2219-1933.
2. Anyakoha, C. 2019. Job analysis as a tool for improved organizational performance of SMEs in Lagos, Nigeria. *Central European Journal of Labour Law and Personnel Management*, 2 (1), 7-16.
3. Bakacsi, GY. 2010. *A szervezeti magatartás alapjai*. Budapest: AULA kiadó, 284
4. Bayer, ZS. 1995. *Vezetési modellek - vezetési stílusok*. Printing Nyomdaipari, Kereskedelmi és Szolgáltató Kft., 151
5. Bilanics, Á. 2008. *Vezetési feladatok és funkciók vizsgálata agrárgazdasági szervezetekben*. Debreceni Egyetem, Doktori értekezés.
6. Caha, Z. 2017. Prevalence of a code of ethics in the Czech Republic in relation to company size and market activity. *Acta Oeconomica Universitatis Selye*, 6 (1), 9 – 22

7. Carreras, A.B.L., Arroyo, J.C., Blanco, J.E.E. 2018. Influence of the strategic planning and the management skills as factors internal of business competitiveness of SME's. *Contaduria y Administracion*, 63 (3), 9 – 10
8. Carnall, C., roebuck, CH. 2015. *Strategic Leadership Development*. Macmillan International Higher Education, 360
9. Dugasová, B., Tkáčová, A. 2012, “Benefits for employees”, *16th International Student Conferenece on Electrical Engineering*, Praha: Czech Technical University in Prague, 1-5.
10. Hitka, M., Lorincova, S., Bartakova, GP., Lizbetinova, L., Starchon, P., Li, C., Zaborova, E., Markova, T., Schmidtova, J., Mura, L. 2018. Strategic Tool of Human Resource Management for Operation of SMEs in the Wood-processing Industry. *Bioresources*, Vol. 13, No. 2., pp. 2759-2774 . ISSN 1930-2126
11. Iqbal, N., 2015. *Effect of Leadership Style on Employee Performance*. *Arabian Journal of Business and Management Review*, 2015, vol. 5.
12. Khan, M. 2015. *The Styles of Leadership: A Critical Review*. *Public Policy and Administration Research*: 5 (3)
13. Kubeš, V., Rančák, J. 2018, “Sustainability of organization performance via management techniques”. *Entrepreneurship and Sustainability Issues*, 5 (4), 1031-1042
14. Lewin, K., Lippitt, P., White, R. K. 2021. *Agresszív viselkedési sémák kísérletileg kialakított társas légkörben*, in Pataki Ferenc: *Csoportdinamika*. Budapest: Közgazdasági és Jogi Könyvkiadó.
15. Lippitt, R. 1940. *An experimental study of the effect of democratic and authoritarian group atmospheres*. *University of Iowa Studies in Child Welfare*, 16, 43-195
16. Lippitt, R. and White, R.K. 1958. *An experimental study of leadership and group life*. E.E. Maccoby, T.M. Newcomb and E.L. Hartley (Eds), *Readings in social psychology*. New York: Holt Rinehart and Winston.
17. Lorincová, S. 2018. Human resource and corporate culture: Gender-based differences in the assessment. *Central European Journal of Labour Law and Personnel Management*, 1 (1), pp. 28 – 45
18. Mura, L., Gontkovicova, B., Dulova Spisakova, E., Hajduova, Z. 2019. Position of Employee Benefits in Remuneration Structure. *Transformations in Business & Economics*, 18 (2), 156-173
19. Mura, L., Svec, M. 2018. Human resources in public and private sector: a comparative study of Slovakia. *10th International Scientific Conference on Reproduction of Human Capital - Mutual Links and Connections (RELIK)*. *RELIK 2017: Reproduction of human capital - mutual links and connections*, 327-336
20. Peck, E., Dickinson, H. 2009. *Performing Leadership*. AIAA, 232

21. Peck, E., Dickinson, H. 2009. Epilogue: Theory and Research in the Performative Theory of Leadership. *Performing Leadership*, 189 – 194
22. Pucko, D., Remišová, A., Lašáková, A. 2013, Culture and Leadership Preferences in Slovakia and Slovenia: Comparative Study Based on the GLOBE Student Research, *Ekonomický časopis*, 61 (4), 376-395
23. Šimo, D., Mura, L. 2015. *Manažment organizácií*. Bratislava: Wolters Kluwer, 264
24. Takei, H., Ito, Y. 2007. Human Resource Management and governance in Central and Eastern Europe: Case studies in Bulgaria and Slovak Republic, *Policy and Governance Working Papers*, 119, 1-28
25. Tang, L. L., Yeh, Y. L. 2015. Effect of Organizational Culture, Leadership Style, and Organizational Learning on Organizational Innovation in the Public Sector. In *Journal of Quality*. 22 (5), 461 – 481
26. Torgersen, P. E. Weinstock, E. T. 1979. *A vezetés integrált felfogásban*. Közgazdasági És Jogi Kiadó, 486
27. Zauskova, A., Madlenak, A., Svec, M. 2013, Legal aspects of corporate social responsibility in conditions of the European union and the Slovak republic, *Marketing identity: design that sells, in conference Proceedings from International Scientific Conference 4th - 5th November 2013 Congress Hall of the Slovak Academy of Science Smolenice, Slovak Republic*, 437-452
28. Wood, E. M. The Question of Market Dependence. 2002. *Journal of Agrarian Change*. 2 (1), 50 – 87

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# CURRENT STATE OF THE HOTEL MARKET IN SLOVAKIA

## SÚČASNÝ STAV HOTELIERSTVA NA SLOVENSKU

*Marián CHROBÁK*

### Abstract

The paper is focused on the tourism industry in Slovakia, specifically the hotel industry. Tourism is currently experiencing a major downturn worldwide in connection with the Covid-19 pandemic. Although tourism in Slovakia is far from reaching the same values as in other European countries, it is still an important component of the Slovak economy, which employs a large number of people. The hotel industry is still living in uncertainty. Today, many hoteliers have to decide how and whether they can afford to operate their hotel facilities at all. It turns out that the year 2022 can be a turning point in this sense. The future of the hotel industry in Slovakia depends on a number of external factors. In this paper, we focused on the current state and impact of the Covid-19 pandemic and also outlined, in our opinion, the most appropriate type of method for evaluating a hotel facility as an investment project.

**Keywords:** hotel, tourism, hospitality, investment, Covid-19, development

### Abstrakt

Príspevok je zameraný na odvetvie cestovného ruchu na Slovensku, konkrétne na hotelierstvo. Cestovný ruch v súčasnosti celosvetovo zažíva veľký prepád v súvislosti s pandémiou Covid-19. Aj keď na Slovensku cestovný ruch zďaleka nedosahuje také hodnoty ako v iných európskych krajinách, predsa len ide o významnú zložku slovenského hospodárstva, ktorá zamestnáva množstvo ľudí. Oblasť hotelierstva stále prežíva v neistote. V súčasnosti sa mnohí hotelieri musia rozhodnúť akým spôsobom a či vôbec si môžu dovoliť prevádzkovať svoje hotelové zariadenia. Ukazuje sa, že rok 2022 môže byť v tomto zmysle prelomový. Budúcnosť hotelierstva na Slovensku totiž závisí od množstva externých faktorov. V príspevku sme sa zamerali na súčasný stav a vplyv pandémie Covid-19 a tiež sme načrtli podľa nášho názoru najvhodnejší typ metódy hodnotenia hotelového zariadenia ako investičného projektu.

**Kľúčové slová:** hotel, cestovný ruch, investícia, hotelierstvo, Covid-19, rozvoj

### Introduction

The hotel industry clearly belongs to the service sector. It is the activity of hotels, accommodation or catering facilities that satisfy the needs of customers, in sense of the end consumers. It is an integral part of the tourism industry and at the same time a necessary condition for its further development (Gúčik, 2000).

The term "hotel" began to be used at the turn of the 19th and 20th centuries within the accommodation facility. In Europe, it was used mainly in countries with conditions that suit the development of tourism or trade. Hospitality is currently characterized as an integral part of tourism services. (Indrová, 1993).

A product is an object or service that we obtain by production or other suitable activity. It is an entity that we can offer on the market, which can satisfy the needs of customers, their wishes or requirements. The hotel product can be catering,

accommodation and additional services as a complex. We call it the service package. It should meet several requirements such as price, attractiveness, image, accessibility, meeting customer needs - guest.

Tourism is an industry that began to take shape in the late 19th and early 20th centuries. Thus, tourism began during the first industrial revolution. At present, tourism has an interdisciplinary character. It is an industry that provides goods and services to customers who spend some time away from home. The industry is divided into three groups – accommodation services, catering services, other tourism.

## **1 Methods of evaluation of investment projects**

At a time when the company has to develop an investment project, respectively projects, it should have the tools to identify the most promising. In the project evaluation stage, the company is looking for the best possible method corresponding to its specifics. The choice of a suitable method very often depends on a subjective evaluation of its advantages and disadvantages. In practice, it seems that a company using one method continues to use it because it is used to it.

In general, we divide investment evaluation methods based on liquidity, time and risk. These are dynamic and static methods, we can also divide them by effect to evaluate the effectiveness of investments based on: cost criteria,

1. profit criteria,
2. criteria of net cash income (Valach, 2010).

In the following subchapter, we have decided to present more suitable methods from our point of view - namely dynamic ones. Rather, static methods are used to make an initial investment decision with a short project life. Therefore, we generally recommend using methods that take into account the time factor, specifically the time value of money. We can only achieve this with dynamic methods, usually using discounting.

### **1.1 Dynamic methods**

Dynamic methods, as opposed to static ones, also take into account the time factor, and thus there is usually a higher explanatory power. Here are some of the most important:

1. *Net present value (NPV)* is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used in capital budgeting and investment planning to analyse the profitability of a projected investment or project. NPV is the result of calculations used to find today's value of a future stream of payments (Fernando, 2021). Its mathematical expression is as follows:

$$NPV = \sum_{n=1}^N P_n \frac{1}{(1+i)^n} - K$$

where:

$NPV$  – net present value,

$P$  – cash income related to the investment,

$n$  – individual years of life,

$N$  – lifetime,

$i$  – interest rate (required performance)

$K$  – capital expenditure.

The NPV indicator in this form indicates the fact that it is used at the beginning of the project investment, usually once. However, if additional incremental capital expenditures are incurred, the need to be updated as follows:

$$NPV = \sum_{n=1}^N P_n \frac{1}{(1+i)^{n+T}} - \sum_{t=1}^T K_t \frac{1}{(1+i)^t},$$

Where:

$NPV$  – net present value,

$P$  – cash income related to the investment in its individual years,

$n$  – individual years of life,

$N$  – lifetime,

$i$  – interest rate (required performance)

$K$  – capital expenditure,

$t$  – individual years of construction,

$T$  – construction time.

If the resulting value of the indicator is positive, then the investment project is acceptable to the company and this usually results in an increase. In the market value of the company. If it is negative, then we consider the investment project unacceptable. If it were zero, then the investment project is indifferent to the company's perspective (Valach2010)

2. *Adjusted net present value*- When evaluating the effectiveness of investment projects using NPV, we did not take into account in the calculation the way project was financed (retention of profit, potential successful issue of new shares, method of lending, etc.)- thus the investment decision was separated from the financial one.

It should be noted that the consequences of the way project was financed in terms of its profit may be as follows (positive and negative):

- The project may force the issue of new shares or bonds (it's necessary to consider the issue costs)

- The project may force an increase in debt, loan interest may increase, the company may receive an interest tax shield, usually the financial risk increases
- It is possible to obtain a subsidy

$$NPV_U = NPV \pm F,$$

Where:

$NPV_U$  it's called adjusted  $NPV$ ;

$F$  – is the sum of current values calculated over all financial consequences of the project. Thus, for example, if the financing of a project requires the issuance of bonds, various additional costs are incurred in connection with this issue. On the other hand, if a grant is allocated to a project, it can have a positive effect on the  $NPV$ .

## 2 Overview of the current state of the hotel industry in Slovakia

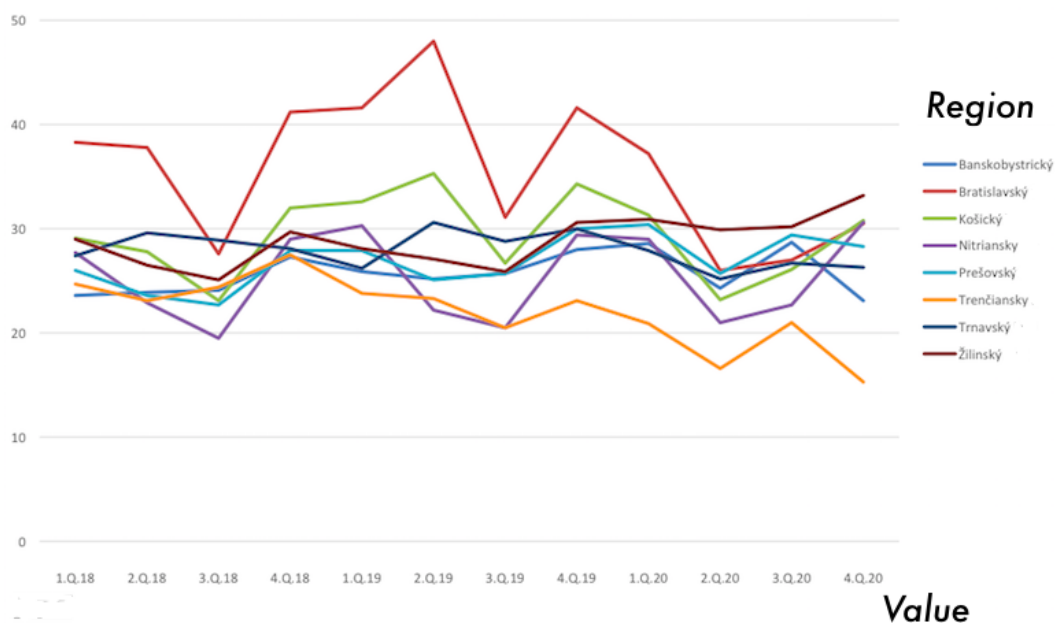
It is generally known that the Slovak Republic offers beautiful nature, geographical location, various historical monuments and cultural heritage for the development of tourism. However, it does not make sufficient use of these resources.

We are receiving negative information from the development of foreign tourism, such as low share of tourists from Western European countries, higher share of low-solvent tourists who have low average expenses, higher share of tourists from former socialist countries, etc. Other problems and shortcomings of the hotel industry in the Slovak Republic are:

- incorrect infrastructure (transport, etc.),
- unqualified staff,
- low level of knowledge of foreign languages,
- low level of service, which does not correspond to the level of prices,
- lack of information or promotion.

From Figure 1 it is clear that the development of prices did not show any significant fluctuations except for the Bratislava region. In the last period of the three quarters monitored, price variability in Slovakia decreased, but remained approximately (except for the Bratislava and Trenčín regions) at the same level.

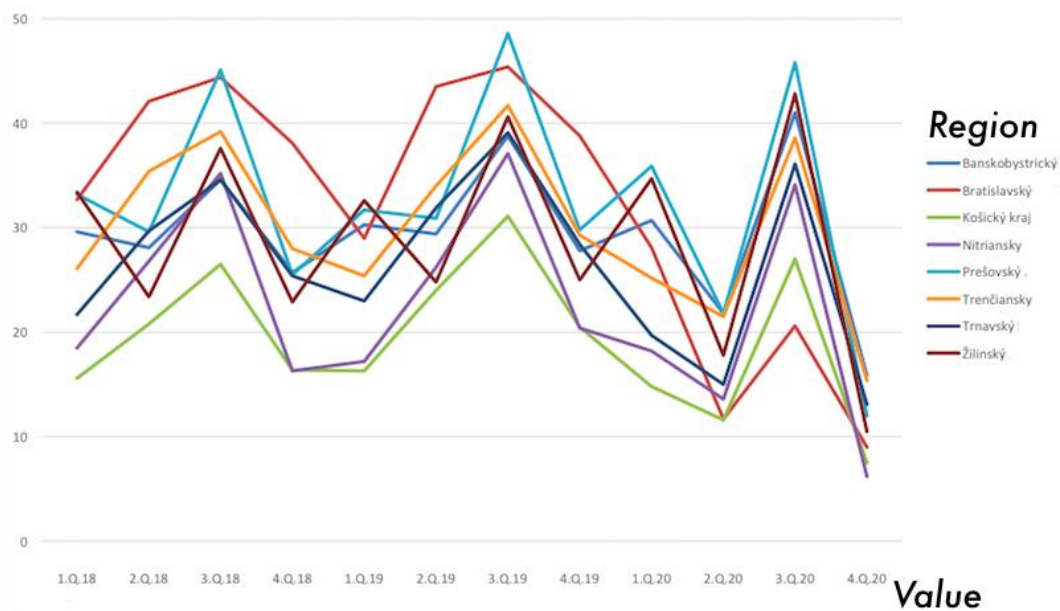




**Figure 1 The average price of accommodation in Eur**

Source: SOSR, 2021

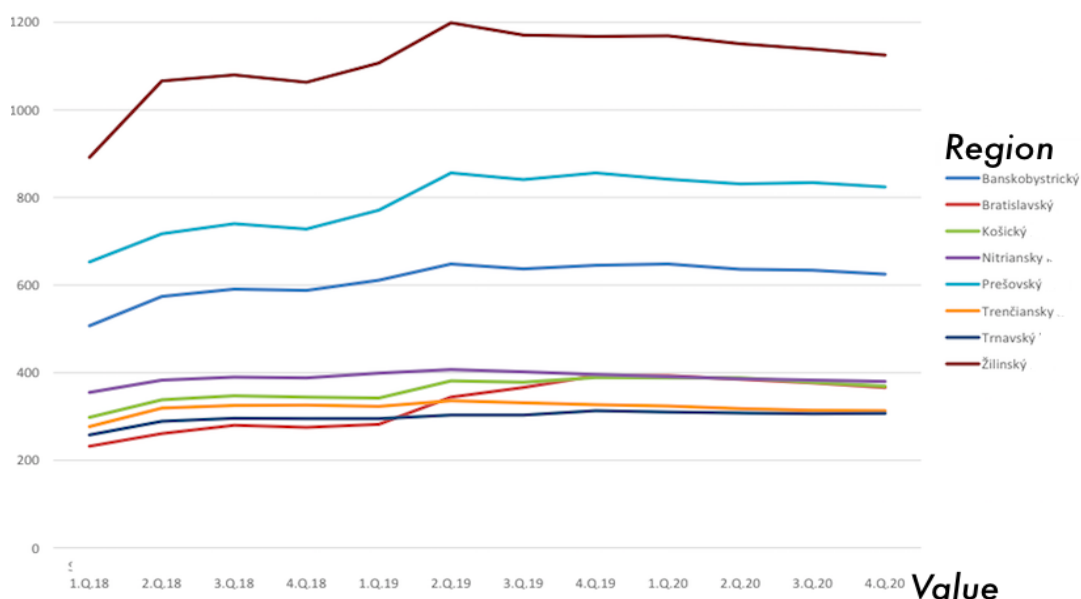
Figure 2 shows a large fluctuation in terms of the use of permanent beds in all regions of Slovakia. The first decline is recorded in the 2nd quarter and the second decline in the 3rd quarter of 2020. The mentioned sharp outages are probably caused by the first and second wave of the COVID-19 pandemic.



**Figure 2 Utilization of permanent beds by region in %**

Source: SOSR, 2021

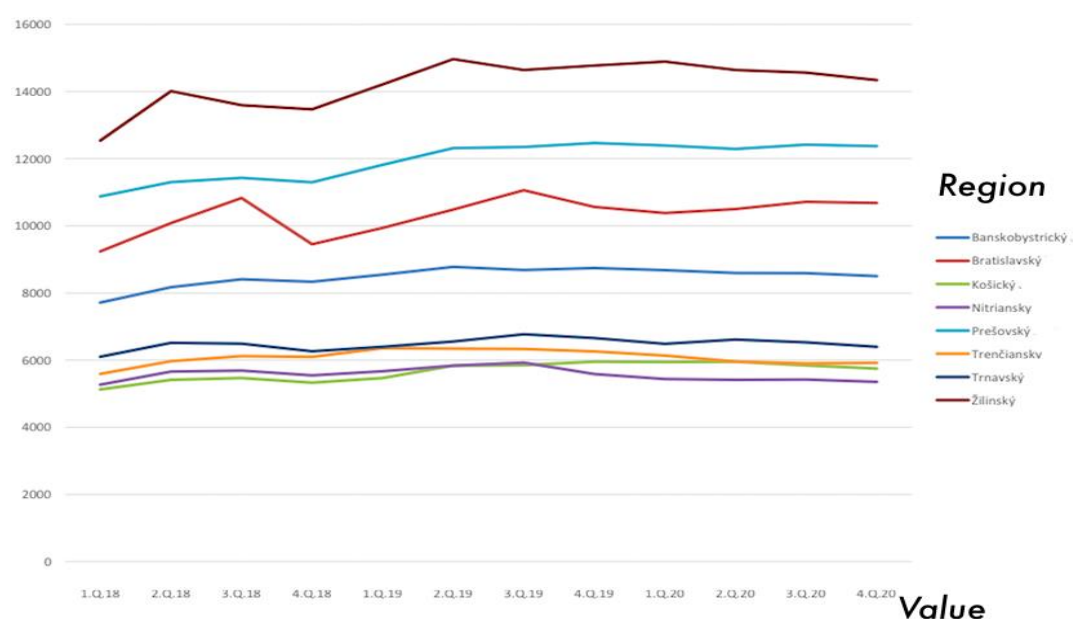
From Figure 3, in turn, it is clear that the number of accommodation facilities, despite the crisis, remains approximately the same, which can be interpreted as the ability of hoteliers, despite difficult conditions, not to significantly reduce the bed capacities of their facilities.



**Figure 3 Number of accommodation facilities**

Source: SOSR, 2021

Figure 4 again indicates that even in the number of accommodation facilities in Slovakia we do not record a significant decrease in the number of accommodation facilities.



**Figure 4 Number of accommodation facilities**

Source: SOSR, 2021

## **2.1 Hotel as an investment**

A hotel investment is taken as a cost item of a real estate investment. Its return is usually very long-term, which is about 12-15 years. Nowadays, in some areas, it is necessary to count on 15-18 years. It mainly depends on what type of investment we used, what the location of the hotel is, what the financing parameters are, etc. When it comes to a qualified investment, we can usually take it as a relatively safe investment based on the overall view that the hotel services market is considered stable in the long run. If an investor decides to invest in the construction of a hotel, he must think about it carefully, make a calculation, usually prepare the Feasibility Study, etc., as a possible change in the hotel investment can be costly and is usually economically difficult to bear. (Šalková, 2011).

If we look at the period of the last economic crisis, the volume of investments in hotels in Europe in the years 2006 to 2007 was in record values (approximately 19 billion euros), but in 2008 the values fell sharply. Furthermore, due to the recession of European economies or the decline in RevPAR, as well as due to the suspension of bank lending, the volume of investments in hotels fell sharply in 2009 by up to 50%. This results in a decrease of 85% compared to 2007. The economic crisis has had a significant impact on the hotel industry, tourism and also hotel investment. We must point out that in our neighbours (Austria and Hungary) the economic crisis had a more significant impact on classic city hotels than on hotels that provide wellness & spa (we also see a 3 to 9% increase in wellness hotels during the economic crisis).

When planning new hotels or accommodation facilities, in addition to monitoring the growth of rooms in the selected location, we must also consider the development of the number of guests. In order for investments in hotels to be successful in the market and to provide good conditions for guests, it is important that the number of guests with their accommodation grows faster than the number of new open accommodation facilities.

## **Conclusion**

Until now, the development of tourism had a growing character worldwide, but also in Slovakia. Although tourism in Slovakia had many shortcomings, it is still an important part of the Slovak economy, which provides a number of jobs. The extension of the employer's obligation to contribute to the employee's Slovak recreation, which was implemented by the Government of the Slovak Republic, has significantly improved the conditions, especially for those companies that provide hotel services. This favourable situation was also reflected in a kind of investment optimism in the sector. Many hoteliers have used various forms of their own and foreign resources to renovate existing and build new hotels or accommodation facilities. With the onset of the COVID-19 pandemic, investors' optimistic prospects in the field of tourism have turned pessimistic in a very short

period of time. Although the first wave of the pandemic has not yet been liquidated, the following period partially compensated for the losses incurred, the second wave and a possible third wave threatened to crash for many Slovak hotel facilities. Unfortunately, the various forms of government assistance that have been implemented so far are proving ineffective, both in terms of the amount of money spent and in terms of time, as the measures promised have generally been delayed.

## References

1. Fernando, J. Net Present Value (NPV). [online]. [cit. 2022-02-06]. Available at <https://www.investopedia.com/terms/n/npv.asp>
2. Gúčik, M. 2000. Ekonomika podniku cestovného ruchu (controlling). Banská Bystrica: Univerzita Mateja Bela, Ekonomická fakulta. 136 s. ISBN 80-8055-392-0.
3. Indrová, J. 1993. Podnikatelská činnost ve stravování a hotelnictví. Vyd. 1. Vysoká škola ekonomická, Praha. 115 s. ISBN 80-7079-291-4.
4. Šalková, L. 2011. Hotel ako investícia, SR & Bratislava. Labartt Hospitality, s.r.o. 2011. [online]. [cit. 2022-02-08]. Available at <http://labartthospitality.com/sk/o-spolocnosti/tlacove-spravy/41/hotel-ako-investicia-sr-bratislava>.
5. Valach, J. 2010. Investiční rozhodování a dlouhodobé financování. 3. přeprac. a rozš. vyd. Praha: Ekopress. 465 s. ISBN 978-80-86929-71-2.
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# APPLICATION OF THE EVA INDICATOR TO THE ANALYSED COMPANY

## APLIKÁCIA UKAZOVATEĽA EVA NA ANALYZOVANÝ PODNIK

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### Abstract

This article points to the need to measure the financial performance of the company in terms of creating added value for owners, which will affect the existence of the company in the market. Through effective management, the company will gain a competitive position in the market, that will guarantee the stability of its customers as well as their new influx. With the modern EVA financial measure, the company will gain an insight into the overall use of corporate resources. Creating a prediction model by applying multiple linear regression of the EVA indicator, the company will gain insight into the future, based on which it can identify bottlenecks and subsequently eliminate them.

**Keywords:** EVA, financial analysis, model, management, performance

### Abstrakt

Príspevok poukazuje na potrebu merania finančnej výkonnosti podniku z pohľadu tvorby pridanej hodnoty pre vlastníkov, ktorá má vplyv na existenciu podniku na trhu. Efektívnym riadením podnik získa konkurenčné postavenie na trhu, ktoré mu zaručí stálosť zákazníkov, ako aj ich nový prílev. Moderným finančným meradlom EVA získa podnik pohľad na celkové využívanie podnikových zdrojov. Vytvorením predikčného modelu aplikáciou viacnásobnej lineárnej regresie ukazovateľa EVA podnik nadobúda pohľad do budúcnosti, na základe čoho dokáže identifikovať problémové miesta a následne ich eliminovať.

**Kľúčové slová:** EVA, finančná analýza, model, riadenie, výkonnosť

### Introduction

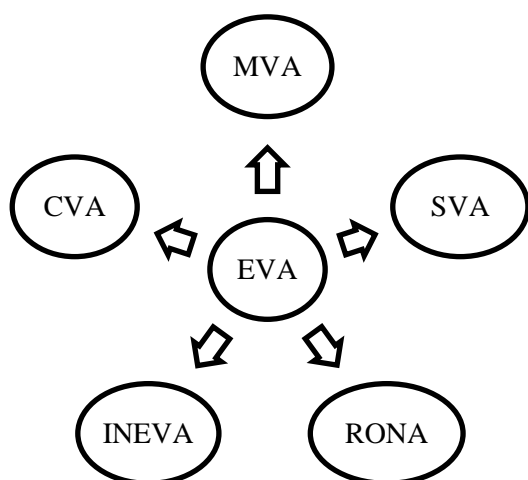
Financial analysis is a generally accepted method that helps a company to examine processes and phenomena from a financial point of view. The analysis of the of financial units allows the company to be mutually conditioned. It is important for its application that it is performed by experts who have knowledge of economics, and management of the surveyed company. The main aim of the analysis is a comprehensive assessment of the economic level in terms of available resources from the external and internal environment of the company. It is necessary to distinguish between quantitative and qualitative data. The choice of indicators depends on the purpose of the analysis, whether it is a business analysis based on a retrospective or perspective view. In this article, we focus on the theoretical knowledge of a new modern approach to assessing the financial stability of the company. By practically using the EVA indicator for the analysed company, we fulfill the purpose of the contribution, which is to point out the need of measuring added value for owners. The aim of the article is to create a

predictive model of financial performance of the company using mathematical and statistical methods.

### Current state of the problem

Increasing pressure on businesses from customers to produce new, improved products directly affects their financial stability. Maintaining competitiveness is costly. Value management theory draws attention to the owner and his expectations in the form of maximum investment value. It became known in the 20th century, in the USA. At present, we can find it in the professional literature, under the term theory of successful management. Its purpose is to achieve consistency between the owners and management of the company, so that the company achieves a positive economic profit and increases its assets. With the right management settings, the company will satisfy the customers' requirements as well as the demands of its owners.

According to Kotulič, Király and Rajčániová (2007), the modern theory deals with value creation for business owners (shareholders) as well as value for stakeholders. By matching the values of shareholders and stakeholders, we obtain a stakeholder value that is different for each person involved (owner, customer, supplier ...). However, both approaches have in common, an effort to meet the needs of stakeholders in achieving the long-term prosperity of the company. From this, we can state that the theory of added value is a concept that is a new measure of the value of assets and the overall performance of the company. Its measurement indicators include the EVA indicator, from which other indicators derived from Figure 1 were derived.



**Figure 1 Scheme derived indicator from EVA**

*Source: own processing according to Berzáková - Bartošová – Kicová (2015), Kotulič – Király - Rajčániová (2007).*

## Economic Value Addict (EVA)

The EVA indicator was developed to provide practical guidance in the investment decision-making process. EVA is an integrated evaluation process, creating a balanced design of evaluation attributes, measurement methods and their assessment, in terms of the sensitivity and functionality of the company's established processes (Peyre et al., 2019). The framework of the EVA indicator does not decide for the user, it provides a picture of the possibilities of simplification, redesign of the business management system based on the specific needs of the users involved. According to Altaf (2016), EVA not only serves as a measure of financial performance, but is also a central element of strategy implementation. It serves as an analytical framework for evaluating the application of alternative changes in the company. By using it, the company can evaluate the efficiency or inefficiency of the business processes in use.

The EVA methodology measures shareholder value creation. It differs from traditional financial performance indicators by McClure's (2020) view, where actual profits should be commensurate with the cost of capital.

We have grouped the EVA calculation options in Table 1.

**Table 1 EVA approaches**

EVA using the cost of capital	$EVA = NOPAT \times (1 - d) - N_k \times K$ (NOPAT - operating profit, d - tax rate, $N_k$ - weighted average cost of capital, K - used capital in the company, $N_k \times K$ - cost of total used capital)
EVA using ROE	$EVA = VI \times (ROE - N_{vk})$ (VI - equity of the company, ROE - return on equity, $N_{vk}$ - cost of equity)
EVA using a risk premium	$EVA = (ROE - re) \times VI$ (re - risk premium)
EVA using NOA	$EVA = NOPAT - NOA \times WACC$ (NOA - net operating assets, WACC - weighted average cost of capital)

Source: own processing according to Janošová (2020), Berzáková - Bartošová - Kicová (2015).

In the article we specify the capital approach of the EVA methodology, t. j. EVA using NOA. Chvojan (2017) defines the formula for calculating WACC as:

$$WACC = N_{ck} * (1 + d) * (CK/K) + N_{vk} * (VK/K)$$

Where:  $N_{ck}$  - the cost of foreign capital; CK - foreign capital; VK - equity; K - total capital.

EVA approaches are consistent in the evaluation phase. There are three evaluation options, which are listed in Table 2.

**Table 2 Evaluation of the EVA indicator**

1.	$EVA > 0$	$NOPAT > WACC$
2.	$EVA = 0$	$NOPAT = WACC$
3.	$EVA < 0$	$NOPAT < WACC$

Source: own processing according to Berzáková (2014).

In the first case, when the value of EVA reaches a positive result, added value is created for the owners of the company. Net operating profit (NOPAT) exceeds and at the same time covers the cost of capital. If the EVA value is zero, the company is in balance in terms of cost and profitability. The company does not create value for the owners in a situation where it cannot cover its costs with a profit. The EVA value in this case shows a negative result.

### **Application of the EVA indicator to the company**

We evaluate the performance of the analysed company from data grouped from its financial statements (balance sheets, profit and loss statements) in the period from 2017 to 2020. Double-entry bookkeeping provides accurate and true information about the principle of business economy. We apply the modern EVA financial method and its capital approach to the analysed company.

Auxiliary calculations, which are set out in Tables 3 to 8 below, are needed to assess the company's performance. The determination of the weighted average cost of capital is preceded by the determination of the cost of borrowed capital, see Table 3.

**Table 3 Calculation of foreign capital costs**

Year	2017	2018	2019	2020
Bank loans	421 863	386 446	371 563	330 887
Interest expense	12 569	13 419	12 665	11 351
<b>rd (%)</b>	<b>2,98</b>	<b>3,47</b>	<b>3,41</b>	<b>3,43</b>

*Source: own calculations based on Finstat.sk*

When calculating the cost of equity, we chose a 3% surcharge after consulting with the company.

**Table 4 Calculation of cost of equity**

Year	2017	2018	2019	2020
<b>rd (%)</b>	2,98	3,47	3,41	3,43
<b>3% Surcharge</b>	3	3	3	3
<b>re (%)</b>	5,98	6,47	6,41	6,43

*Source: own calculations*

Using the weighted arithmetic average of the cost of debt and equity, which is given by their weight, we obtain the average cost of capital. We determine the weight based on their share in the total capital.



**Table 5 Calculation of average cost of capital**

Year	2017	2018	2019	2020
<b>CuK</b>	1 822 277	1 838 062	1 817 080	1 978 790
<b>VK</b>	847 659	711 606	543 190	591 939
<b>CK</b>	2 669 936	2 549 668	2 360 270	2 570 729
<b>CuK / CK</b>	0,68	0,72	0,77	0,77
<b>VK / CK</b>	0,32	0,28	0,23	0,23
<b>r<sub>d</sub> (%)</b>	2,98	3,47	3,41	3,43
<b>r<sub>e</sub> (%)</b>	5,98	6,47	6,41	6,43
<b>WACC</b>	<b>0,039</b>	<b>0,04</b>	<b>0,04</b>	<b>0,04</b>

Source: own calculations based on Finstat.sk

By deducting trade payables, we determine the final value of the capital.

**Table 6 Adjustment of the liabilities side of the enterprise**

Year	2017	2018	2019	2020
<b>Total liabilities</b>	2 752 009	2 608 543	2 395 945	2 583 202
<b>Obligations from commercial contact</b>	259 818	222 096	197 006	307 853
<b>K</b>	2 492 191	2 386 447	2 198 939	2 275 349

Source: own calculations based on Finstat.sk

**Table 7 NOPAT of the analysed company**

Year	2017	2018	2019	2020
<b>NOPAT</b>	18 875	42 855	33 418	40 209

Source: own calculations based on Finstat.sk

Subsequently, it continues with the final calculation of the EVA indicator.

**Table 8 The value of the EVA indicator**

Year	2017	2018	2019	2020
<b>NOPAT</b>	18 875	42 855	33 418	40 209
<b>WACC</b>	0,04	0,04	0,04	0,04
<b>K</b>	2 492 191	2 386 447	2 198 939	2 275 349
<b>EVA</b>	<b>- 79 114,26</b>	<b>- 59 993,83</b>	<b>- 56 716,31</b>	<b>- 53 564,04</b>

Source: own processing

In the period under review, the company does not create value for owners. Using multiple linear regression, we want to design a model for the development of the future EVA value, to determine the necessary values for the growth of the EVA value.

The result of multiple linear regression is a summary table of statistical regression and ANOVI, shown in Figure 2.

Regression Statistics			
Multiple R	1		
R Square	1		
Adjusted R Square	65535		
Standard Error	0		
Observations	4		

ANOVA			
	<i>df</i>	<i>SS</i>	<i>MS</i>
Regression	3	395523472,3	1,32E+08
Residual	0	0	65535
Total	3	395523472,3	

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>
Intercept	212748,9469	0	65535
NOPAT	0,342111236	0	65535
WACC	-319668,953	0	65535
K	-0,11465881	0	65535

**Figure 2 The resulting summary of multiple linear regression**

*Source: own processing*

Correlation coefficient measures the strength of the linear dependence between the variables, whilst its value is between -1 and 1, the closer to 1, the stronger the relationship. In our case, the correlation coefficient is 1, t. j. the EVA value is strongly dependent on the NOPAT, WACC and Capital indicators.

The range of the good agreement indicator, or otherwise called the coefficient of determination, is 0 to 1. Again, the closer you get to 1, the more appropriate the model. The indicator needs to be converted to a percentage. Our model shows that the EVA indicator can be ideally determined based on independent variables. The accuracy of the performed regression analysis is zero.

The final output is a linear equation for predicting the development of the EVA value into the future.

$$Y = 212\,748,9469 + 0,342111236 * \text{NOPAT} + (-319\,668,953 * \text{WACC}) + (-0,11465881 * \text{K})$$

By adding data proposals to the equation, we obtain a prediction of business value creation for owners. The company is in financial crisis during the monitored period. Business management must bring about change. Innovation is needed to

increase business value for owners. Otherwise, the company is destined to disappear.

## Conclusion

In the article, we focused on the issue of creating added value for the company for owners. We have specified the possibilities of measuring the modern EVA financial method in several respects. On a practical example, we evaluated the company's performance using the EVA capital approach. We created a predictive model of EVA value development by multiple linear regression. We recommend that the company constantly measure the creation of added value for owners. The prediction model always needs to be updated due to its sensitivity to the coming years and changes in double-entry bookkeeping. By measuring regularly, the company gains an insight into overall management and is able to use its resources efficiently.

## References

1. ALTAF, N. 2016. Economic value added or earnings: What explains market value in Indian firms? *Future Business Journal*. [online]. Elsevier, December 2016. 2(2), 152-166 [cit. 04.02.2022]. ISSN 2314-7210. Available from: <https://doi.org/10.1016/j.fbj.2016.11.001>.
2. BERZÁKOVÁ, V. 2014. Metóda ekonomickej pridanej hodnoty v teórii a praxi. *Trendy v podnikaní 2014* [online]. Plzeň: Západočeská univerzita v Plzni, 2014 [cit. 28.01.2022]. ISBN 978-80-261-0444-5 Available from: [https://www.tvp.zcu.cz/cd/2014/PDF\\_sbornik/berzakova.pdf](https://www.tvp.zcu.cz/cd/2014/PDF_sbornik/berzakova.pdf).
3. BERZÁKOVÁ, V. – BARTOŠOVÁ, V. – KICOVÁ, E. 2015. Modification of EVA in Value Based Management. *Procedia Economics and Finance*. [online]. Elsevier. 2015, 26, 317 – 324 [cit. 13.11.2017]. ISSN 2212-5671. Available from: <https://www.sciencedirect.com/science/article/pii/S221256711500859X>.
4. CHVOJAN, P. 2017. Odhad nákladů vlastního kapitálu jako východiska pro stanovení hodnoty podniku. *Trendy v podnikaní*. [online]. Plzeň: ZČU v Plzni, 2017, 4, 20-26 [cit. 3.2.2022]. ISSN 1805-0603. Available from: <https://www.dfek.zcu.cz/tvp/doc/2017-4.pdf>.
5. JANOŠOVÁ, V. 2020. Teoretické aspekty moderných metód merania výkonnosti podnikov. *Časopis znalostní společnosti*. [online]. Brno: Knowler - Evropský institut pro výzkum, inovace a vzdělávání, z. s., 2020. 8(1), 10-17 [cit. 29.01.2022]. ISSN 2336-2561. Available from: [http://www.jks.euin.org/sites/default/files/jks\\_2020\\_02\\_Janosova.pdf](http://www.jks.euin.org/sites/default/files/jks_2020_02_Janosova.pdf).
6. KOTULIČ, R. – KILÁRY, P. – RAJČÁNIOVÁ, M. 2007. *Finančná analýza podniku*. Bratislava: Iura Edition, spol. s. r. o. 2007. 206 s. ISBN 978-80-8078-117-0.

7. MCCLURE, B. 2020. What to Know About Economic Value Added (EVA). In: *Investopedia.com*. [online]. 23. July 2020 [cit. 29.01.2022]. Available from: <https://www.investopedia.com/articles/fundamental/03/031203.asp>.
8. PEYRE, M. et al. 2019. The RISKSUR EVA tool (Survtool): A tool for the integrated evaluation of animal health surveillance systems. *Preventive Veterinary Medicine*. [online]. Elsevier, 1 December 2019. 173, 104777 [cit. 04.02.2022]. ISSN 0167-5877. Available from: <https://doi.org/10.1016/j.prevetmed.2019.104777>.

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