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Editorial Office: **Journal of Management and Business: Research and Practice**
Časopis pre manažment a podnikanie: Výskum a prax

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***Journal of Management and Business:
Research and Practice***

*Časopis pre manažment a podnikanie:
Výskum a prax*

University of Presov in Presov
Faculty of Management

1/2019
VOLUME 11

Journal of Management and Business: Research and Practice

Časopis pre manažment a podnikanie: Výskum a prax

Scientific Journal of the Faculty of Management of University of Presov in Presov

Published twice a year.

Registration number 2858/09

Content Focus: Management, Marketing, Segments and Applications of Management, Trade Entrepreneurship, Corporate Economics, Econometrics, Regional Development, Social Aspects of Current Management and Marketing

Language: English

Frequency: Semiannual

Publisher: University of Presov in Presov, 17. novembra 15, 080 01 Presov
IČO 17 070 775

Date of issue: June 2019

Print: DMC, s.r.o., Nové Zámky

Printing: 50 copies

ISSN 1338-0494

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INVESTMENT PROJECTS OF THE WORLD BANK IN THE FIELD OF INDUSTRIAL INFRASTRUCTURE OF UKRAINE

INVESTIČNÉ PROJEKTY SVETOVEJ BANKY V OBLASTI PRIEMYSELNEJ INFRAŠTRUKTÚRY UKRAJINY

***Abstract:** The credit activity of the World Bank in the territory of Ukraine has been analyzed. The current status of financing activities of IBRD and IDA development projects has been determined. The dynamics of loans has been traced and an attempt has been made to investigate their efficiency. Positive and negative aspects of cooperation with the World Bank have been highlighted.*

***Keywords:** The World Bank, International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), loans, projects, industrial infrastructure.*

***Kľúčové slová:** Svetová banka, Medzinárodná banka pre obnovu a rozvoj (IBRD), Medzinárodné združenie pre rozvoj (IDA), pôžičky, projekty, priemyselná infraštruktúra*

***JEL classification:** D21; L83; M39*

Formulation of the problem. At the current stage of restructuring of the Ukrainian economy, most branches of industrial infrastructure require significant investment for the implementation of innovative projects. The renewal of industrial infrastructure sectors is an important task of state significance, for the implementation of which various financing mechanisms, including international financial institutions, in particular the World Bank (which combines two institutions: the International Bank for Reconstruction and Development and the International Development Association), should be involved.

Today, when Ukraine is in an undeclared Russian-Ukrainian war, its economic activity is impossible without the use of foreign capital investment. Its involvement in the financing activity of economic growth programs in Ukraine makes it expedient to develop a system of budget planning and increase the efficiency of budget expenditures.

Therefore, the study of the dynamics and volumes of World Bank loans to the Ukrainian economy is relevant for the purpose of continuous monitoring to improve the efficiency of their use.

Analysis of recent research and publications. Legislative acts, legal documents and official materials of state statistics bodies has served as a theoretical basis of the article. A number of works by Ukrainian scholars such as Halyna Myskiv, Stepan Mytsyuk, Tetyana Kozhukhova and Viktoriya Kolosova, [1, 2, 3] are devoted to the study of activities of international financial institutions, in particular the World Bank.

This paper aims at investigating the World Bank loans in Ukraine, analyzing the dynamics and efficiency of using the provided funds, and highlighting the positive and negative aspects of this cooperation for Ukraine.

Main body. In the international credit market, Ukraine actively cooperates with leading international financial organizations, in particular the World Bank. In the modern system of management, the World Bank loans, provided that they are used effectively, are an important

source for implementing priority projects and tasks of economic development, an instrument of institutional transformation and international integration.

During 1994-2014, the World Bank approved 26 loans for Ukraine with a total volume of 6399.85 billion US dollars [4]. According to the results of 2015, the World Bank investment portfolio in Ukraine consisted of 10 projects that were implemented with a total volume of about 2.46 billion US dollars, and 4 projects that were under preparation [5]. As of June 2016, the World Bank portfolio also consisted of 10 investment projects at the stage of implementation in the amount of 3 134.66 million US dollars. There were 3 projects amounting to 1000 million US dollars at the stage of initiation [1, p. 131].

The World Bank projects are mainly implemented in such areas as private entrepreneurship, agro-industrial sector, energy conservation, municipal infrastructure, transport and communications. The largest share of total World Bank financing of current infrastructure development projects in Ukraine is aimed at developing the transport sector [6]. Improvement of infrastructure, creation of equal partnership in the private sector and land reform are among the main directions of the strategic partnership between Ukraine and the World Bank in 2017-2021 [7].

The World Bank leading financial and credit institution is the International Bank for Reconstruction and Development (IBRD). It is a lending organization in the institutional field and has been providing loans for 15-20 years, including a five-year deferred payment period. During 2010-2014, IBRD provided loans to the Ukrainian economy in the amount of 1432.0 million US dollars. As of mid-June 2017, the portfolio of the World Bank Group in Ukraine included 8 projects amounting to 3079 billion US dollars of guarantees against political risks, of which IBRD provided 2.25 billion US dollars (IFC - 695 million, MIGA - 134 million US dollars) [8].

An analysis of financing of the current development projects of Ukraine by the IBRD has shown that the largest share of funds is directed to the infrastructure development services - 25.9% (17.8% for the development of the private sector), urban infrastructure and provision of services - 17.6%, development of the financial sector - 8.5%, social protection systems - 7.9%, climate change — 7.4% [2, p. 19].

As Table 1 shows, the loan portfolio of IBRD investment projects in 2012-2016 included 13 active development projects in Ukraine for a total amount of 4.7 billion dollars, and the share of reserved funds for current projects as of the end of 2015 amounted to 86.7% of total cost of projects [2, p. 18].

Table 1: IBRD Financing of Current Development Projects in Ukraine According to the Partnership Strategy of 2012-2016

| Project | Total cost of project, \$ million | Reserved funds, \$ million |
|--|-----------------------------------|----------------------------|
| Rehabilitation of Hydroelectric Power Stations Project (21.06.2005-30.06.2016) | 374,5 | 106 |
| Energy Sector Reform Support Program and Development Program (02.08.2007-30.06.2016) | 238 | 200 |
| Hydroelectric power stations - additional financing (3 19.11.2009) | 66 | 60 |
| Energy Efficiency Project (17.05.2011-31.03.2017) | 200 | 200 |
| Road Improvement & Traffic Safety Project (20.09.2012 -31.12.2016) | 562 | 450 |

| | | |
|---|---------|---------|
| Second City Infrastructure Development Project (22.05.2014 -31.10.2020) | 350 | 300 |
| Energy Efficiency Project in the Centralized Heat Supply Sector (22.05.2014-30.10.2020) 350 | 382 | 332 |
| Modernization of the System for Social Support of population of Ukraine (03.07.2014 -01.10.2020) | 300 | 300 |
| Second Electricity Transmission Project (22.12.2014 -30.06.2020) | 378,43 | 330 |
| Health Improvement Project (04.03.2015 -30.09.2020) | 261,03 | 214,73 |
| Development Policy Crediting Project – 2 (25.08.2015-30.06.2016) | 500 | 500 |
| Financial Sector Development Project – 2 (15.09.2015 -30.06.2016) | 500 | 500 |
| Road Sector Development Project (03.11.2015-31.12.2021) | 560 | 560 |
| Total | 4671,96 | 4052,73 |

World Bank Group [Electronic Resource]. Access mode: <http://www.worldbank.org/>.

Within the framework of cooperation with IBRD Ukraine has attracted a loan for the total amount of 400 million US dollars for the implementation of the Road Improvement & Traffic Safety Project. It aims at bringing to the European level the transport and operational condition of the motorway M-03 Kyiv-Kharkiv-Dovzhansky in the area from Boryspil to Lubny (this is one of the most important roads of Ukraine, which coincides with the Europe-Asia national transport corridor) and improvement of the transport and operational condition of public highways on accident-hazardous areas and places of concentration of traffic accidents [5].

On December 13, 2017 the Cabinet of Ministers of Ukraine approved the project [9]. It is a continuation of the Road Improvement & Traffic Safety Project and the World Bank's Second Road Improvement & Traffic Safety Project.

The above-mentioned reconstruction will be carried out within the framework of the implementation of the joint project of Ukravtodor and IBRD «Road Sector Development Project» during the reconstruction of the international highway M-03 Kyiv-Kharkiv-Dovzhansky in the Poltava-Kharkiv area. This will reduce the level of accidents, which will improve the sanitary state of the environment, as well as transport performance and throughput ability in the area of the national transport corridor Europe-Asia.

Among the main issues of cooperation with the IBRD are often a lack of transparency in the selection of projects (mainly on the basis of "lobbying of government" rather than an open tender or discussion) and a lack of a realistic assessment of the effectiveness of project implementation [10]. IBRD loans are provided under the state budget guarantees, and therefore borrowers must pay the granted loans.

Experts from the National Institute for Strategic Studies under the President of Ukraine point to the main problems of cooperation with the IBRD, such as "non-transparency of the

project selection system... the lack of a real assessment of the effectiveness of project implementation (in preparing the feasibility study, the assessment is made only in terms of the effectiveness of the use of IBRD funds, while the socio-economic effect is not assessed), which leads to the impossibility of choosing the most effective way to implement such projects [11].

The second component of the World Bank is the International Development Association (IDA). Ukraine became its full member on May 27, 2004 in accordance with the Law of Ukraine of June 3, 1992 No. 2402-XII "On Ukraine's Accession to the International Monetary Fund, the International Bank for Reconstruction and Development, the International Finance Corporation, the International Development Association and the Multilateral Investment Guarantee Agency» [12].

Membership in IBRD is a prerequisite for membership in IDA. This means that loan activities of the International Development Association is optional in comparison with the financial mechanisms implemented by the International Bank for Reconstruction and Development, and therefore their task is to assist in the implementation of IBRD plans.

The International Development Association provides interest-free loans (with the exception of a small amount to cover administrative expenses - 0.75%) for the period of 35-40 years in the national currency of the state. Repayment of the principal amount begins from the 11th year after the start of their use [13]. Loans are directed primarily to infrastructure and agriculture. Sometimes IDA and IBRD jointly give loans to the same object if it needs a lot of funds.

It should be noted that cooperation of Ukraine with international monetary and financial organizations, in particular the World Bank, has both positive and negative consequences. The following advantages should be singled out: creation of sufficient foreign exchange reserves to repay loans with interest, increase of the competitiveness of the national economy, increase of the country's credit rating in the world financial market, promotion of banking and monetary system of the state.

Among the disadvantages there is the formation of the country's financial dependence on external resources, the build-up of the external debt of the state, the formation of a "consumer" type of economy, the transformation of the problem of servicing debt into the problem of borrowing, impoverishment of the population in the long run through the increased tariffs for gas and heating, freezing of social payments, and so on.

Conclusion. Cooperation with the World Bank is of great importance for the reformation of the Ukrainian economy. Despite a number of organizational shortcomings, international loans are important for Ukraine, as they contribute to improving the state of the economy and its macro-financial indicators, the formation of a competitive market environment, the upgrading of industrial infrastructure, etc. They allow the implementation of a large number of projects, namely: energy saving, infrastructure, energy efficiency of production, large-scale transport projects, etc. We believe that the process of obtaining international loans, their use and evaluation of the effectiveness of implemented projects would be transparent and accessible to the public.

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COMPARISON OF SOURCES HEALTHCARE FINANCING IN EUROPE AND SELECTED COUNTRIES THROUGH PANEL DATA ANALYSIS

POROVNANIE ZDROJOV FINANCOVANIA ZDRAVOTNEJ STAROSTLIVOSTI V EURÓPE A VYBRANÝCH KRAJINÁCH POMOCOU PANELOVEJ REGRESIE

Abstract: *The aim of this work is to show the impact of the size of GDP (per capita) on the indicators of healthcare financing in Europe and selected countries .*

The impact of GDP (per capita) on the following indicators was examined:

- *Current Health Expenditure as% Gross Domestic Product*
- *Government Health Expenditure as% Current Health Expenditure*
- *Out-of-pocket expenditure as% of Current Health Expenditure*

Data on financing of healthcare in 36 European and world countries (Canada, Japan, USA, Russia) for the period 2000-2015 were analyzed. The panel data analysis was used to measure the impact of the GDP (per capita) on the mentioned indicators. The study demonstrates the positive impact of GDP (per capita) growth on Current Health Expenditure as% Gross Domestic Product as well as Government Health Expenditure as% Current Health Expenditure. It was not possible to prove the significant impact of GDP (per capita) on Out-of-pocket expenses as% of Current Health Expenditure. The models used (Random Effects Model, Fixed Effects Model - Least Squares Dummy Variables) point to the common and different practices of European and selected countries in providing sources of funding for healthcare.

Keywords: *Health expenditure, Out-of-pocket expenditure, Fixed effect model, Random effect model*

Kľúčové slová: *Výdavky na zdravotnú starostlivosť, platby pacientov, Model fixných efektov, Model náhodných efektov*

JEL classification: I18

This article is prepared within the scope of the project VEGA 1/0945/17

Introduction

Healthcare spendings represent a significant part the total costs. Size of healthcare costs worldwide has increased considerably over the past decade. Health care costs have risen in some countries for the past 10 years by more than 100%. The total common health care costs for the period of 2015 reached 5.418 billion EUR in Slovakia [1]. Sources of financing of health care can be public or private. Amount of the resources on health care, compared to GDP(or General Government Expenditure), the allocation of resources to public and private (General Government Health Expenditure or Private Health Expenditure), Out of pocket expenditure and other indicators are different for each country in Europe or in the World. It makes sense to compare the development of indicators of the financing of health care between different countries over a longer period of time.

Each of the countries surveyed is described at some time a number of indicators. When we compare the sources of financing of healthcare in more countries, increasing the amount of data processed. For processing of multidimensional data multidimensional statistical methods (Discriminant analysis, Principal Component Analysis, Cluster analysis, Correlation analysis, Regression analysis [2], Neural Connection, Panel Data analysis [3] or Multidimensional scaling [2] should be used.

These methods are suitable for analyzing and modeling the links between indicators of sources of funding for health care in individual countries. The analysis obtained using these methods is also associated with a clear and easily interpreted output [4].

We will analyze the effect of GDP (per capita) on other healthcare financing indicators:

- Current Health Expenditure as % Gross Domestic Product panel (CHE from GDP)
- Government Health Expenditure as % Current Health Expenditure (GHE from CHE)
- Out-of-pocket expenditure as % of Current Health Expenditure (OOP from CHE)

We will use the panel data analysis to determine the above impact.

Material and Methods

For the following analyses indicators of financing national healthcare (NHA indicators) from the period the 2000 to 2015 were used.

Global health expenditure database that World Health Organization (WHO) has maintained provides internationally comparable numbers on national health expenditures.

Countries surveyed :

1.Austria, 2.Belarus, 3.Belgium, 4.Bulgaria, 5.Canada, 6.Croatia, 7.Cyprus, 8. Czech Republic, 9.Denmark, 10.Estonia, 11.Finland, 12.France, 13.Germany, 14.Hungary, 15.Iceland, 16.Italy, 17.Japan, 18.Latvia, 19.Lithuania, 20.Luxembourg, 21.Malta, 22.Montenegro, 23.Netherlands, 24.Norway, 25.Portugal, 26.Republic of Moldova, 27.Romania, 28.Russian Federation, 29.Serbia, 30.Slovakia, 31.Slovenia, 32.Spain, 33.Sweden, 34.Ukraine, 35.United Kingdom, 36.United States of America.

Panel data are combined cross-sectional and time data. This type of data are advantageous due to easily controllable individual variability of the investigated entities, possibility of identification and measurability of effects, which are impossible to verify solely by cross-sectional data and time series and they are also more appropriate for the study of dynamics adjustment. The analysis of panel data is a statistically-econometric method [4] dealing with the analysis of relationship and correlation of data in two dimensional space. The first dimension is represented by time and the second dimension is the individual objects of investigation.

Three model types are used [5]:

- Pooled Regression Model
- Fixed Effects Model (FEM , LSDV - Least Squares Dummy Variable)
- Random Effects Model (REM)

Following tests are used for the article [6] , [7]:

- F- test, Wald test
- Hausman test
- Breusch – Pagan Lagrange multiplier (LM) test

Econometric software STATA 15 was used in the Panel data analysis.

Results and Discussion

We have gradually analyzed the dependence of individual indicators on GDP per capita through panel data analysis. The input variable is GDP per capita in all three cases, which averages USD 28,130. The lowest value was recorded in Moldova (2000) USD 350 and the highest value in Luxembourg (2014) USD 120 610. GDP per capita grew in Slovakia from 3 830 USD in 2000 to 18 600 USD in 2015. GDP per capita was measured in thousands of USD.

1. Current Health Expenditure as % GDP

The average value of the indicator during the period considered and for all countries was 8.14 %. The minimum value reached by Romania (2000) is 4.18 % and the maximum USA (2015) is 16.84%. Current Health Expenses as% GDP ranged from 5.31% to 7.96% in Slovakia. Results using the panel data analysis were as follows.

FEM

Number of obs = 576 Group variable: Country Number of groups = 36
 Obs per group: min = 16 max = 16 avg = 16.0
 R-sq: within = 0.1453 between = 0.1827 overall = 0.1767
 F(1,539) = 91.65 Prob > F = 0.0000
 corr(u_i, Xb) = 0.0171

| CHE from GDP | Coef. | P> t |
|-----------------------------|--------|-------|
| GDP per Capita (thous. USD) | .0377 | 0.000 |
| cons | 7.1153 | 0.000 |

sigma_u 1.7495 sigma_e .7957 rho .8285922 (fraction of variance due to u_i)
 F test that all u_i=0: F(35, 539) = 77.32 Prob > F = 0.0000

REM

R-sq: within = 0.1453 between = 0.1827 overall = 0.1767
 Wald chi2(1) = 99.41 Prob > chi2 = 0.0000

| CHE from GDP | Coef. | P> z |
|-----------------------------|--------|-------|
| GDP per Capita (thous. USD) | .0378 | 0.000 |
| cons | 7.1124 | 0.000 |

sigma_u 1.7635 sigma_e .79572372 rho .8308 (fraction of variance due to u_i)

The Wald test and the F test show that the coefficients of both models (REM and FEM) are significant. The p-value of the Breusch and Pagan LM test is zero, meaning that we reject the zero hypothesis about using the Pooled regression model. The appropriate model is REM by Hausman test (Table.1).

Tab.1 Tests Current Health Expenditure as % GDP

| Test | H ₀ | Prob>chi2 |
|---------------------------|--|-----------|
| Breusch and Pagan LM test | No panel effect | 0.0000 |
| Hausman test | Difference in coefficients is not systematic | 0.9182 |

Source: Own processing using Stata

The coefficients of the REM model are positive, so we can say that with increasing GDP per capita, the share of Current Health Expenditure on GDP is also increasing.

2. Government Health Expenditure as % Current Health Expenditure

The average value of the indicator during the period considered and for all countries was 71.43%. The minimum value reached by Cyprus (2005) is 40.18 % and the maximum by Czech Republic (2015) is 89.39 % . Government Health Expenditure as % Current Health Expenditure ranged from 69.30 % to 80.23% in Slovakia.

FEM

R-sq: within = 0.0130 between = 0.2548 overall = 0.2204
 F(1,498) = 6.58 Prob > F = 0.0106
 corr(u_i, Xb) = 0.4134

| | Coef. | P> t |
|------------------------------------|---------|-------|
| GHE from CHE | | |
| GDP per Capita (thous. USD) | .04273 | 0.011 |
| cons | 70.2401 | 0.000 |

sigma_u 10.923257 sigma_e 2.8589157 rho .93589036 (fraction of variance due to u_i)
 F test that all u_i=0: Prob > F = 0.0000

REM

R-sq: within = 0.0130 between = 0.149 overall = 0.2204
 Wald chi2(1) = 10.29 Prob > chi2 = 0.0013

| | Coef. | P> z |
|------------------------------------|----------|-------|
| GHE from CHE | | |
| GDP per Capita (thous. USD) | .0525 | 0.001 |
| cons | 70.35765 | 0.000 |

sigma_u 9.9261 sigma_e 2.8589 rho .9233 (fraction of variance due to u_i)

Model coefficients, as in the previous case, are positive and significant. However, the Hausman test is different (Table 2). A suitable model is FEM.

Tab.2 Tests for Government Health Expenditure as % Current Health Expenditure

| Test | H ₀ | Prob>chi2 |
|---------------------------|--|-----------|
| Breusch and Pagan LM test | No panel effect | 0.0000 |
| Hausman test | Difference in coefficients is not systematic | 0.0011 |

Source: Own processing using Stata

Let us introduce the results of the LSDV model with specific constants for each country. The first country in turn is Austria, which has a specific constant of 73.72. Specific constants for other countries can be found in Table 3, where the number in the coef. means the difference between the specific constant of the country concerned and the specific constant of the first country in turn (73.72 - Austria).

LSDV

F(36, 498) = 238.40 Prob > F = 0.0000
 R-squared = 0.9452 Adj R-squared = 0.9412 Root MSE = 2.8589

| Source | SS | df | MS |
|--------|-----------|----|-----------|
| Model | 70147.237 | 36 | 1948.5343 |

| | | | |
|----------|------------|-----|----------|
| Residual | 4070.3527 | 498 | 8.1733 |
| Total | 74217.5898 | 534 | 138.9842 |

Tab.3 Specific constants from LSDV model

| GHE from CHE | Coef | P> t | | | |
|-----------------------|--------------|-------|-----------------------|----------------|-------|
| GDP per Capita | .0427 | 0.011 | Lithuania | -4.4807 | 0.000 |
| Belarus | -3.4278 | 0.008 | Luxembourg | 6.0217 | 0.000 |
| Belgium | 5.9184 | 0.000 | Malta | -7.6914 | 0.000 |
| Bulgaria | -17.9932 | 0.000 | Montenegro | -5.1135 | 0.000 |
| Canada | -2.2805 | 0.038 | Netherlands | 2.5588 | 0.026 |
| Croatia | 8.4728 | 0.000 | Norway | 6.9059 | 0.000 |
| Cyprus | -31.4507 | 0.000 | Portugal | -5.4530 | 0.000 |
| Czech Republic | 10.2122 | 0.000 | Moldova | -25.0156 | 0.000 |
| Denmark | 7.9772 | 0.000 | Romania | 5.4679 | 0.000 |
| Estonia | 1.3300 | 0.291 | Russia | -13.1277 | 0.000 |
| Finland | 1.6097 | 0.142 | Serbia | -10.5101 | 0.000 |
| France | 3.1419 | 0.007 | Slovakia | -2.2701 | 0.834 |
| Germany | 4.8415 | 0.000 | Slovenia | -2.1449 | 0.078 |
| Hungary | -5.9403 | 0.000 | Spain | -2.5207 | 0.033 |
| Iceland | 5.5425 | 0.000 | Sweden | 6.7389 | 0.000 |
| Italy | 1.1952 | 0.285 | Ukraine | -19.5244 | 0.000 |
| Japan | 6.3179 | 0.000 | United Kingdom | 7.3107 | 0.000 |
| Latvia | -17.1507 | 0.000 | USA | -28.6441 | 0.000 |
| | | | cons (Austria) | 73.7272 | 0.000 |

Source: Own processing using Stata

The Cyprus and USA has the lowest specific constants :

- Cyprus $73.72 - 31.45 = 42.08$
- USA $73.72 - 28.64 = 45.08$

3. Out-of-pocket expenditure as % of Current Health Expenditure

The average value of the indicator 22.78 %. The minimum value reached by France (2015) is 6.79 % and the maximum by Cyprus 55.86 % . Out-of-pocket expenditure as % of Current Health Expenditure ranged from 10.84 % (2000) to 27.37% (2007) in Slovakia.

FEM

R-sq: within = 0.0039 between = 0.3811 overall = 0.3187

F(1,533) 2.11 Prob > F = 0.1471

corr(u_i, Xb) = 0.5527

| | | |
|-----------------------------------|--------------|-----------------|
| OOP from CHE | Coef. | P> t |
| GDP per Capita (thous.USD) | -0.0198 | 0.147 |
| cons | 23.3235 | 0.000 |

sigma_e 2.7241 rho .9383 (fraction of variance due to u_i)

F test that all u_i=0: F(35, 533) = 168.21 Prob > F = 0.0000

REM

R-sq: within = 0.0039 between = 0.3811 overall = 0.3187

Wald chi2(1) = 5.17 Prob > chi2 = 0.0229

| | | |
|------------------------------------|--------------|-----------------|
| OOP from CHE | Coef. | P> z |
| GDP per Capita (thous. USD) | -0.0310 | 0.023 |
| cons | 23.5547 | 0.000 |

sigma_u 8.6593 sigma_e 2.7241 rho .9099 (fraction of variance due to u_i)

Model coefficients are negative and are not significant for the FEM model. It follows from Table 4 that a suitable model for this case is FEM.

Tab.4 Tests for Out-of-pocket expenditure as % of Current Health Expenditure

| Test | H ₀ | Prob>chi2 |
|---------------------------|--|-----------|
| Breusch and Pagan LM test | No panel effect | 0.0000 |
| Hausman test | Difference in coefficients is not systematic | 0.0000 |

Source: Own processing using Stata

We calculate the specific constants for each country using the LSDV (Table 5).

LSDV

F(36, 533) = 246.96 Prob > F = 0.0000

R-squared = 0.9434 Adj R-squared = 0.9396 Root MSE = 2.7241

| Source | SS | df | MS |
|----------|------------|-----|-----------|
| Model | 65975.8531 | 36 | 1832.6625 |
| Residual | 3955.3066 | 533 | 7.4208 |
| Total | 69931.1598 | 569 | 122.9018 |

Tab.5 Specific constants from LSDV model

| OOP from CHE | Coef | P> t | | | |
|-----------------------|----------------|-------|-----------------------|----------------|-------|
| GDP per Capita | -.01988 | 0.147 | Lithuania | 10.5633 | 0.000 |
| Belarus | 6.7491 | 0.000 | Luxembourg | -5.4148 | 0.000 |
| Belgium | .4176 | 0.682 | Malta | 12.6223 | 0.000 |
| Bulgaria | 24.1898 | 0.000 | Montenegro | 11.0401 | 0.000 |
| Canada | -2.8753 | 0.003 | Netherlands | -8.1849 | 0.000 |
| Croatia | -4.4217 | 0.000 | Norway | -1.6018 | 0.134 |
| Cyprus | 30.0485 | 0.000 | Portugal | 6.7032 | 0.000 |
| Czech Republic | -5.6593 | 0.000 | Moldova | 26.0705 | 0.000 |
| Denmark | -3.5478 | 0.000 | Romania | 1.1118 | 0.302 |
| Estonia | 2.8413 | 0.006 | Russia | 14.3436 | 0.000 |
| Finland | 1.8844 | 0.051 | Serbia | 14.1754 | 0.000 |
| France | -10.8923 | 0.000 | Slovakia | 1.0754 | 0.302 |
| Germany | -4.8240 | 0.000 | Slovenia | -5.842 | 0.000 |
| Hungary | 8.5444 | 0.000 | Spain | 4.1415 | 0.000 |
| Iceland | -.4750 | 0.623 | Sweden | -1.7505 | 0.071 |
| Italy | 4.1374 | 0.000 | Ukraine | 22.8101 | 0.000 |
| Japan | -3.2678 | 0.001 | United Kingdom | -6.8236 | 0.000 |
| Latvia | 22.1548 | 0.000 | USA | -4.9111 | 0.000 |
| | | | cons (Austria) | 18.9404 | 0.000 |

Source: Own processing using Stata

Bulgaria, Cyprus, Latvia, Moldova, Ukraine have the highest specific constants, the share out of pocket expenses in total healthcare spending is the highest in compared countries

Summary

Several European countries, including Slovakia, have risen sharply in healthcare spending over the last 10 years. The Slovak Republic has increased healthcare spending over the past 10 years by 106% (purchasing power parity). Healthcare spending in the EU represents a significant part of the total cost. There are considerable differences between EU countries not only in the amount of financial resources for healthcare but also in the amount of health expenditure in relation to GDP.

We examined whether the change in GDP per capita would also be reflected in a change in other healthcare financing indicators :

1. Current Health Expenditure as% Gross Domestic Product
2. Government Health Expenditure as% Current Health Expenditure
3. Out-of-pocket expenses as% of Current Health Expenditure

We have used models of panel data analysis to quantify these dependencies. We have shown that in the first case, the most appropriate REM model is. The model has positive and significant coefficients. This means that with the growth of GDP per capita, Current Health Expenditure as% of the Gross Domestic Product will grow. In the latter case, the appropriate FEM model also has positive and significant coefficients. The higher the GDP per capita, the higher the Government Health Expenditure as% Current Health Expenditure. We have shown significant differences between EU and selected countries (significant specific constants). The most appropriate model in the third case is FEM. However, the regression coefficient is not significant. Therefore, we could not prove the impact of GDP per capita on Out-of-pocket expenses as% of Current Health Expenditure. However, we have shown, by specific constants, that the differences between EU countries are large.

Súhrn

Výdavky na zdravotnú starostlivosť v EU predstavujú značnú časť celkových nákladov. Viaceré európske krajiny vrátane Slovenska razantne zvýšili výdavky na zdravotnú starostlivosť za posledných 10 rokov. Slovenská republika zvýšila výdavky na zdravotnú starostlivosť za posledných 10 rokov o 106 % (podľa parity kúpnej sily.). Existujú značné rozdiely medzi EU krajinami nielen vo veľkosti finančných zdrojov na zdravotnú starostlivosť, ale aj vo veľkosti výdavkov na zdravotníctvo v pomere k HDP.

Skúmali sme, či zmena HDP na obyvateľa sa prejaví aj v zmene ďalších ukazovateľov financovania zdravotnej starostlivosti :

1. Celkové výdavky na zdravotnú starostlivosť ako percento z HDP
2. Vládne výdavky na zdravotnú starostlivosť ako percento z celkových výdavkov na zdravotnú starostlivosť
3. Platby pacientov ako percento z celkových výdavkov na zdravotnú starostlivosť

Použili sme modely panelovej regresie na kvantifikáciu týchto závislostí. Ukázali sme, že v prvom prípade je najvhodnejší REM model. Model má kladné a významné koeficienty. To znamená, že s rastom HDP na obyvateľa narastá aj podiel celkových výdavkov na zdravotnú starostlivosť z HDP.

V druhom prípade vhodný FEM model má tiež kladné a významné koeficienty. Čím je vyšší HDP na obyvateľa tým je vyšší aj podiel vládnych výdavkov na zdravotnú starostlivosť na celkových výdavkoch. Ukázali sme významné diferencie medzi jednotlivými krajinami (significant specific constants).

Najvhodnejší model v treťom prípade je FEM. Koeficienty však nie sú významné. Nepodarilo sa nám teda dokázať vplyv HDP na obyvateľa na podiel platieb pacienta na celkových nákladoch na zdravotnú starostlivosť. Ukázali sme však pomocou špecifických konštánt, že rozdiely medzi jednotlivými krajinami sú veľké.

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PROFITABILITY AS ONE OF THE MOST IMPORTANT INDICATORS OF BUSINESS EFFICIENCY OF TOURISM ENTERPRISES

ZISKOVOSŤ AKO JEDEN Z NEJDÔLEŽITEJŠÍCH UKAZOVATEĽOV EFEKTÍVNOSTI PODNIKOV CESTOVNÉHO RUCHU

Abstract:

Objective. The aim of the research is to study the essence and components of profitability as one of the most important indices of tourism enterprise efficiency.

Research methodology. The monographic and abstract-logical method were used in the research (in order to improve the essence of the concept of "tourism enterprises profitability" and the formulation of conclusions); hierarchical classification method (to identify factors of both internal and external nature); graphic method (for visual display of research results).

Results. The content of the concept of profitability and tourism enterprise efficiency is defined. The approaches to determining the essence of profitability from the standpoint of different authors are systematized. Specific features of tourism enterprises activities are determined. The types and functions of profit as one of the indices of profitability are investigated. The essence of profitability as a relative index of effective activity of the enterprise is determined.

Scientific novelty of the research results. On the basis of approaches systematized in the process of the research in order to determine the essence of profitability, the author's vision of the concept of tourism enterprises profitability has been formed. The profitability of tourism enterprises is an index that characterizes the efficiency of an enterprise in terms of its ability to bring profit, to provide liquidity and competitiveness in the long run.

Practical significance of the research results. It is determined that the process of profit accumulation is influenced by factors of internal and external nature. Initial measures are proposed to increase profits in the long run.

Key words: profitability, tourism, enterprise, profitableness, profit.

Kľúčové slová: ziskovosť, cestovný ruch, podnikanie, ziskovosť, zisk.

JEL: A 130

Global structural transformations in international economic relations have led to a competitive struggle between enterprises for receiving maximum return and ensuring proper level of competitiveness. Enterprise profitability is the most important index that determines the prospects for its development, the ability to achieve strategic goals and objectives. Profit of the enterprise as one of the profitability indices is the main driving force of the market economy type, the main incentive motive of entrepreneurs. Profit is the category that most fully depicts the financial capabilities of the enterprise and its ability to expand the production activities of the enterprise. It's clear that the higher the profit is, the more opportunities the enterprise has for its economic development and improvement as well as expansion of its activity.

Problems of studying ways to ensure and increase the profitability of enterprises are highlighted in the works of such domestic and foreign scientists as: I.A. Blanc, S.V. Zazanska, S.V. Mochernyi, S.F. Pokropyvnyi, A.M. Podderiogin and others. At the same time, among

scientists there is no common view of the theoretical essence of profitability concept and reserves of its increase, which may be problematic when solving practical problems of improving the enterprise efficiency. The impact of various factors (internal and external) on the growth of profitability of the enterprise is still a topical issue.

The aim of the research is to study the essence and components of profitability as one of the most important indices of the efficiency of tourism enterprises.

Currently in the economic literature there are many interpretations of the definition of the concept of "profitability", which respectively affects the management of the economy in general and enterprises in particular.

Thus, Osypova T.V. [11] considers that the basis of profitability is the profit itself, which in general determines the result of financial and economic activity of enterprises. Davydov O.I. states that in addition to the fact that profitability begins with the orientation of the enterprise to profit maximization, it is a criterion for enterprise management, in which the value of profit is used as an absolute index, and the ratio of various indices - as the relative ones [7, p. 189].

Blank I.O. argues that profitability is based on profit and efficiency. The scientist treats profits as a measure of the financial condition of the enterprise and the main characteristic of the return on investment in its assets. He also emphasizes that profit can be both quantitative and qualitative, and profitability characterizes the efficiency of the enterprise [3]. This means that in its basis and meaning, the wider expression of the indices is laid, namely the relative one.

Khmelevskiy O. defines profitability as the state of the enterprise, which indicates its ability to carry out profitable activities, provide solvency, bring profits, and ensure stability of growth and future innovation and investment development. That is, it is indisputable that the profitability is directly related income generation. At the same time, it has two manifestation "poles": positive and negative, that is, profitability and loss-making. The basis of such a manifestation is the result of economic activity - positive (profit) and negative (loss). The third state is also possible, namely a break-even, which corresponds to the absence of both profit and loss [12, p. 50-51]. Yepifanova I.U. and Gumeniuk V.C. along with the understanding of profitability as characteristics of the efficiency of enterprise resources reproduction suggest assessing its level by dimension, quality and production potential [8, p. 190].

Mochernyi S.V. offers to consider the profitability of the economic entity on two aspects: firstly, as the profitability of the entire enterprise for all the advanced capital, which is determined by the rate of profit: the ratio of annual profit to the advanced capital; and secondly, as the profitability of manufacturing a separate batch of goods, measured by the ratio of profit to the cost of goods [10].

As can be seen, the treatment of the category of profitability by the above mentioned authors is close by the content and cannot be determined without taking into account the absolute effect on the value of profit and further determination of profitability indicators. In its turn, in the formation of enterprise profitability it is also not appropriate to calculate efficiency as an independent index, which does not depend on the value of profit. As a result, profitability characterizes the efficiency of the enterprise and relates only to a certain level of profitableness.

The generalization and analysis of the results of researches of domestic and foreign scientists have shown that the originality of tourist services as a service sphere product is characterized by common features for this sphere other than material production that influence the determination of profitability. In turn, tourism industry enterprises have their own distinctive features other than socially significant services. Namely: the service is individual; the effect of the services provision (satisfaction from the health improvement and rest) is not directly related to the size of the tourist costs; all medical resorts are situated in special areas characterized by a certain set of landscape-climatic conditions and hydro-mineral resources;

that's why there is a dependence of services provision from local natural and climatic conditions; the tourism services market at first shows not the services itself, but only the information about the services that can be made; tourist and health services belong to the most expensive ones, because they are based on the use of valuable natural medical resources and this requires a complex balneal technical facilities and medical equipment; there is a significant impact of seasonal factors.

As the tourism market develops in a competitive environment, travel companies, in order not to lose customers, carry out a certain pricing policy. The main factors of pricing are: costs as the basis for setting prices, competitor prices as a guideline, seasonality, as well as the nature (uniqueness) of services, category of accommodation.

The process of profit accumulation is influenced by internal and external factors (Fig. 1).

Internal factors of the impact on the company's profit are factors that depend on the enterprise's activity, such as: volume of the enterprise's activity, the state and efficiency of using the enterprise resources, the level of income, the level of costs, the effectiveness of pricing policy and types of services rendered.

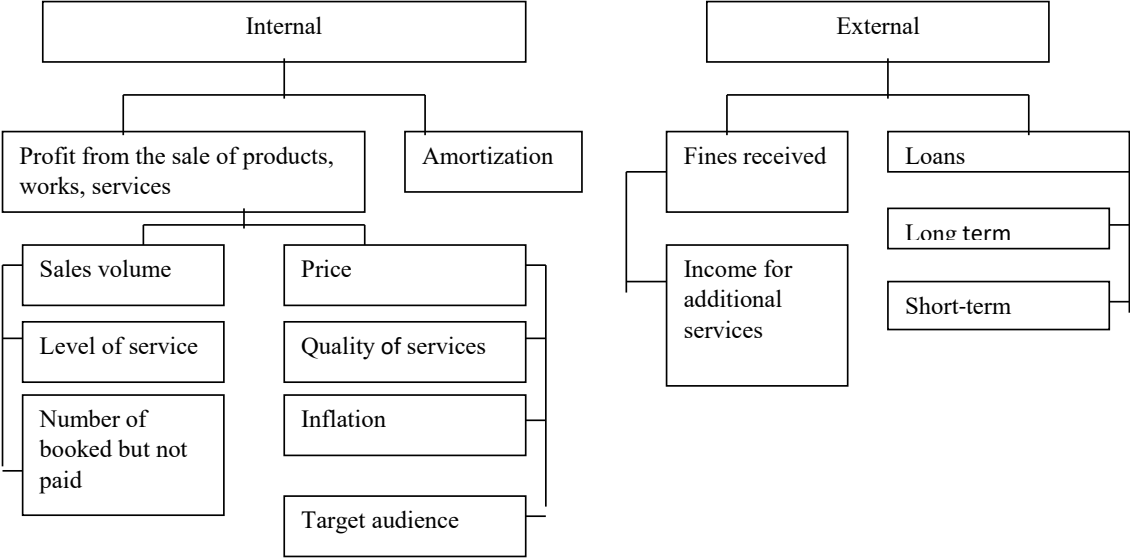


Fig. 1. Classification of factors influencing the formation of financial resources of the tourism enterprise

External factors affecting the company's profit are the factors that do not depend on the enterprise activity, namely: the state regulation of prices in the current conditions for goods included in the consumer basket, rising prices for services of other national economy branches, taxation system, changes in regulatory documents on lending, increase of accounting rates for the use of credit, the state policy on income generation, the absence of indexation of household incomes depending on the rate of inflation.

Time-space factors are very important - these are objective factors that operate independently of the enterprise.

Territorial belonging determines the direction of enterprise activity, in addition to its direct location, weather and climatic conditions, the following factors are also important: relief, beaches, climate, balneological resources, landscape diversity.

The time factor is taken into account when assessing the appropriateness of capital investments, new projects, forecasting demand. An important factor is the duration of service, it affects directly the functional indicators of the service - the degree of satisfaction that occurs as a result of health improvement and rest. The choice of rest time depends on many social and economic factors, such as: demand, supply, prices on the tourist services market, income, availability of free time, etc.

A specific feature of the tourism enterprises activities is the seasonality factor. The season reduction leads to the fact that in search of profit, the tourist market entities in this period set the highest prices, which, in turn, holds back the growth of tourist flow. Seasonal functioning can negatively affect the quality of service: the periodic workload of employees leads to a decrease in their qualifications, and uneven loading of premises causes unplanned physical and moral wear of the material base.

Increasing the duration of the holiday season is an important prerequisite for improving the quality of service and revenue growth for a tourism enterprise. Economic factors of the environment partially manifest themselves through the market entities, which behavior depends on the degree of manifestation and the consequences of their influence [1].

The generalization and systematization of factors of internal and external environment allows us to give an author's definition of tourism enterprises profitability. Thus, the profitability of tourism enterprises is an index that characterizes the efficiency of the enterprise in terms of its ability to generate income, provide liquidity and competitiveness in the long run.

The tourism enterprise profitability is characterized by two indices: profit and profitableness. They are the main qualitative indices reflecting the economic efficiency of the enterprise, its financial status, successes and opportunities in the implementation of the developed program of economic and social development. Profitableness and profit are closely linked. The profitableness growth objectively indicates an increase in profits. That is to say that, by increasing profits, conditions to the increase of profitableness is created [13, p. 76].

In order to analyze and ensure the effective management of profit generation, several types of company profits are distinguished: marginal, gross, operating, from ordinary activities, and net ones. In accordance with the accounting provisions (standards) of Ukraine, the total profit of an enterprise consists of profits received by the enterprise from ordinary activities and from extraordinary events. Profit from ordinary activities is about 95% of the total profit received by the company [9].

The main purpose of profit in modern conditions of management is the reflection of the efficiency of production and sales activity of the enterprise. This is due to the fact that the amount of profit should have the coverage of the individual costs of the company associated with the production and sale of their products in the form of prime cost, socially necessary costs, the indirect expression of which should be the price of the service. The increase in profits in the conditions of price stability indicates the reduction of individual expenses of the enterprise for the production and sale of products.

The basic functions of profit are as follows:

- estimative - means that profit is used as the main criterion for the efficiency of production and use of resources;
- stimulating - means that its size affects production and personal consumption, is the source for paying of taxes;
- self-supporting - means that state expenditure involves the mandatory receipt of profits, otherwise the production does not make sense [5].

When investigating the issue of determining financial results, Western economists drew attention to the fact that the emergence of profit contributes to a number of factors, such as: entrepreneurial initiative, favorable conditions, protection of the state and other public institutions. Economists from the USA and other countries are studying the issue of the

dependence of profit on the scale of production, fluctuations in costs and the intensity of capital use. Profitability is also affected by the ability of an entrepreneur to manage risk and possess the methods of prediction and forecasting. The variety of factors affecting profits requires their classification, which at the same time is important for determining the main directions, finding reserves for improving the management efficiency.

Profit formation is a continuous process, which includes a set of actions to ensure the linkage (reconciliation) of income and expenses of an enterprise in order to obtain and maximize their positive balance. All enterprise activity is aimed at ensuring profit growth or at least stabilizing it at a certain level. The formation of the absolute amount of profits of the enterprise is affected by the following factors:

- results, that is, the efficiency of its financial and economic activity;
- field of activities;
- branch of economy;
- the terms of financial results accounting established by the current legislation [4].

Significant influence of these factors in most cases does not mean the presence of some unique reserves of profit growth, but only emphasizes some of them, highlighting them as the most promising and significant for this enterprise, market or industry.

Today, there are such approaches to the formation of enterprise profits, including tourism one, as: accounting and economic approaches.

Formation of profit as a financial index of the company, reflected in the accounting and official reporting of economic entities is affected by the established procedure for determining the financial activity results; calculation of the cost of products (works, services); general expenses; definition of profits (losses) from financial transactions, other activities.

To generate the enterprise profit a certain technology is offered, which allows applying methods, techniques and operations that provide the company with an over-income over expenditure (predicted, expected, actual) (Figure 2).

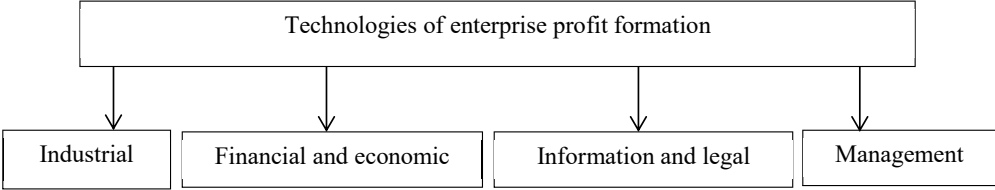


Fig. 2. Types of technologies for enterprise profit formation in market conditions

The profit received by the enterprise is the object of distribution. The distribution of profit is the process of forming the directions of its future use in accordance with the goals and objectives of enterprise development. The distribution of profit can be divided into two stages.

The first stage is the distribution of the total profit. At this stage, the distribution participants are the state and the enterprise. As a result of the distribution, each of the participants receives its share of profit. The distribution of profits between the state and enterprises is important for ensuring both the state and enterprise needs. This is one of the key issues in the state financial policy implementation, on which depends the economy development as a whole. The proportions of profit distribution between the state (budget) and the enterprise are influenced by a number of factors. In this case, the state tax policy towards the economic entities is important. This policy is implemented in the amount of taxes paid at the expense of profits, in determining the objects of taxation, tax rates, in the form of tax privileges.

The second stage is the distribution and use of profits remaining at the disposal of enterprises after making payments to the budget. At this stage, trust funds may be created at the expense of profits to finance the corresponding expenses (for payment of dividends, for social

development of the enterprise, etc.). The principal value in the distribution of net profit (profit remaining in the enterprise) is to achieve an optimal balance between the accumulation fund and the consumption fund [6].

The system of profit distribution should provide financial resources for the needs of the company's expanded reproduction on the basis of establishing the optimal balance between funds directed to consumption and accumulation.

Profit is a criterion and an index of the enterprise efficiency. However, the enterprise needs not profit, but its specific size to ensure its effective activities.

Profit is necessary for the further expansion of its activities, increasing the number of tourist tours, improving their quality, purchasing new equipment, computers, communications, as well as stimulating the productivity of tourism enterprises employees. Part of the profit can be allocated by the management of the tourism enterprise to insure their business in case of force majeure for the period of tourist services provision (for example, natural disasters in the form of tsunamis, earthquakes, floods, landslips, etc.). Under market economy conditions, when any enterprise acts as the subject and object of economic relations, it independently determines the proportions of net profit distribution, that is, what remained after tax payments.

The formation of tourism enterprises profitability directly depends on indices of population welfare and financial and economic growth in the country; if they deteriorate, the profitability of tourism enterprises is also decreasing.

The main ways to increase profits in the long run can be as follows:

1. Actions - aimed at increasing the market share in existing segments. Such actions may be the creation of additional properties for manufactured products, improvement of customer service quality, elimination of the competitor.

2. Actions aimed at developing a new competitive strategy.

3. Penetration into new market segments.

An important place among the ways to increase the profit of any enterprise is to effectively manage its profitability, which is a process of planning revenue and use of cash resources, establishing the optimal ratios in the enterprise income distribution. In conditions of competition, the improvement the process of profit generation at the macro level is carried out continuously.

The most widespread explanation of the essence of enterprise profitability is that it is identified with the breakeven level, which indicates the effectiveness of the enterprise activity. At the same time, the breakeven index is considered on the basis of the income level, but in relative terms.

Profitableness is not just a statistical, calculated parameter, but a complex social and economic criterion. In contrast to profits, it characterizes the effectiveness of financial activities of any particular economic entity, in relation to all other (individual entrepreneurs, organizations, regions, individual countries and the world as a whole), regardless of the size and nature of economic activity. On the one hand it adds profitability to the form of economic category, which expresses economic relations between economic entities on the effectiveness of the use of factors of capital, and on the other - the nature of the object and instrument of financial management. Profitableness is directly related to profits. However, it cannot be identified with the absolute amount of profits [2, p. 63].

Profitability indices characterize the efficiency of the enterprise as a whole, the profitability of various activities, payback costs, etc. They are more complete than profit, characterizing the final results of management, because their size shows the correlation of the effect with available or used resources. Profitability indices are important characteristics of the factor environment for the formation of enterprise profit. For this reason, they are mandatory elements of comparative analysis and assessment of the financial condition of the enterprise.

In the practical experience of Ukrainian enterprises the profitability level index is the most common. It is calculated as the ratio of profit to the full cost of sales. This index shows how much for every hryvnia or other monetary unit spent on the farm was earned. According to the well-known scientists, the calculation of relative indices of enterprise profitability is carried out only for positive financial results, but such a result is hasty. After all, when identifying losses from the implementation of economic operations, it is also important for the enterprise to determine the level of loss, that is, how much damage is incurred for each investment in the production of a monetary unit. The level of profitability or loss-making can be determined by individual products, by industry and by the enterprise as a whole. Importance with regard to the profitability index is that its use can not only reveal profitability or loss-making, but also determine the effectiveness of the use of funds.

Profit and profitability growth is important not only for further development of the enterprise, industry, but also the entire national economy of Ukraine, as it is the source of funds for the formation of the revenue part of the state (local) budget.

Thus, the profitability of a tourism enterprise is an individual index, which includes a number of economic concepts and is characterized by a large number of external and internal factors. At the bottom of profitability lies the level of income, the size of which in relation to the company expenditures indicates the effectiveness of its activities, namely the profitability. In order to increase the profitability and the volume of sales, the company management should take sound management decisions based on the peculiarities of the basic conditions of its formation, namely, at the stage of overcoming the limit of break-even, the stage of profit generation and the stage of its growth.

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METHODOLOGICAL STUDY OF THE SELECTED ATTRIBUTES OF THE BOSSING QUESTIONNAIRE*

METODOLOGICKÁ ŠTÚDIA VYBRANÝCH ATRIBÚTOV DOTAZNÍKA BOSSING

***Abstract:** The presented contribution focuses on the vertical, down-ward workplace bullying also known as bossing and the methods to assess this aspect in the work environment. Several selected attributes of a new original BOSSING questionnaire, which represents a psychometric approach to research and measurement of bossing, are also analyzed. Results of the research conducted on a sample of 770 non-managerial workers, including 301 (39.1%) men and 469 (60.9%) women, aged from 18 years to 61 years ($M = 34$ years, $SD = 10.372$ years), enabled extraction of the factor structure of the BOSSING methodology, where two factors were revealed: Work-Aimed Bossing and Psyche-Aimed Bossing. These factors represent two important areas within which the manifestations of bossing can be performed.*

***Keywords:** bullying, mobbing, bossing, BOSSING methodology*

***Kľúčové slová:** šikanovanie, mobbing, bossing, BOSSING metodika*

***JEL classification:** C18, J71*

Introduction

Since early 1990s, bullying in the workplace has become a major cause of significant reductions in labor productivity, increase in tension and absenteeism due to mental disorders that are automatically brought about by it [1]. The main objective of the presented paper is to take an insight into this phenomenon, particularly in terms of its vertical direction, i.e. bullying initiated by a superior and directed towards a subordinate known as bossing [2], through verification of the questionnaire (by means of the Principal Component Analysis with Varimax Rotation) aimed at the issue of bossing in the workplace and labeled as BOSSING.

Bossing

As opposed to mobbing, which occurs most frequently between the workers in the same position, bossing occurs between the supervisor or manager and the subordinates [3]. Mobbing can be also defined as a relentless and systematic abuse of other colleague/s through intrigues, conspirations, and smearing in a work team or group, whereas bossing is a psychological form of terror in the workplace occurring when a boss (superior) bullies one or more subordinates/employees [4]. Oberhofer [5] adds that while bossing is a form of "downward bullying" by superiors, one can also speak about staffing, which is an "upward bullying" by colleagues, and these aspects are typically described in some European countries, for instance, in German-speaking regions. Arnejčič [6] also categorizes bossing

within the so-called vertical wall mobbing, which occurs when an individual defames a subordinate employee. Vertical mobbing, or bossing, therefore occurs when a subordinate is mobbed by a supervisor [2].

Although mobbing and bossing are similar terms, the difference lies in the actors of the mental bullying. However, the consequences for the victim of bullying by a manager may be more serious. Employees are often in situations which threaten them much more than any other [7]. It's not just about their social contacts and a sense of personal happiness, but also about professional identity, career, and often, from an economic point of view, about their own existence. A particularly threatened group consists of novice workers with no work or social experience [8]. As mentioned above, mobbing is not the only type of disruption in relationships in the work environment. It is no exception that the workers are mentally assaulted by their superiors, and that is when bossing occurs.

In accordance with [9], bossing significantly reduces not only the quality of employee's work, but also their focus on meeting the organization's goals. Authors describe it as a dangerous form of behavior for the performance of an organization as it can affect the long-term cooperation of the working teams. Another research study [10] also suggests that bossing is quite a frequently occurring workplace phenomenon, with one or more superiors often applying continuous aggression towards a particular employee or group of employees. According to [8], the main feature of mobbing and bossing is their systematic-ness and long-term-ness.

Methods of Bossing Assessment

Study approaches to mobbing focus particularly on the consequences of mobbing and experiencing of the victim [11], [12], [13]. In the presented research project, a questionnaire aimed at the issue of bossing in the workplace is proposed and verified. The BOSSING questionnaire contains 20 items describing various forms of workplace bossing. The role of the respondents is to assess each item on a 5-point scale (1 = absolutely disagree, 2 = rather disagree, 3 = neither disagree nor agree, 4 = rather agree, 5 = absolutely agree).

The research involved participation of 770 non-managerial workers, including 301 (39.1%) men and 469 (60.9%) women, aged from 18 years to 61 years ($M = 34$ years, $SD = 10.372$ years).

The main objective of the research was to verify the methodology for measuring bossing on the basis of the psychometric approach. The analysis included only the items with a satisfactory value of communalities. On the basis of the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy value (.946), Factor Analysis (Principal Component Analysis with Varimax Rotation) was used to extract two bossing factors (Figure 1, Table 1).

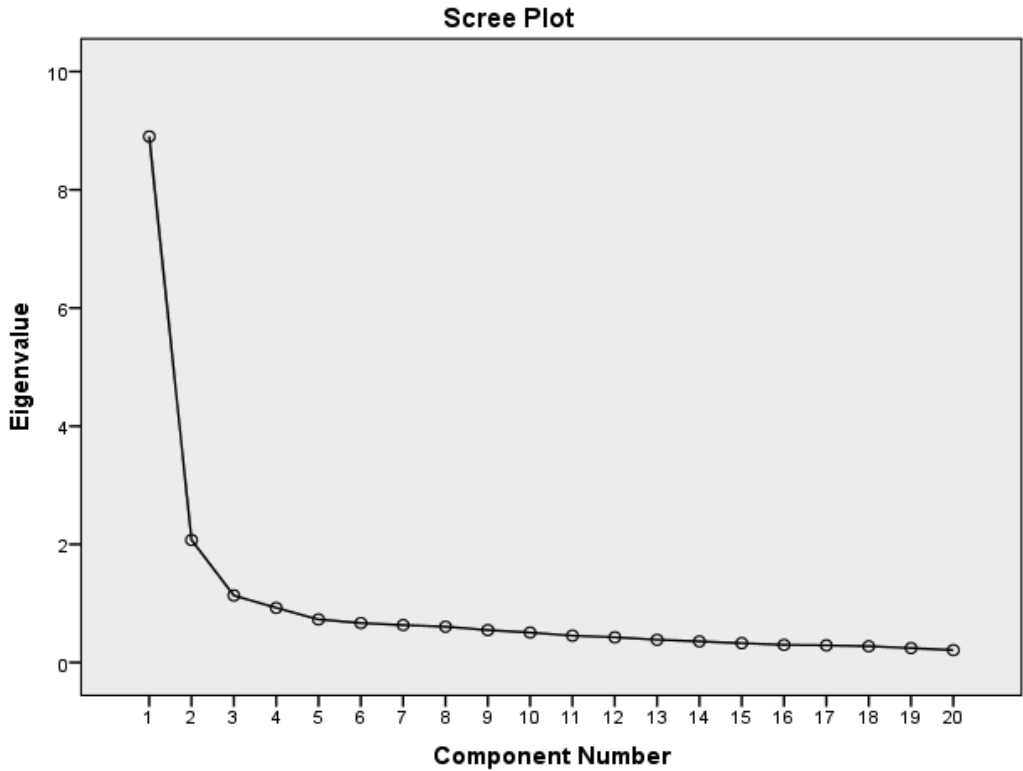


Fig. 1: Scree plot of the factor structure of the BOSSING methodology

Source: own calculation

Tab. 1: Factor structure of the BOSSING methodology

| | Component (Factor) | |
|--|-------------------------------|---------------------------------|
| | <i>Work-Aimed Bossing</i> | <i>Psyche-Aimed Bossing</i> |
| The superior does not allow me to comment on my criticism. | .618 | |
| The superior does not call me for the operational meetings. | .702 | |
| At meetings, my supervisor does not provide me with a turn to speak according to my interest. | .763 | |
| The superior does not allow me to access the necessary, undistorted (not belated) information to fulfill my tasks. | .765 | |

| | | | |
|---|----------------------------|---------------|--------------|
| The superior stopped communicating with me, or communicates with me only minimally. | .805 | | |
| The superior does not call me for informal meetings of the working team. | .699 | | |
| My superior organizes absurd and unjustified relocations of my job position against my will. | .619 | | |
| In the case of failures in the workplace, the superior makes a "scapegoat" out of me. | .615 | | |
| The superior ends the conversation abruptly when I enter the room. | .688 | | |
| The superior ignores my opinions and casts doubt on my views. | .749 | | |
| The superior gives me jobs that do not match my qualifications. | .591 | | |
| The superior deprives me of my competences (as needed). | .684 | | |
| The superior controls my results, presence and attendance at the workplace more than those of other colleagues. | .552 | | |
| I am criticized by my superior for my political, religious, and other convictions. | | .561 | |
| The superior has devised a derogatory (unflattering) nickname for me. | | .553 | |
| The superior damages my (personal or work) belongings and the results of my work. | | .637 | |
| My superior threatens me with physical violence. | | .796 | |
| The superior sexually harasses me (touching, proposals, jokes, repeated refused invitations). | | .795 | |
| The superior casts doubt on my mental state. | | .805 | |
| I am a joke to my superior (imitating my laughter, voice, walk). | | .511 | |
| | <i>Initial Eigenvalues</i> | | |
| <i>Component</i> | Total | % of Variance | Cumulative % |
| Work-Aimed Bossing | 8.901 | 44.507 | 44.507 |

| | | | |
|--|---------------|--------------|--------|
| Psyche-Aimed Bossing | 2.073 | 10.366 | 54.873 |
| <i>Rotation Sums of Squared Loadings</i> | | | |
| Total | % of Variance | Cumulative % | |
| 6.566 | 32.828 | 32.828 | |
| 4.409 | 22.045 | 54.873 | |

Source: own calculation

The extracted factors of BOSSING methodology were labeled and specified as follows:

1. WORK-AIMED BOSSING: Respondents with high scores in a given factor feel that their superior does not allow them to comment on criticism, does not invite them to the operational or informal meetings of the working team, does not provide them with a turn to speak according to their interest during meetings, does not allow them access to undistorted information to fulfill their tasks, communicates with them minimally, abruptly terminates the conversation when they enter the room, carries out senseless and unjustified actions against their will, spreads gossip, defamation, unsubstantiated claims, half-truths, and intrigues about them, and ignores their opinions and casts doubt on their views.
2. PSYCHE-AIMED BOSSING: Respondents who score high in a given factor feel that they are criticized by their superior for their political, religious, and other convictions, that the superior damages their belongings and the results of their work, threatens them with physical violence, sexually harasses them, questions their mental state, gives them defamatory nicknames, and denies them additional business education.

The extracted factors explain 54.873% of the variance. This percentage of the variance explained by the extracted factors is acceptable; the factors could be specified by content. The internal consistency of the individual factors as a reliability indicator of the individual factors of the methodology was determined by calculating the Cronbach's alpha coefficient (Tables 2, 3).

Tab. 2: Internal consistency of the BOSSING factor of Work-Aimed Bossing

| | Cronbach's Alpha if Item Deleted |
|--|-------------------------------------|
| The superior does not allow me to comment on my criticism. | .926 |
| The superior does not call me for the operational meetings. | .924 |
| At meetings, my supervisor does not provide me with a turn to speak according to my interest. | .919 |
| The superior does not allow me to access the necessary, undistorted (not belated) information to fulfill my tasks. | .920 |
| The superior stopped communicating with me, or communicates with me only minimally. | .917 |

| | |
|---|------------|
| The superior does not call me for informal meetings of the working team. | .922 |
| My superior organizes absurd and unjustified relocations of my job position against my will. | .923 |
| In the case of failures in the workplace, the superior makes a "scapegoat" out of me. | .920 |
| The superior ends the conversation abruptly when I enter the room. | .919 |
| The superior ignores my opinions and casts doubt on my views. | .918 |
| The superior gives me jobs that do not match my qualifications. | .922 |
| The superior deprives me of my competences (as needed). | .918 |
| The superior controls my results, presence and attendance at the workplace more than those of other colleagues. | .922 |
| Cronbach's Alpha | N of Items |
| .926 | 13 |

Source: own calculation

Tab. 3: Internal consistency of the BOSSING factor of Psyche-Aimed Bossing

| | Cronbach's Alpha if Item Deleted |
|---|-------------------------------------|
| I am criticized by my superior for my political, religious, and other convictions. | .796 |
| The superior has devised a derogatory (unflattering) nickname for me. | .797 |
| The superior damages my (personal or work) belongings and the results of my work. | .775 |
| My superior threatens me with physical violence. | .788 |
| The superior sexually harasses me (touching, proposals, jokes, repeated refused invitations). | .781 |
| The superior casts doubt on my mental state. | .760 |
| I am a joke to my superior (imitating my laughter, voice, walk). | .824 |
| Cronbach's Alpha | N of Items |
| .813 | 7 |

Source: own calculation

The calculated Cronbach's alpha coefficient values prove that the internal consistency of the items saturating the specified factors is within the acceptability range. The proposed structure of the BOSSING methodology factors is also supported by the values of the calculated inter-correlation coefficients between the individual factors (Table 4).

Tab. 4: Inter-correlations of the BOSSING factors

| | | Psyche-Aimed Bossing |
|--------------------|---------------------|----------------------|
| Work-Aimed Bossing | Pearson Correlation | .627** |
| | Sig. (2-tailed) | .000 |
| | N | 770 |

Source: own calculation

The extracted factors of the BOSSING methodology correlate with each other. This is documented by the fact that these factors representing the bossing indicators are mutually statistically significantly related to each other. It means that those respondents, who are not allowed by their superior to express their attitude towards criticism, do not have the opportunity to express their own opinion at the council, are not provided with the necessary information, and do not receive sufficient communication from the superior who, furthermore, ignores their opinion, at the same time perceive the mental attacks of their superior in the form of questioning their psychological condition, harassment, derogatory nicknames, and criticisms of their conviction.

A certain limitation of the conducted factor analysis is represented by the higher level of mutual factor correlation. Nevertheless, specification of the two factors, which describe the content of two various areas, is preferred here as it enables a more detailed specification of bossing manifestations in an organization. In the next step of the methodology development, the focus will be also on this fact.

Conclusion

In terms of conceptualization and operationalization of bossing, a significant attribute is represented by the existence of appropriate methodologies that detect the above manifestations in the workplace. The extracted and content-specific bossing factors of the BOSSING questionnaire – Work-Aimed Bossing and Psyche-Aimed Bossing – represent two important areas within which these manifestations can be performed. Even in the context of these two bossing manifestations it should be noted that their practical implementation may be masked in different ways [7].

Defining the two-factor structure of bossing in the concept of the presented BOSSING questionnaire also represents a structural approach to this issue.

Verification data obtained so far on the concept of BOSSING show that this study is meaningful in favor of the use of the bossing measurement approach that is desirable in terms of practical needs. We are fully aware of the limitations of our findings, such as the detected higher mutual factor correlation. Simultaneously, there is also a necessity of verifying the presented concept and methodology in much broader contexts, especially taking into account the cultural one.

It is also crucial to accentuate the need to examine the issue of bossing in the context of personality traits on the one hand, and the conditions of occurrence of this behavior on the other. The presented concept of bossing can be considered as a dispositional approach, within

which this issue is defined as a personality trait, based on which it is possible to predict the behavior trans-situationally in the sense of the superordinate vs. subordinate interaction.

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* project 003PU-4/2017 – KEGA; Coping with demanding situations - subject innovation and university textbook preparation

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CROSS-BORDER MERGERS AND ACQUISITIONS IN ECONOMIC CONTEXT OF SELECTED DETERMINANTS WITH ACCENT FOR EUROPEAN AREA

CEZHRANIČNÉ FÚZIE A AKVIZÍCIE V EKONOMICKÝCH SÚVISLOSTIACH VYBRANÝCH DETERMINANTOV S AKCENTOM NA EURÓPSKY PRIESTOR

***Abstract:** The main objective of this paper is to identify the determinants influencing the increase in the average volume of mergers and acquisitions leading from the source country to the destination country during the period 1998-2015 in the European Union. For the analysis, we considered relevant indicators of the state of the economy (source countries), the average change in the distance between the source and the destination country, the existence of a common border, the existence of a common language, membership of the European Union countries and the European Monetary Union and the level of social freedoms. The analysis shows that GDP does not affect the number of mergers and acquisitions themselves, but their frequency. We also focused on the analysis of the following determinants, namely the common border and its impact on the volume of cross-border mergers and acquisitions realized and the determinant of civil liberty and its impact on the rate of these investments in the European Union countries.*

***Key words:** Cross-border mergers and acquisitions, European union, European currency union, HDP*

***Kľúčové slová:** Cezhraničné fúzie a akvizície, Európska únia, Európska menová únia, HDP*

This paper was compiled as a part of the project VEGA No. 1/0031/17 “Cross-border mergers and acquisitions in the context of economic and social determinants in the European area”.

***JEL classification :** F15, F21, F23*

Introduction

Cross-border mergers and acquisitions are a significant global phenomenon that enables businesses to create business synergies, procure discounted assets, generate tax savings, gain access to new technologies, expand, differentiate and diversify business activities, increase competitiveness and market value [1]. Mergers and acquisitions can be analysed within the following disciplines [2]:

- strategic management - addresses the reasons and different types of transactions,
- economy - The main topics include cost optimization, economy of scale and market power issues,

- finance - representing shareholders, issues related to value creation companies,
- research organizations - examines the processes of implementation of operations and integration processes, as well as issues of adapting corporate culture,
- human resources management - in connection with the transaction, management issues and employee motivation.

A broad view of mergers and acquisitions is addressed by Brakman, Garretsen et al. in terms of summarizing the reasons and objectives of mergers and acquisitions in five groups [3]: (1) exploiting growth opportunities synergies, (2) acquisition managers' interest, (3) risk dispersal, (4) strengthening market power, and (5) changing business environment. As companies are forced to keep up with local and foreign competition, mergers and acquisitions as a form of investment can include both local and foreign companies. If a company decides to place its products on foreign markets, it has a choice between export and local production through foreign direct investment (FDI) [4]. If a company decides to produce locally, it can build its own facilities, green-field investment, or acquire an existing business through cross-border mergers and acquisitions [5]. In order to benefit from foreign markets, a business must have a competitive advantage over local competitors. Otherwise, local companies would put him out of the market [6].

A study on the macroeconomic determinants of cross-border mergers and acquisitions and investments on the greenfield classifies systematic factors that influence the choice of cross-border mergers and acquisitions as a way to enter the foreign market as follows [7]: (1) Business-level factors such as multinational experience, local experience, product diversity and international strategy; (2) sectoral factors such as technological intensity, advertising intensity and sales force intensity; and (3) country-level factors such as market size and market growth in the host country, cultural differences between domestic and the host country and the specific culture in the country of origin of the acquiring company (especially in terms of avoiding uncertainty and risk-prone). Corporate and sectoral factors could also apply to domestic mergers and acquisitions, but country-level factors are a peculiarity of cross-border mergers and acquisitions [8].

Neary, based on a model of oligopoly in the general equilibrium of two countries [9], Neary examines how changes in market structure accompany the process of trade and capital market liberalization, and points out that trade liberalization can lead to international mergers and can encourage countries to specialized and traded more in line with the comparative advantage.

Analyzing the oligopoly model, assuming technological asymmetry among the countries involved, demonstrates that incentives for a multinational company (MNC) to choose cross-border mergers and acquisitions as a foreign direct investment scheme will increase when a preferential trade agreement between the host country and the home country is agreed.

Neary classify the motives of mergers and acquisitions in the following groups [9]:

- trading companies with high Tobin Q - coefficients are the ones that have the best technology and are looking to expand their equity capital,
- efficiency gains increase as takeovers increase economies of scale or generate other synergies in the form of tax incentives,
- strategic gains increase when cross-border mergers and acquisitions change market structure and the competitive position and profit level by creating monopolies or oligopolies,

- building "empires" allows diversification and protection against shocks in the relevant sector,
 - Managers can be motivated by managerial compensation or by their own decisions [10].
- When companies face intense pressure of competition and do not have access to financial and non-financial resources to enable them to survive the effects of competition in the economic crisis, they can cross-border mergers and acquisitions relatively quickly restructure existing capacities and improve competitiveness while increasing the competitiveness of the whole economy [5].

Data and methodology

In this paper, we discuss the determinants affecting the increase in the average volume of M&A going from the source economy to the target country over the period 1998-2015 in EU countries. Considering the contributions of the authors in the given field ([11], [12], [13], [14] and others) we considered relevant indicators of the development of the state of the economy (source country), the average change in the distance between the source and destination the common border, or the common language, the membership of M&A countries within the political-economic grouping (EU or EMU) and the level of civil liberties. Based on the above, we have compiled the hypotheses as follows:

- H1:** Positive growth rates of the economy increase the likelihood of a year-on-year increase in the volume of M&A coming from that country.
- H2:** Growth in market capitalization has a demonstrable statistical impact on the year-on-year increase in the volume of M&A coming from that country.
- H3:** Changing the distance between the source and destination countries affects the proportional change in volume M&A flows from source country.
- H4:** The existence of a common border between the two countries contributes to an increase in M&A.
- H5:** Language similarity is a significant factor affecting an increase in the assumption of M&A volume growth among such countries.
- H6:** Membership just 1 in the EU reduces the likelihood of an increase in M&A volume.
- H7:** If both countries are members of EMU, we are considering reducing the likelihood of a year-on-year increase in M&A realized.
- H8:** Civil liberties are a significant factor affecting the likelihood of a change in the volume of M&A realized.

Due to the nature of the contribution, the data were structured on the basis of 2 primary attributes, which were the source country realized by M&A and the time factor. Considering the data from the Zephyr database (Bureau van Dijk 2016), we have considered 16 countries for a period of 18 years. The total database used contained 11,1024 M&A records. However, in the data used, only 47110 (for the overall dataset) was addressed by M&A. However, the research sample still narrowed due to the unavailability of at least one of the independent variables in several cases. Thus, the total range of usable data for the entire reference period is 46822 observations. The M&A realized values were subsequent for each period in each unit expressed as their average height. Thus, the final version of the modified dataset is 288 observations for each variable. Table 1 presents a summary of the variables used and the characteristics of their construction.

Table 1 List and description of used variables

| Variable | Description |
|------------------------|---|
| <i>M&A</i> | Mergers and acquisitions growth. A dummy variable that takes a value of 1 when there is a year-on-year increase in the average volume of M&A going from the source country, otherwise 0. (dependent variable) |
| <i>GDP</i> | Dynamics of aggregated production. The variable is characterized as the year-on-year growth rate of aggregate output of the source country. The variable is expressed as a percentage. (independent variable) |
| <i>MC</i> | Change in market capitalization. The variable records the percentage change in the average ratio of market capitalization to aggregated production. The variable is expressed as a percentage. (independent variable) |
| <i>Distance</i> | Distance change. The variable captures the percentage change in the average distance of the source and target country affected. The variable is expressed as a percentage. (independent variable) |
| <i>Border</i> | M&A share in neighboring countries. The variable presents the percentage of M&A in a given source country in a given timeframe going to the immediate neighboring country to the total number of M&A realized. The variable is expressed as a percentage. (independent variable) |
| <i>Common Language</i> | Share M&A in countries with a related language. The variable presents the percentage of M&A in a given source country in a given timeframe going to a country with a related language to the total number of M&As executed. The variable is expressed as a percentage. (independent variable) |
| <i>EU-EU</i> | Share of M&A realized within EU countries. The variable captures the percentage of M&A between EU member states to the total M&A realized. The variable is expressed as a percentage. (independent variable) |
| <i>nonEU-EU</i> | Share of M&A between EU member and non-EU countries. The variable expresses the percentage of cases where one of the M&A countries involved belongs to the EU. The variable is expressed as a percentage. (independent variable) |
| <i>EMU-EMU</i> | Share of M&A realized within EMU countries. The variable captures the percentage of M&A between EMU member countries to the total M&A realized. The variable is expressed as a percentage. (independent variable) |
| <i>nonEMU-EMU</i> | Share of M&A realized between EMU member and non-member countries. The variable expresses the percentage of cases where one of the M&A countries involved belongs to EMU. The variable is expressed as a percentage. (independent variable) |
| <i>CL</i> | Civil liberties. The variable captures the level of civil liberties where 1 means the highest level of CL and 5 the lowest. The variable is characterized as ordinal. (independent variable) |

(Source: own processing)

The specifics of the paper's contribution to the determinants of the growth of the average M&A volume in the source country was to use the logistic regression model. Logistic regression is among the generalized linear models [15] in binomial distribution with logit link function. A step-wise technique was used to determine suitable variables. An important point is also the determination of internal links between indicators, for which we have used the Variance inflation factor [16], Akaike information criterion [17], or Bayesian information criterion [18],

was used to select a suitable model. MS Excel and R (3.4.3) with RStudio (1.1.442) were used for data processing and analysis.

Analysis and results

Based on the above, we were able to compile a binary logistic model representing determinants affecting the probability of growth in the average volume of M&A realized. The constructed model quantifies the log odds effect of selected predictors on the growth of the realized M&A volume. The dependent variable is considered dichotomous. The step-wise model consists of 4 determinants. The presence of multicollinearity of predictors was not confirmed, as shown in Table 2.

Table 2 Variance Inflation Factor

| VIF | | | |
|-----------------------|----------|--------|----------|
| Market Capitalisation | Distance | Border | nonEU_EU |
| 1.0497 | 1.0854 | 1.4471 | 1.3037 |

(Source: own processing)

Based on the probability of an increase in M&A volume (47.79%) and the use of just 4 independent variables, we determined the minimum number of samples at 84 observations. Thus, the model fills this condition as well. Linearity assumption of continuous predictors with log odds has also been fulfilled, but due to capacity reasons it is not mentioned in the contribution. The over dispersion of the assembled model was not confirmed. A summary view of the constructed analysis is presented in Table 3.

Table 3 Logit model of M&A amount growth likelihood

| Coefficients | Estimate | Std. Error | z value | Pr(> z) | e ^{Estimate} | CI - low | CI - high |
|-----------------------|----------|------------|---------|----------------|-----------------------|---------------------------------------|-----------|
| (Intercept) | -2.7535 | 0.7342 | -3.7500 | [1.77e-04] *** | 0.0637 | 0.0135 | 0.2429 |
| Market Capitalisation | 0.0855 | 0.0336 | 2.5480 | [0.0108] ** | 1.0892 | 1.0345 | 1.1836 |
| Distance | 0.5267 | 0.2144 | 2.4560 | [0.0140] ** | 1.6932 | 1.1316 | 2.6393 |
| Border | 2.9804 | 0.8505 | 3.5040 | [4.58e-04] *** | 19.6947 | 4.1379 | 118.0144 |
| nonEU_EU | 2.5667 | 1.2322 | 2.0830 | [0.0373] ** | 13.0229 | 1.1693 | 179.6600 |
| AIC | 349.7054 | | BIC | 367.7160 | | Pseudo R ² (Nagelkerke) | 0.1772 |

(Source: own processing)

The results showed that the rate of growth of aggregated GDP did not reach a statistically significant level of impact on the likelihood of M&A growth, which is why we are unable to confirm the H1 hypothesis. However, in the case of another market condition factor, Market Capitalization, we expect a 0.0855 increase in log odds of response at a percentage change of more than 1%, thus increasing the average M&A volume growth by 8.92% and 8.92% respectively. 3.45% - 18.36%. Given the result, we confirm the H2 hypothesis. Another factor that we considered in the analysis was distance, resp. relative change in average distance between source and destination country. From the results, we determined that each time the average distance was doubled, the chances of M&A volume growth increased by 69.32%,

respectively. with 95% probability, it will be in the range of 13.16% - 163.93%. We confirm this hypothesis H3. The fourth determinant considered is the existence of a common border between the source and target countries. The results showed that in the case of 100% M&A's share in neighbouring countries, the probability of M&A volume growth of 19.69 times higher than in a situation where neither M&A is heading to a neighbouring country, thus confirming the H4 hypothesis. Another indicator recorded the percentage of M&A heading to countries with related languages. However, given the lack of significance, we have not considered it further in the model, so we cannot accept the H5 hypothesis. The following four indicators deal with the membership of the entities under consideration in the political-economic groupings - EU & EMU. However, based on the results, we are considering a potential increase in M&A average volume only if one of the M&A countries involved belongs to the EU. Based on the results, we estimate that for all realized M&As during a given timeframe meeting this attribute, the probability of an increase in the average M&A volume will increase 13.02 times that in which none of the M&As went to non-EU countries. Given the above, we are unable to confirm the hypotheses H6 and H7. While in the case of the H7 hypothesis we have not confirmed the absence of statistical significance, in the case of H6 this status is caused by the opposite of the anticipated phenomenon (we considered that M&A among the EU member states will bring a presumption of growth of M&A volume). The last determinant considered determined the level of civil liberties, but due to the low variability of this indicator within the unit (only in a marginal number of cases, but between the units as such, this variability was more pronounced), statistical significance was not shown. Consequently, we are unable to confirm the H8 hypothesis.

Discussion

The magnitude of the rate of growth of aggregate output does not influence the increase in the likelihood of growth in the volume realized by M&A, which is attributed to the fact that although GDP is a significant indicator of the state of the economy, it does not take into account the individual situation of enterprises. Consequently, while in case [14], [19] (2016, 2018), the presence of dependence with aggregated M&A level has been confirmed, in this case the results indicate that the determinant itself will not increase the M&A average. The above implies that GDP does not affect the amount of M&A itself, but its frequency. The opposite situation occurs in the 2nd indicator of market conditions, market capitalization. This indicator contributes to increasing log odds of response. On the basis of which we expect that the average value of M&A realized in the source countries will increase as the market capitalization grows. These results correspond to the findings [14], [19] (2016, 2018). Lessons learned from an analysis of changes in the average distance between source and target countries in synergy with findings [14], [19] (2016, 2018) suggest that while the total M&A realized at a greater distance decreases, the average size of M&A realized increases. Thus, this disproportion is associated with a significant decrease in the number of realized M&As to more distant countries, but we also expect their value to increase as the distance increases. The common border determinant has an impact on increasing M&A growth chances, which, in conjunction with previous findings [14], [19], suggests that there is an expectation of an increase in M&A size rather than number in neighbouring countries. However, the same findings do not apply to countries that communicate through a similar language, so we do not expect an increase in the average M&A volume for a larger relative number of M&As heading to such countries. At the same time, we are more likely to increase the volume of M&A if M&A goes outside the EU. This phenomenon will be linked in particular to the higher growth rate of the non-EU countries in which M&A

has been heading, always bringing a higher level of capitalization to the market (in relative terms). These aspects have led to the findings. The final finding of this contribution is that the level of civil liberties is not a significant factor for the likelihood of M&A amount growth. This phenomenon is also related to the fact that in the 16 countries compared, only one case achieved a moderate level of civil liberties, while in other countries it was high or lower. very tall. Thus, they consider the companies of the country to be free and not afraid to invest within their markets.

Conclusion

Based on the results obtained from the model of logistic regression, we can conclude that although GDP is an important indicator of the state of the economy does not reflect the individual situation. This means that the determinant itself will not increase the M&A average. Indicator of market capitalization contributes to the volume of completed M & A. Determinant common border also has a positive effect on the growth of M & A, which means that if the neighboring countries will increase the size of M & A is not a number. The analysis carried out has also been found that the determinant of civil liberties not a significant factor that contributed to the growth in M & A in EU countries.

Záver

Na základe výsledkov získaných z modelu logistickej regresie môžeme konštatovať, že hoci je HDP významným indikátorom stavu ekonomiky nezohľadňuje individuálnu situáciu podnikov. Čo znamená, že samotný determinant nezvýši priemernú výšku M&A. Ukazovateľ trhová kapitalizácia prispieva k zväčšovaniu objemu realizovaných M&A. Determinant spoločnej hranice taktiež pozitívne vplyva na rast objemu M&A, čo znamená, že v prípade susediacich krajín sa zvýši veľkosť M&A a nie jej počet. Z vykonanej analýzy sa taktiež zistilo, že determinant občianska sloboda nepredstavuje významný faktor, ktorý by prispieval k rastu objemu M&A v krajinách EÚ.

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ASSESSMENT OF COACHING – AC-BEC METHODOLOGY

POSUDZOVANIE KOUČINGU – METODIKA PK-SEK

***Abstract:** Coaching is one of the significant tools of a complex development of managers' working potential. It is a tool for releasing this potential allowing persons who are coached to maximize their performance. The effectiveness of a coaching approach relates to the awareness of individual specifics of the coached persons as well as to the assessment of individual coaching attributes. The paper presents the results of verifying a new, original AC-BEC methodology of assessing coaching from the point of view of behaviour, emotions, and cognitions. Using a factor analysis on a research sample of 317 managers, three factors were extracted – Behaviour, Emotions, Cognitions – that explain 69,73% of variance. The paper also presents basic parameters of the AC-BEC methodology, the values of Cronbach's alpha, factors correlations and the differences in the assessment of factors.*

***Keywords:** coaching, original AC-BEC methodology*

***Kľúčové slová:** koučovanie, pôvodná metodika AC-BEC*

***JEL classification:** C18, J71*

Introduction

Downey (2003) defines coaching as art, practical inspiration, energization, facilitation, performance, learning, and development. Haberleitner et al. (2009) report that coaching means developing the potential of all workers according to their current level of development with a goal to optimize their performance while taking into account their objectives, interests, and needs. Coaching brings results based on a supportive relationship between a coach and the coached one and the style of communication used by the coach. The coached person acquires facts from his/her inside (Whitmore, 2009). The essence of coaching is a systematic effort of improving through questions oriented towards changes and leading to the improvement of current performance up to the target level. It is about the effort to help somebody to fulfil their dreams that are the centres of this process (Clegg, Birch, 2004). Stacke (2005) states that coaching lies in realizing the extent of limits and abilities of a coached person so that it would be easier to achieve them and thus increase the effectiveness.

Research

From a methodological point of view, the research aim was to verify an original AC-BEC methodology for identifying the assessment and perception of coaching by managers. It is a new, original methodology that was verified within the research project. The methodology consists of 23 statements related to coaching assessment. Each statement contains 6 possible ways of reactions to the degree of identification and agreement with a statement (1-definitely no, 2-no, 3-rather no than yes, 4-rather yes than no, 5-yes, 6-definitely yes). As an example, we present the following statement: "Coaching enabled me to try new or different ways of doing things at work".

The research sample consisted of 317 managers from different areas, out of which 209 (65,9%) were men and 106 (33,4%) women at the age from 30 to 62 years (standard deviation 7,810 year). The respondents have experienced, or better to say met with a coaching process in their managerial work.

Attributes of coaching assessment

Using a factor analysis based on the results of KMO test (0.953) and Bartlett's test of sphericity (5992, significance 0.000), the method of Principal Component with Varimax rotation was used and three factors were extracted, specified in terms of content as follows:

- F1: BEHAVIOUR: This factor is saturated by 10 items and is focused on the use of experience from coaching. The content context is related to understanding of one's own responsibility for oneself and one's own life, finding answers to questions, thinking about one's own behaviour, activities, obtaining the view at oneself, with a help of getting on with people better, developing empathy, using experience from coaching and its influence also on privacy, with a change of behaviour and overcoming oneself.
- F2: EMOTIONS. This factor relates to how individuals experience a coaching process. It is focused on the delight from a relationship between a coach and the coached one, whether individuals are full of expectations before coaching and are looking forward to it, on the balance and relax during a session and positive mood after it. It also focuses on whether they like to work on themselves through coaching and perceive it as a way that helps to work more effectively. This factor is saturated by eight items.
- F3: COGNITIONS. This factor is saturated by 5 items. These items specify the factor from the point of view of individuals' willingness to try new or different ways of doing things, developing potential, doing things more effectively, changing the standard and routine working procedures and achieving better results at work.

The extracted factors explain 69,73% of variance (Table 1). This percentage of the explained variance is acceptable, therefore adding other factors that would increase the given percentage, would be inappropriate and at the same time, other factors could not be meaningfully specified in terms of content.

Table 1: Saturation of extracted factors by individual items (AC-BEC methodology)

| Items in questionnaire | Factors | | |
|--|-----------|----------|------------|
| | Behaviour | Emotions | Cognitions |
| Coaching enabled me to try new or different ways of doing things at work | | | ,810 |
| Coaching helped me to develop my potential | | | ,802 |
| Based on coaching, I think about how things could be done more effectively | | | ,799 |
| Thanks to coaching, I change my standard and routine working procedures | | | ,737 |
| Coaching enabled me to achieve better results | | | ,734 |
| I also use experience from coaching in my personal life | ,642 | | |
| In coaching, I realize my own responsibility for myself and my life | ,586 | | |

| | | | |
|--|--------|--------|--------|
| Coaching helped me to find answers to my questions | ,666 | | |
| Coaching helped me to think about my behaviour, activities etc. | ,661 | | |
| Coaching enabled me to acquire my own view on myself | ,813 | | |
| Coaching helps me to get along better with people | ,793 | | |
| A coaching session affected also my privacy | ,771 | | |
| Coaching helped me to change my behaviour | ,839 | | |
| I have overcome myself by coaching | ,794 | | |
| Coaching helped me to develop empathy | ,730 | | |
| I realize that coaching is a way that helps to work more effectively | | ,645 | |
| I enjoy the relationships between me and the coach | | ,670 | |
| Coaching sessions cause balance in me | | ,704 | |
| I am relaxed during coaching | | ,800 | |
| Before coaching, I am full of expectations | | ,659 | |
| I am looking forward to a coaching session | | ,796 | |
| After a coaching session, I am in good mood. | | ,829 | |
| I like to work on myself through coaching | | ,737 | |
| Eigenvalue | 12,131 | 2,373 | 1,534 |
| % Variance | 52,744 | 10,319 | 6,670 |
| Cumulatively % | 52,744 | 63,062 | 69,732 |

In terms of content, it was possible to specify the extracted factors absolutely unequivocally. This structure of factors is also proved by the result of the used Scree plot method (Figure 1). It is also confirmed by the high values of Cronbach's Alpha coefficient indicating that the reliability of the elements saturating the specified factor are within the acceptability range (Table 2, Table 3, Table 4).

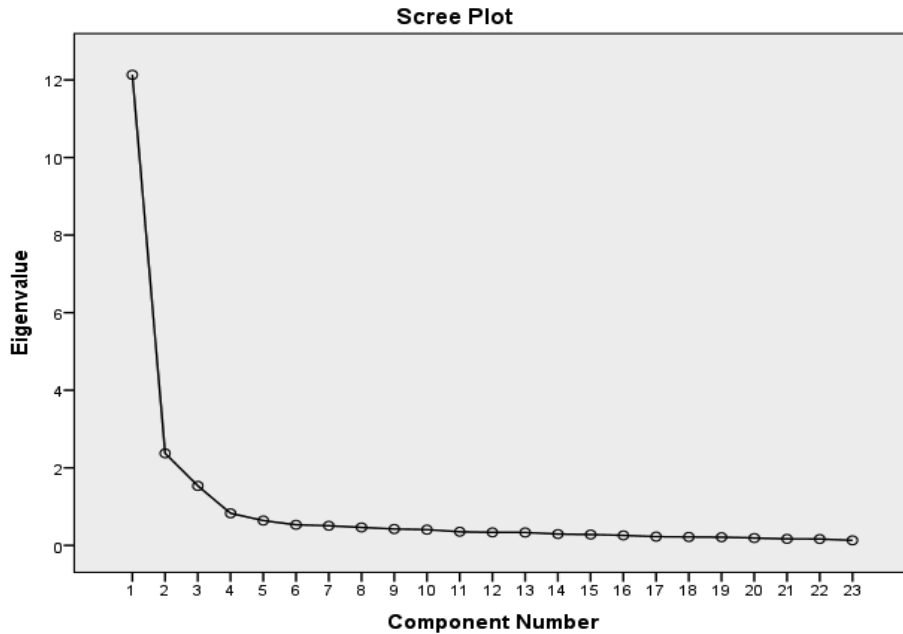


Figure 1 Depiction of the identified factors based on the method of Scree plot

Table 2: Cronbach’s Alpha values for factor Behavior

| Items | Cronbach’s Alpha values |
|---|-------------------------|
| I also use experience from coaching in my personal life | ,940 |
| In coaching, I realize my own responsibility for myself and my life | ,941 |
| Coaching helped me to find answers to my questions | ,934 |
| Coaching helped me to think about my behaviour, activities etc. | ,935 |
| Coaching enabled me to acquire my own view on myself | ,932 |
| Coaching helps me to get along better with people | ,933 |
| A coaching session affected also my privacy | ,939 |
| Coaching helped me to change my behaviour | ,933 |
| I have overcome myself by coaching | ,934 |
| Coaching helped me to develop empathy | ,937 |
| Cronbach’s Alpha is 0,942 for factor Behaviour | |

Table 3: Cronbach’s Alpha values for factor Emotions

| Items | Cronbach’s Alpha values |
|--|-------------------------|
| I realize that coaching is a way that helps to work more effectively | ,936 |
| I enjoy the relationships between me and the coach | ,937 |

| | |
|---|------|
| Coaching sessions cause balance in me | ,932 |
| I am relaxed during coaching | ,936 |
| Before coaching, I am full of expectations | ,938 |
| I am looking forward to coaching sessions | ,931 |
| After a coaching session, I am in good mood | ,933 |
| I like to work on myself through coaching | ,931 |
| Cronbach's Alpha is 0,941 for factor Emotions | |

Table 4: Values of Cronbach's Alpha values for factor Cognitions

| Items | Cronbach's Alpha values |
|--|-------------------------|
| Coaching enabled me to try new or different ways of doing things at work | ,842 |
| Coaching helped me to develop my potential | ,851 |
| Based on coaching, I think about how things could be done more effectively | ,860 |
| Thanks to coaching, I change my standard and usual working procedures | ,858 |
| Coaching enabled me to achieve better results | ,859 |
| Cronbach's Alpha is 0,880 for factor Cognitions | |

The extracted factors testify in favour of thinking about the existence of a certain structure of coaching assessment attributes.

Different assessment of coaching attributes by the respondents was detected using a non-parametric Friedman test for dependent samples. The data analysis confirmed the existence of statistically significant differences in the assessment of individual extracted factors of the AC-BEC methodology (Table 5). In assessing the perception of three factors – Behaviour, Emotions, and Cognitions, the low values stand for a high level degree of disagreement, contrary to that, high values represent a high degree of agreement. The detected differences between the middle values of assessing the individual factors can be interpreted only as the differences in the degree of agreement. The highest degree of agreement was expressed by the managers with the factor Cognitions. Opposite to that, the lowest degree of agreement was identified in the assessment of the factor Behaviour. It means that the respondents primarily agreed that they want to try new things at work, they want to develop themselves, to do things more effectively, to achieve better results, and to change the routine standard work procedures. The managers expressed a lower degree of agreement with the way how they experience the coaching process and the relationships between a coach and the coached one. At the same time, this degree of agreement related to the expectations, relax and the mood after a coaching session. The lowest degree of agreement related to the understanding of one's own responsibility for oneself and one's life, to better relationships with people, developing empathy, using experience from coaching and its influence on privacy, and to the change of behaviour overcoming oneself.

Table 5: Different assessment of extracted coaching factors

| Factor | Median | Significance |
|------------|--------|--------------|
| Behaviour | 4,10 | ,000 |
| Emotions | 4,50 | |
| Cognitions | 5,20 | |

In searching for connections in the assessment of coaching attributes by the respondents, we found out positive correlations among all extracted factors. The presented finding is confirmed by the fact that if respondents positively perceive one coaching attribute, they will have a positive attitude also to the other two. If they have, in connection to coaching, e.g. positive Emotion, their Behaviour will be also positive, as well as the assessment of the attribute Cognitions. This claim is confirmed by the values given in the Table 6 that include the results of Spearman's correlation coefficient and statistical significance.

Table 6: Intercorrelations of extracted factors

| Factors | Emotions | Behaviour |
|---|----------------|----------------|
| Cognitions | ,518** ,000 | ,460** ,000 |
| Emotions | | ,703** ,000 |
| ** statistical significance at 0,05 level of significance | | |

Conclusion

Coaching is one of the tools of man's development, the discovery and use of one's own hidden potential. It is a tool for seeking satisfaction, motivation, effectiveness, as well as a tool for getting answers to questions. It is important to realize that everything we really need is hidden in ourselves. Coaching helps to think beyond our routine thinking, supports our creativity, imagination and leads us from "comfortable" thinking where we often cannot find our way out of a vicious circle of our own limited thoughts. Coaching is a tool enabling to change and influence what we really can change and in order to make changes really happen, we have to start by ourselves.

The research results enriched the knowledge of the construct of coaching in terms of one of the possible specifications of the structure of operation of this process. The characterized fields of the effects of the coaching process activity belong to the most significant ones within the context of business environment and managerial work. They are an important factor in the creation of corporate culture, social and working atmosphere, training and career development of employees and managers (Fisher-Epe, 2006; Mohauptová, 2013).

From a methodological point of view, the research results contributed to the verification of a new methodology for assessing and perceiving coaching. Three factors of assessment of coaching - Behavior, Emotions and Cognitions were identified and specified. Data analysis confirmed the existence of statistically significant differences in the assessment of individual extracted factors. The managers expressed the highest degree of agreement with factor

Cognition. Conversely, the lowest degree of agreement was found in the assessment of the factor Behaviour. At the same time, statistically significant correlations among the identified factors of the validated methodology were confirmed.

The results confirm that in assessing coaching, it is necessary to monitor and evaluate all of these attributes. The findings presented in this paper are important for the theory, methodology and application of coaching into practice.

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- * project 003PU-4/2017 – KEĜA; Coping with demanding situations - subject innovation and university textbook preparation

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Názov monografie: Pracovná angažovanosť v systéme riadenia ľudských zdrojov

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Mgr. Martina Cehlárová, PhD.

Recenzent: doc. PaedDr. Zuzana Birknerová, PhD., MBA

Monografia pozostáva zo siedmych kapitol, ktoré na seba logicky nadväzujú. Začína stručnou sumarizáciou pojmu angažovanosť, pokračuje teoretickým vymedzením angažovanosti a súvisiacich konštruktov, prezentáciou modelov a faktorov angažovanosti, metódami merania angažovanosti, prezentáciou výskumu faktorov angažovanosti a ich vyhodnotením. Končí odporúčaním metód a nástrojov angažovanosti. Oceniť je potrebné najmä pomerne obsiahlu výskumnú časť, ktorá doposiaľ v slovenskom podnikateľskom prostredí absentuje.

Zvolenú tému možno považovať za vysoko aktuálnu, nakoľko v ére znalostnej ekonomiky sú ľudské zdroje, ich prístup a motivácie základom konkurenčnej výhody. Ako to vyplýva aj z prezentovanej monografie, angažovanosť je vrcholovým konštruktom v súbore motivačných nástrojov.

Cieľ, ktorý si autori monografie stanovili, t.j. zistenie vzťahu medzi angažovanosťou a vybranými faktormi ovplyvňujúcimi angažovanosť, možno považovať za splnené. Autori v teoretickej časti poukázali na celú šírku a zložitú problematiku, ako aj určitú neujasnenosť a nejednotnosť pojmov, ktoré v tejto relatívne mladej oblasti existujú. Prezentovaný výskum poukázal na úroveň a problémy implementácie angažovanosti. Na baze týchto poznatkov je potom navrhnutý integrovaný model angažovanosti. Tento aspekt je možné považovať za prínos pre teóriu aj prax zabezpečovania angažovanosti.

Metódy uplatnené pri vypracovaní monografie sú v súlade s metódami, ktoré sú štandardne využívané pri vypracovávaní vedeckých monografií. Vykonaný výskum a metódy použité pri jeho vyhodnocovaní, zodpovedajú štandardom uplatňovaným vo vedeckých monografiách.

Posudzovaná monografia spĺňa štandardy kladené na vedecké monografie. Možno by bolo vhodné v budúcnosti načrtnúť určitý postup, ktorý by mal byť použitý na to, aby sa medzinárodná vedecká komunita zhodla na štandardizácii terminológie a postupov merania, aby výsledky jednotlivých zisťovaní boli porovnateľné. Predpokladám, že autori takýto návrh začnú presadzovať na domácich aj medzinárodných seminároch a konferenciách.

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[1] ROTHBARD, M., N., 2008. *Mystery of Banking*. Auburn, Alabama: Ludwig von Mises Institute. ISBN 978-1-933550-28-2.

[2] HORVÁT, J. et al., 1999. *Anatómia a biológia človeka*. 2. vyd. Bratislava: Obzor. ISBN 80-07-00031-5.

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