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ЕКОНОМІКА ТА УПРАВЛІННЯ ПІДПРИЄМСТВАМИ

Martina Merkova¹, Rastislav Rajnoha², Jan Dobrovic³ BUSINESS PERFORMANCE AND PARTICIPATION OF FOREIGN CAPITAL

This paper analyzes business performance based on the return on equity indicator, and reveals certain common aspects for companies with better business performance. The results of statistical testing proved positive dependences between turnover, performance and foreign ownership as well as the importance of foreign capital origin for companies. Certain signs typical for companies with participation of foreign capital against local firms are identified.

Keywords: business performance; return on equity; foreign ownership; Slovakia. *JEL classification: G31; G32; M2.*

Мартіна Меркова, Растіслав Райноха, Ян Добрович БІЗНЕС-ПОКАЗНИКИ ТА УЧАСТЬ ІНОЗЕМНОГО КАПІТАЛУ

У статті проаналізовано бізнес-показники компаній, спираючись на параметр «прибуток на капітал», виділено спільні риси компаній з найкращими бізнес-показниками. Статистичне тестування виявило наявність взаємозв'язку між обігом, бізнес-показниками та участю іноземного капіталу, також доведено важливість країни походження капіталу. Описано типові риси, які вигідно вирізняють компанії з часткою іноземного капіталу від суто місцевих, словацьких фірм.

Ключові слова: бізнес-показники; дохідність капіталу; іноземна власність; Словаччина. Форм. 4. Рис. 1. Табл. 11. Літ. 26.

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В статье проанализированы бизнес-показатели компаний, опираясь на параметр «прибыль на капитал», выделены общие черты компаний с лучшими бизнес-показателями. Статистические тестирование выявило наличие взаимосвязи между оборотом, бизнеспоказателями и участием иностранного капитала, также доказано важность страны происхождения капитала. Описаны типичные черты, которые выгодно отличают компании с долей иностранного капитала от сугубо местных, словацких фирм.

Ключевые слова: бизнес-показатели; прибыльность капитала; иностранная собственность; Словакия.

Introduction. Transition countries have to deal with the challenge of globalization: all countries, whatever their development level and historical background are, have to host FDI to stay competitive (Fabry and Zeghni, 2006). As one of the most popular destinations for foreign direct investment in Europe thanks to country's openness to foreign trade and investment Slovak Republic was positioned at some moment (Index of Economic Freedom, 2011). This is reflected in various sectors, most significantly in the automotive industry. Slovakia has long term been the largest producer of cars per capita in the world (OICA). Up until now, Slovakia has had some comparative advantages such as cheap and skilled labor, low transfer costs and infrastructure quality. After declining of FDI inflows in Slovakia during the global financial crisis in 2009, Slovakia has recorded continuous increasing of FDI inflows in the

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next 3 years (UNCTAD, 2013), despite of two facts: FDI inflows in groups of transition and developed economies decreased in 2012 (9% in transition economies; 32% in developed ones) and the European Union alone accounted for almost two thirds of the global FDI decline (UNCTAD, 2013).

Theoretical framework. The relationship between FDI and economic growth has been a topical issue in vast number of publications. FDI by multinational corporations plays an important role in the transformation of former centrally planned economies into vibrant market systems, since it provides capital inflow, management skills, and jobs, alongside increasing exports and technology transfer (Chidlow et al., 2009). A number of economic measures were undertaken since 2002 aimed at providing business-friendly environment, ranging from governmental incentives for new investors to decreasing corporate taxes (Fisher et al., 2007). Policymakers in a large number of countries are engaged in creating all kinds of incentives (export processing zones, tax incentives etc.) to attract FDI, because it is assumed to positively affect local economic development (Giroud, 2007). They also may help develop international trade (Bevan and Estrin, 2004). Economies in transition are home to a large number of export platforms, especially in the automotive and electronics industries (Kalotay, 2002). The eclectic or OLI paradigm of FDI comprises 3 sets of interdependent variables (Dunning, 2000). The advantages describe ownership and internalization advantages of TNCs and locational advantages of host economies. The fourth, home-country advantage (Kalotay and Sulstarova, 2010), what means home-country environment and other home-country factors, may especially occur in specific conditions of emerging economies, and transitional countries in particular. On the other hand, through certain methods of transfer pricing (Rajnoha, Slivkova and Dobrovic, 2014) for intangible assets MNEs can affect their profit in individual countries according to corporate tax with the aim to increase global performance of the whole corporation.

There are several studies and analyses dealing with FDI issues in Central and Eastern Europe. The analysis of locational advantages offered by Czechia, Hungary, Poland, Romania and Slovakia suggests that investors in these countries are mainly interested in low labour costs coupled with a well-trained and educated workforce and an expanding market with high growth rates in the purchasing power of potential buyers (Gauselmann et al., 2011). Study of FDI in other countries of the Visegrad Four – Hungary, Poland and Czechia found evidence that FDI has increased labor productivity levels in most manufacturing sectors (Barrell and Holland, 2000). E. Rugraff (2007) focused on the efficiency of Central European countries' FDI policies by evaluating the spillover effects of FDI.

Research concerning FDI determinants and effects especially in Slovakia is limited. D. Dow and S. Ferencikova (2010) directed their research dealing with specific FDI issues in Slovakia: predicting market selection, entry mode choice and performance. Impact of FDI on Slovak economy was also analyzed by A. Hoskova (2001), indirect effects of FDI commonly referred to as spillovers and its potential in Slovakia are defined M. Fifekova (2008). Positive impact of FDI in Slovakia was demonstrated in past research with the main objective to identify significant quantitative and qualitative effects of FDI; such findings were published (Merkova, Rajnoha and Novak, 2012; Merkova, Drabek and Jelacic, 2012). The correlation and regression analysis was aimed at presenting the dependence in the period 1999–2008 and demonstrated significant dependence between FDI stocks and GDP growth for Slovakia. Positive influence and benefits of foreign ownership were proved for the scope of business performance and investment management in companies (Merkova, Rajnoha and Dobrovic, 2015).

The recent research analyzing macroeconomic statistical data of the whole economy was followed by the research at the microeconomic level and was aimed at businesses in various industries in Slovakia. We focused on both traditional key indicators such as accounting profit, value added, wages and labor productivity as well as non-traditional way of performance measuring. Company managers use a number of concepts for performance management including Balanced Scorecard (BSC), Economic Value Added, benchmarking and many others (Knapkova et al., 2010). Corporate Performance Management (CPM) is an integrating concept, which connects business methodologies as Balanced Scorecard, Economic Value Added, Activity Based Management. CPM is an umbrella term describing all of processes, methodologies, metrics and systems needed to measure and manage performance of an organization (Mihok and Vidova, 2006). Lean manufacturing, team working, continuous process improvement, knowledge management and e-business are just a few of practices that organizations use in search for effectiveness (Chromjakova and Rajnoha, 2012). Managing the company's performance and efficiency is very important, one of the conditions to maintain competitiveness and performance is the ability to work properly and timely with information not only about past and present but also and especially about future (Rajnoha et al., 2014).

Objective and methodology.

1. *Research objective.* The objective of the research was to analyze the extent of traditional and modern indicators use, methods and models of performance management on the sample of randomly selected companies in various industries of Slovakia, based on relevant mathematical and statistical methods to identify the cause and the subsequent context and determine their influence on achieved business performance.

In this paper we present the results of partial research and focus on business performance based on the return on equity (ROE) indicator. We selected parameters from the questionnaire with the aim to detect if they are significantly linked with factor business performance as basic sorting parameter in the research. Consequently, we aim to find out differences between local and foreign firms in the business performance and other research parameters. We try to find out certain common aspects for companies with better business performance as well as some aspects typical for companies with participation of foreign capital.

2. *Research questionnaire and sample.* Online questionnaire was created through Internet application for data collection from companies in Slovakia. The questionnaire was distributed via e-mail, telephone and during face-to-face interview; in total, over 1500 randomly chosen businesses were asked to participate in the survey during the year 2013. We maintain complete anonymity of participating firms. The size of the research sample was 164 counts at the end. Relatively low frequency resulted mainly from the reluctance of companies, their negative mood and skepticism about economic development, lack of time or lack of interest. Nevertheless, the research sample of 164 firms we consider as relevant with sufficient expressive capability. Table 1 presents the data from the research sets.

Set	The industry focus	Totals
Set 1	All industries	164 firms
Set 2	Wood processing industry	34 firms
Set 3	Mechanical engineering	30 firms
Set 4	Automotive industry	16 firms
Set 5	Selected industries (wood processing, engineering, automotive)	80 firms
Set 6	Production companies	106 firms
Set 7	Trade and services	58 firms

Table 1. Basic data on the data sets analyzed, authors'

We analyzed and statistically tested selected the following variables:

- business performance;
- industry;
- region of country;
- legal form of company;
- age of company;
- ownership;
- origin of foreign capital;
- size of company;
- value of turnover.

3. Statistical methods used in the research. Data from the questionnaire were processed and evaluated by the chosen statistical methods, we applied chi-squared test, commonly used for testing the independence between two categorical variables. The research consists from qualitative – nominal variables, their relationship cannot adequately describe the correlation coefficient. Association between variables we examined with contingency coefficients and contingency tables.

The results of chi-squared tests describe the selected statistics: Pearson's chisquare and significance p-value "p", Pearson's contingency coefficient (*CC*), adjusted contingency coefficient (*Adj.CC*) and the degrees of freedom (*df*).

Pearson's chi-square:

$$\chi^{2} = \sum_{i=1}^{k} \left[\left(f_{o_{i}} - f_{e_{i}} \right)^{2} / f_{e_{i}} \right], \text{ while } \sum \left(f_{o} - f_{e} \right) = 0.$$
 (1)

Pearson's contingency coefficient CC:

$$CC = \sqrt{\chi^2 / (\chi^2 + N)}.$$
 (2)

Maximum contingency coefficient CC_{max}:

$$CC_{\max} = \sqrt{(q-1)/q}.$$
(3)

Adjusted contingency coefficient:

 $Adj.CC = CC/CC_{max}$, while $CC \le CC_{max}$. (4)

where f_{oi} – the observed frequency in an field of the table; f_{ei} – the expected (theoretical) frequency in an field of the table; k – the number of cells in the table; N – the sample size; q – the number of rows or columns (in square tables).

Pearson's contingency coefficient may occur in *different maximum values* depending on the number of categories for the studied variables. G. Clauss and

H. Ebner (1988) report the maximum values for square tables, CC_{max} for rectangular tables can be roughly estimated by averaging the maximum values for square tables. We analyzed various types of rectangular tables in this paper, so we have prepared data with calculated CC_{max} (Table 2).

Number of columns	2	3	4	5	6	7	8
CC _{max} at 2 rows	0.707	0.762	0.787	0.801	0.810	0.817	0.821
CC _{max} at 3 rows	0.762	0.816	0.841	0.855	0.865	0.871	0.876
CC _{max} at 4 rows	0.787	0.841	0.866	0.880	0.890	0.896	0.901
CC _{max} at 5 rows	0.801	0.855	0.880	0.894	0.904	0.910	0.915
CC _{max} at 6 rows	0.810	0.865	0.890	0.904	0.913	0.920	0.924
CC _{max} at 7 rows	0.817	0.871	0.896	0.910	0.920	0.926	0.931
CC _{max} at 8 rows	0.821	0.876	0.901	0.915	0.924	0.931	0.935

Table 2. Maximum values of contingency coefficient for rectangular tables, authors' own

For clear interpretation and relevant comparisons of the contingency coefficients of several analyzes we calculated the *adjusted contingency coefficient* (*Adj.CC*), which takes into account the calculated CC and the corresponding CC_{max} (Formula 4). That ranges from 0 to 1, values close to 1 mean stronger dependence of two variables.

The only assumption underlying the use of Chi-square (other than random selection of the sample) is that the expected frequencies are not very small. The 2x2 tables would be the value of the expected frequency for each cell being in a table greater than 5. When the expected cell frequencies fall below 5, those probabilities cannot be estimated with sufficient precision. For larger tables, compliance to this condition is often problematic. The result is inaccurate approximation of the test characteristics of the chi-square probability distribution. However, according to (Finkelstein and Levin, 2001), for tables larger than 2x2 it is recommended to have at least 80% of the expected frequency of greater than 5 or not the expected frequency of less than 1 in more than 10% of cases.

Findings. The presented findings are primarily focused on statistically significant dependence (p-value < 0.05, which is the alpha level associated with the 95% confidence level) with fulfilled condition of expected frequencies. For each significant association we present and analyze contingency table. Just from the results of residuals we can demonstrate relevant, scientifically based findings and state certain logical conclusions presented below. If the mentioned condition of expected frequencies is not satisfied, despite the fact that the p-value < 0.05, it is not suitable to interpret findings from contingency table (residuals) and contingency coefficient.

1. *Observed business performance.* For the basic sorting parameter, business performance (ROE indicator), we analyzed the selected descriptive statistics of one variable. Achievements in various sectors as well as in the related research samples are presented in Table 3, the distribution of observed business performance in tested companies is presented Figure 1.

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Industry	Counts	Mean	Median	Mode	Counts (mode)				
Pharmaceutical industry	1	5.00	5	5	1				
Automotive industry	16	2.94	3	multiple	4				
Electrotechnic industry	8	2.25	2	1	3				
Construction	15	2.13	2	1	5				
Engineering industry	30	2.00	2	multiple	7				
Wood harvesting and transport	5	2.00	2	multiple	2				
Other	55	2.00	2	1	15				
Wood industry	21	1.90	1	1	8				
Furniture industry	11	1.27	1	2	4				
Pulp and paper industry	2	1.00	1	multiple	1				
Common samples:									
Sample of all the companies	164	2.06	2	1	47				
Manufacture	106	2.02	2	1	32				
Services and commerce	58	2.14	2	1	15				

 Table 3. Descriptive statistics: business performance (ROE indicator),

The descriptive statistics of the variable "business performance" (categorized according the ROE indicator into 6 groups), presented in Figure 1 shows the mean 2.06, companies on average create positive, but relatively low ROE in the range of 2-4% in Slovakia. Median is at level 2. Modus, the maximum frequency is represented in the second group with a performance at the level of 0-2% ROE, which includes 47 (29%) of the total sample.



Figure 1. Business performance (ROE indicator), authors'

2. Dependences in relation to business performance. In all the presented dependences the same variable was used – business performance, analyzed relatively to other selected parameters, described in the methodology. The results of statistical

testing (Table 4) demonstrate three significant facts, observed performance in companies is influenced by the parameters of:

- ownership;
- origin of foreign capital;
- turnover value.

Table 4. Contingency: business performance vs. other variables – statistics, authors'

Business performance	Counts	Pearson's chi- square	df	р	Contingency coefficient (CC)	Number of categories	Maximum contingency coefficient (CC _{max})	Adjusted CC (Adj. CC)
Industry	164	19.04715	15	0.2116	0.32	4x6	0.890	0.36
Region of country	164	34.98657	35	0.4746	0.42	8x6	0.924	0.45
Legal form	164	17.02000	15	0.3177	0.31	4x6	0.890	0.34
Age of company	164	13.84254	15	0.5375	0.28	4x6	0.890	0.31
Ownership	164	19.20522	5	0.0018	0.32	2x6	0.810	0.40
Origin of capital	164	39.86017	15	0.0005	0.44	4x6	0.890	0.50
Size of company	164	20.04812	15	0.1701	0.33	4x6	0.890	0.37
Value of turnover	164	31.34774	15	0.0079	0.40	4x6	0.890	0.45

Relation between turnover and business performance did not fulfil the expected frequencies condition and we did not consider it in detail. Besides we will address the variable of turnover further.

On the other hand, we analyzed explicitly through contingency tables the next two statistically significant relations of business performance with variables ownership and the origin of foreign capital.

Regarding the variable "*ownership*", this research confirmed the difference in performance of firms with purely domestic capital as compared to companies with foreign participation (partial or full foreign ownership). The analysis shows statistically strongly significant dependence (p-value < 0.001) with *Adj.CC* 0.40. From the values of residues (Table 5) we show that firms with purely domestic capital typically merit in group 1 (very low ROE in the range of 0-2%), enterprises with foreign participation are sorted in better performance groups, most typically with ROE above 10%. These results demonstrate a statistically significant impact of foreign capital in better business performance.

In statistically significant dependence between the origin of capital and business performance we used the optimal binning of classes in variable "origin of capital". The research sample consisted of 17 various answers, we created 4 classes. Countries were sorted by most counts: 120 firms of domestic origin, 27 firms in the group of other foreign origin (21 firms of 15 specific foreign countries and 6 firms from unnamed foreign countries), 10 firms from Germany and 7 from Czechia. The results demonstrate very significant dependence (p-value < 0.001) and *Adj.CC* 0.50 means strong correlation. So, it is important whether firms dispose foreign capital, but more importantly is from which country. But despite the binning of classes, the expected counts condition not fulfiled was and the credibility of the obtained results may not be entirely relevant. We are aware of unfulfilled condition, nevertheless, the results we have interpreted. Residual frequencies (Table 6) signify the best and stable performance in firms

with German capital (performance group 3, 4 and 5). For the research class of other foreign countries are positive residuals in performance group 0, 2 and 5, there is diverse, unreliable performance and we cannot determine typical results. The success and higher ROE indicator of these firms is possible as well as the negative or low ROE.

Foreign investment x business performance	Group 0 ROE < 0%	Group 1 ROE = 0–2%	Group 2 ROE = 2–4%	Group 3 ROE = 4–7%	Group 4 ROE = 7–10%	Group 5 ROE > 10%	Row totals			
Observed frequencies										
Domestic ownership	18	44	26	16	6	10	120			
Foreign ownership	7	3	9	10	6	9	44			
Totals	25	47	35	26	12	19	164			
Expected frequencies										
Domestic ownership	18.292	34.390	25.609	19.024	8.7804	13.902	120.00			
Foreign ownership	6.7073	12.609	9.3902	6.9756	3.2195	5.0975	44.00			
Totals	25.000	47.000	35.000	26.000	12.000	19.000	164.00			
Residual frequencies										
Domestic ownership	-0.292	9.6097	0.3902	-3.0243	-2.7804	-3.9024	0.00			
Foreign ownership	0.292	-9.6097	-0.3902	3.0243	2.7804	3.9024	0.00			
Totals	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00			

 Table 5. Contingency: foreign ownership x business performance

 - frequencies, authors'

Table 6.	Contingency: or	rigin of capital x b	ousiness perfo	ormance – f	requencies,
		autho	rc'		

Origin of conital y	Group 0	Group 1	Group 2	Group 3	Group 4	Group 5	Dow		
business performance	ROE <	ROE =	ROE =	ROE =	ROE =	ROE >	totals		
business performance	0%	0–2%	2-4%	4–7%	7-10%	10%	totals		
		Observ	ed frequen	cies					
Domestic origin	18	44	26	16	6	10	120		
Other foreign origin	6	2	7	4	1	7	27		
Germany	1	1	0	3	3	2	10		
Czechia	0	0	2	3	2	0	7		
Totals	25	47	35	26	12	19	164		
Expected frequencies									
Domestic origin	18.293	34.3902	25.6098	19.0244	8.7805	13.9024	120.00		
Other foreign origin	4.1159	7.7378	5.7622	4.2805	1.9756	3.1281	27.000		
Germany	1.5244	2.8659	2.1342	1.5854	0.7317	1.1585	10.000		
Czechia	1.0671	2.0061	1.4939	1.1098	0.5122	0.8110	7.000		
Totals	25.000	47.0000	35.0000	26.0000	12.0000	19.0000	164.00		
		Residu	al frequenc	cies					
Domestic origin	-0.293	9.6098	0.3902	-3.0244	-2.7805	-3.9024	0.00		
Other foreign origin	1.884	-5.7378	1.2378	-0.2805	-0.9756	3.8720	0.00		
Germany	-0.524	-1.8659	-2.1342	1.4146	2.2683	0.8415	0.00		
Czechia	-1.067	-2.0061	0.5061	1.8902	1.4878	-0.8190	0.00		
Totals	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00		

3. Dependences in relation to foreign ownership. Positive dependence between foreign capital and better business performance as described previously we have considered as the basic finding and consequently we focus our research on the variable of foreign capital. We tried to find out certain common aspects typical for companies with participation of foreign capital and these findings are supported by statistical testing. So, in all other dependences the same variable was used – foreign capital, analyzed relatively to other parameters and variables. The results we present in Table 7.

Foreign ownership	Counts	Pearson's chi- square	df	р	Contingency coefficient (CC)	Number of categories	Maximum contingency coefficient (CC _{max})	Adjusted CC (Adj. CC)
Industry	164	13.0248	3	0.00458	0.27	4x2	0.787	0.34
Region of country	164	10.55772	7	0.15913	0.25	8x2	0.821	0.30
Legal form	164	9.528031	3	0.02304	0.23	4x2	0.787	0.30
Age of company	164	0.753718	3	0.86050	0.07	4x2	0.787	0.09
Size of company	164	52.0283	3	0.00000	0.49	4x2	0.787	0.62
Value of turnover	164	50.31809	3	0.00000	0.48	4x2	0.787	0.62

Table 7. Contingency: foreign ownership vs. other variables – statistics, authors'

The variable of industry has been studied in 4 dominant groups (Table 8). It would be better to analyze each branch in the questionnaire separately, but due to low observed counts we put together low numerous groups. Despite this, however, the results have shown statistically significant differences by branches. *Engineering and automotive industry* is characterized by foreign capital significant presence, against wood processing and other industries with typically domestic capital. By comparison, 56% of the automotive companies are capitalized via foreign capital, but 82% of the wood processing companies have only domestic ownership.

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Industry	Other	Wood processing	Engineering	Automotive	Row totals				
Observed frequencies									
Domestic ownership	67	28	18	7	120				
Foreign ownership	17	6	12	9	44				
Totals	84	34	30	16	164				
Expected frequencies									
Domestic ownership	61.46341	24.87805	21.95122	11.70732	120.0000				
Foreign ownership	22.53659	9.12195	8.04878	4.29268	44.0000				
Totals	84.00000	34.00000	30.00000	16.00000	164.0000				
Residual frequencies									
Domestic ownership	5.53659	3.12195	-3.95122	-4.70732	0.00				
Foreign ownership	-5.53659	-3.12195	3.95122	4.70732	0.00				
Totals	0.00000	0.00000	0.00000	0.00000	0.00				

Table 8. Contingency: industry vs. foreign ownership – frequencies,

In the analysis of legal form we specified 4 types of companies (Table 9). Statistically significant results proved that *foreign capital is the most typical for Ltd. companies* (80%), less in capitally more intensive joint stock companies. On the other hand, for self-employed persons and other legal forms domestic capital is typical.

Legal form	Self-employed person	Other	Join stock company	Ltd.	Row totals				
Observed frequencies									
Domestic ownership	18	13	19	70	120				
Foreign ownership	1	1	7	35	44				
Totals	19	14	26	105	164				
Expected frequencies									
Domestic ownership	13.90244	10.24390	19.02439	76.8293	120.0000				
Foreign ownership	5.09756	3.75610	6.97561	28.1707	44.0000				
Totals	19.00000	14.00000	26.00000	105.0000	164.0000				
	Residual frequencies								
Domestic ownership	4.09756	2.75610	-0.024390	-6.82927	0.00				
Foreign ownership	-4.09756	-2.75610	0.024390	6.82927	0.00				
Totals	0.00000	0.00000	0.000000	0.00000	0.00				

Table 9. Contingency: legal form vs. foreign ownership – frequencies, authors'

Size of company was selected in four groups (Table 10). According the statistically significant results we can see the proportional growth of enterprises with foreign participation with a growing number of employees in company. For micro and small companies with max. 50 employees domestic capital is typical, but in bigger companies foreign ownership precails. *Almost 70% of large companies* (over 250 employees) *is financed by foreign capital*, compared with 6% of foreign ownership in micro enterprises (to 10 employees).

Size of company (number of employees)	Micro (1–10 employees)	Small (11–50 employees)	Medium (51–250 employees)	Large (over 250 employees)	Row totals				
	0	bserved frequen	cies						
Domestic ownership	47	43	19	11	120				
Foreign ownership	3	4	14	23	44				
Totals	50	47	33	34	164				
	Expected frequencies								
Domestic ownership	36.58537	34.39024	24.14634	24.87805	120.000				
Foreign ownership	13.41463	12.60976	8.85366	9.12195	44.000				
Totals	50.00000	47.00000	33.00000	34.00000	164.000				
Residual frequencies									
Domestic ownership	10.4146	8.60976	-5.14634	-13.8780	0.00				
Foreign ownership	-10.4146	-8.60976	5.14634	13.8780	0.00				
Totals	0.0000	0.00000	0.00000	0.0000	0.00				

 Table 10. Contingency: size of company vs. foreign ownership – frequencies, authors'

Size of company, given by the number of employees, can be also classified according the value of turnover. In our research, the *dependence between foreign own-ership and the size of company*, given by both variables the number of employees as well as the value of turnover, demonstrated the same results, *very close and strong depend-*

ence with p-value 0.00000 and adjusted contingency coefficient 0.62, the highest during the whole testing.

As we can see from the residuals in the dependence between foreign ownership and turnover (Table 11), at enterprises with turnover up to 2 mln EUR here is nonparticipation of foreign capital. Conversely, with increasing turnover increases the relative frequency of enterprises with foreign participation, most of them are in the category with the turnover of over 50 mln EUR.

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Turnover, mln EUR	0-2	2-10	10-50	Over 50	Row totals				
Observed frequencies									
Domestic ownership	79	25	11	5	120				
Foreign ownership	6	11	10	17	44				
Totals	85	36	21	22	164				
Expected frequencies									
Domestic ownership	62.19512	26.34146	15.36585	16.09756	120.0000				
Foreign ownership	22.80488	9.65854	5.63415	5.90244	44.0000				
Totals	85.00000	36.00000	21.00000	22.00000	164.0000				
	Res	idual frequenc	ries						
Domestic ownership	16.8049	-1.34146	-4.36585	-11.0976	0.00				
Foreign ownership	-16.8049	1.34146	4.36585	11.0976	0.00				
Totals	0.0000	0.00000	0.00000	0.0000	0.00				

Table 11. Contingency: turnover vs. foreign ownership – frequencies, authors'

Discussion. Detailed view on the impact of foreign capital to higher performance made us assume some differences of domestic companies in terms of management. Also thanks to already published results (Merkova, Rajnoha and Dobrovic, 2015) we ecidenced that local firms don't use or use in low level some sophisticated practices, techniques, concepts or methods in investment management and they achieve worse performance. There are several reasons for the absence of useful knowledge fundamentals in local firms. The most important issue is the lack of capital to buy or form own know-how. But it is possible to mention the typical sign of local firms – indifference and aversion to use new and unfamiliar tools, which they do not understand. If a company doesn't trust them, it doesn't expect possible future effects and performance improvement. Foreign investors bring and implement tools in their investment decision-making, measurement and management, what causes better business performance. Local firms benefit from the entry of foreign capital and improve their knowledge base. Investments focused in intangibles and R&D are associated with sophisticated production, higher added value and economic growth. Foreign firms benefit from advantages, which a host country provides, uses inexpensive raw material resources and particularly cheap labor force, which is one of the main comparative advantage of Slovakia. This reality is often criticized as the exploitation of workers and natural resources without positive impact for economic growth of the country. However, it is important to understand the proved positives, advanced technologies in Slovakia are available precisely because of foreign-owned firms presence. The supported result refutes skeptical views of FDI opponents, who argue that foreign firms in Slovakia only use outdated tools and procedures without requirements to develop and improve their knowledge base.

Regarding the parameter origin of foreign capital in companies in Slovakia, several remarkable facts have been revealed in our study. Power and success of German capital was proven, with its applied business planning, exactly determined goals and the ways to achieve them, precisely developed concept and methodological procedures. German firms in their strategic management use modern, useful and efficient tools, manners, knowledge base, information systems based on business intelligence, controlling etc. with the positive impact on performance. Medium performance (ROE groups 2, 3 and 4) was reached by the firms with the origin of capital from Czechia. This fact is little surprising comparing the result of Slovak firms with lower performance (in performance group 1). Even in recent past there was a general view that firms of two countries from the ex common state Czechoslovakia reach approximately same (low) performance level. Current reality in Slovakia is that Czech firms have better performance than the domestic ones.

From all the parameters we can see only one - turnover - as dependent on both primarily tested variables, foreign ownership as well as business performance. Based on the results of the analysis between turnover on business performance, apart from the fulfillment of the condition for expected frequencies, it could be concluded that higher turnover has impact on achieving greater efficiency and this is reflected in all the categories of turnover and achieved performance. Borderline results therefore say that companies with the highest turnover (over 50 mln EUR / year) achieved excellent performance in groups 4 and 5 (groups with ROE of 7-10% and over 10%), while enterprises with the lowest turnover in 2 mln EUR / year have, although positive, but the lowest ROE of 0-2%. Most companies automatically expect that if they increase turnover, they will perform better, although of course it is not always true. The increased turnover will increase the absolute value of profit, but in relation to increasing costs or invested capital the ratio indicator of profitability can remain the same. In this research, where we used the ROE indicator, is the result of a statistical test slightly surprising, but certainly positive. In terms of future research it would certainly be appropriate for the two parameters – turnover and ROE to be analyzed not only in categories, but in concrete values with the possibility of applying correlation analysis to find out the concrete influencing values between turnover and profitability.

Conclusion. As the meaningful finding we have considered positive dependence between foreign ownership and better business performance. The best performing companies (the most typically reaching ROE above 10%) are mainly or wholly financed from abroad, and vice versa, purely domestic firms have lower performance with the value of ROE in the range of 0-2%.

We focused our research on the variable of foreign capital. We found certain common aspects typical for companies with participation of foreign capital against local firms and these findings are supported by statistical testing.

From all the parameters we can see only one – turnover – as dependent on both primarily tested variables, foreign ownership as well as business performance. Dependence between foreign ownership and turnover demonstrated a very close and strong dependence with p-value 0.00000 and adjusted contingency coefficient of 0.62, the highest during the whole testing.

Benefits of these research findings are at the microeconomic as well as macroeconomic aspects. Companies can increase their performance with foreign partnership. National economics can argue with the fact of positive FDI effects and GDP growth in government decisions for investment aid. Finally, foreign ownership is typical for automotive industry, the branch with dominant impact on GDP growth in Slovakia, so with indirect positive effect of foreign capital at the macroeconomic level.

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