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## Factors of Profitability: Evidence from the Serbian Manufacturing Sector

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# Factors of Profitability: Evidence from the Serbian Manufacturing Sector

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## Abstract

This paper aims to investigate factors of profitability in the manufacturing sector in the Republic of Serbia. The research is based on the sample of 220 observations of financial statements of listed companies on the Belgrade stock exchange from sector C – manufacturing during 2017-2020. Profitability was measured as a return on assets (ROA) and return on equity (ROE) being the two most common ratios. Primarily, the descriptive statistics of ROA and ROE were conducted. The results showed that manufacturing companies achieve a positive rate of profitability but at a low level (ROA is 0,0263 and ROE is 0,0595).

Furthermore, two regression models were conducted to investigate which internal factors significantly affected ROA and ROE as dependent variables. The independent variables were set: fixed assets ratio, size, current ratio, leverage, and growth. Results of the first model showed that size, current ratio, and growth have a significant positive impact on ROA, while leverage significantly negatively impacts ROA. Results of the second model show that size and growth have a significant positive impact on ROE, while leverage negatively impacts it.

**Keywords:** Profitability; Profitability factors; Return on assets; Return on equity.

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## Introduction

Profitability is the main goal of all commercial companies; without it, the business cannot survive in the long run. Therefore, profitability is crucial when measuring financial flows and performances and forecasting future profits. Profitability is using funds in which an organization covers its costs with revenue and does the mentioned with profit. The profit and profitability of an entrepreneur's business are measured through revenues and expenses. It is important to understand that money comes from business activities, while borrowing does not generate income. It is just a cash transaction between the entrepreneur and the creditor, through which the former receives from the latter money to operate a business or property purchase. Costs are the cost of assets used (or consumed) in business. However, the repayment of the loan (as well as its receipt, as mentioned above) does not go towards the cost, as it is simply a transfer of funds between the business and the lender. To understand profitability, it is necessary to recognize the concepts of profit and loss. It is a list of income and expenses for the entire business over a period (usually a year). Financial statements provide insight into companies' financial well-being, including their financial performance, operations, and cash flow at a particular point in time. They are used when measuring different profitability ratios.

Throughout this research paper, factors of profitability in the manufacturing sector in the Republic of Serbia are investigated. The research is based on a sample of 220 observations of financial statements of listed companies at the Belgrade stock exchange from sector C – manufacturing during 2017-2020. Profitability was measured as a return on assets (ROA) and return on equity (ROE), the two most common ratios used. Return on assets (ROA) indicates how profitable a company is relative to its total assets. It gives an idea of how effectively a company's management uses it to generate profits.

On the other hand, return on equity (ROE) is used to evaluate investment returns using the net income and shareholder's equity. Like ROA, ROE also gives an idea of how the company management uses financing from equity to grow the business. It may also be compared to the industry's average to determine the company's competitive advantage.

## Literature review

Profitability has been analyzed in many theoretical and research papers. Furthermore, many authors researched to investigate which factors significantly impact profitability (Azhagaiah et al., 2012; Škuflić et al., 2016; Akinleye et al., 2019, etc.). The purpose of these research papers is to analyze profitability trends and factors of profitability and give managers primary instructions to plan future business and achieve better profitability performance.

Authors Azhagaiah and Deepa (2012) examined the impact of size on profitability, where size was the control variable. The size was determined based on sales turnover and classified into three categories, 'small,' 'medium,' and 'large.' This study showed that small firms face more challenges to earn additional profit since their volatility increases significantly with profitability.

Škuflić et al. (2016) have shown in their research that market concentration (Herfindahl-Hirschman index) and total factor productivity have a significant and positive impact on the profitability of the manufacturing industry in Croatia during the study period from 2003 to 2014. Their results have also shown a significant but negative relationship between indebtedness, current ratio, and indebtedness factor,

concluding that the concentration and indebtedness factor are determinants with a larger influence on profitability.

In research on the capital structure and profitability of manufacturing firms from the Nigerian stock exchange, authors Akinleye and Akomolafe (2019) revealed that short-term debt has an insignificant positive effect on the profit after tax of manufacturing firms. In contrast, long-term debt exerts a significant positive impact on profit after tax. Share capital exerts a significant positive effect on profit after tax, and the share premium exerts an insignificant negative effect on profit after tax. The study concluded that short-term debt has a declining effect on the profitability of manufacturing firms in the country. In contrast, the long-term variable of firms' debt finance spurs the profitability rate.

Factors influencing the profitability of manufacturing firms listed on the New York Stock Exchange show a positive relationship between investment in research and development, growth rate, employee productivity, leverage ratio, current ratio, and the dependent variable: profitability. In his research, Kant (2018) has also shown a negative relationship between net asset turnover and profitability.

Pervan et al. (2019), in their research, have examined the influence of different factors that affect a firm's profitability by creating a model with three categories of profitability determinants: firm-specific, industry-specific, and macroeconomics. After they researched 9359 firms operating in the Croatian manufacturing industry during 2006-2015, they concluded that the macroeconomic environment is significant for manufacturing firms in Croatia. With progressive economic conditions, demand for a firm's goods increases, contributing to increasing sales and, ultimately, achieving higher profitability. The opposite was true for the downward trend in the economy, when the inflation rates positively affected firm performance, demonstrating that a firm's costs decreased more with inflation than revenues, resulting in higher profitability.

Authors Mijić and Jakišić (2017) have analyzed, using the panel data technique, the profitability determinants of the agricultural industry in countries of the CEE region, such as Hungary, Romania, Bosnia and Herzegovina, and Serbia. The profitability of agriculture enterprises in Hungary and Romania is positively affected by leverage, quick ratio, growth, and lagged profitability.

In contrast, size and fixed assets to total assets ratios are negatively related to the profitability in these countries. In Serbia and Bosnia and Herzegovina profitability of agricultural enterprises is affected positively by quick ratio, lagged profitability, and growth. Furthermore, in Bosnia and Herzegovina determinant of leverage is significant.

The cash ratio significantly positively affects the profitability of manufacturing firms in Nigeria. Authors Akinleye and Ogunleye (2019) have examined the relationship between the liquidity and profitability of manufacturing firms, analyzing the effect of cash ratio, current ratio, and quick ratio on profit after-tax manufacturing firms in Nigeria. Besides the positive effect of the cash ratio, the authors have shown no long-run relationship between the liquidity and profitability of selected manufacturing firms. In their work, they have recommended that the manufacturing management should objectively try to reduce their bill receivable to guide against waiting longer to collect from customers to increase their profitability.

Throughout research on the impact of internal factors on return on assets, in the case of meat processing enterprises in Serbia, authors Dakić and Mijić (2020) have shown that variables age, debt ratio, capital turnover ratio, sale growth, and quick ratio have a significant impact on ROA. Variables age (-0.0019), debt ratio (-0.2413), and capital turnover ratio (-0.0897) are statistically significant at the level of

significance of 1%, the variable sale growth is statistically significant at the level of significance of 5%, and the quick variable ratio (0.0161) is statistically significant at the level of significance of 10%.

Throughout an empirical analysis of the factors determining the profitability of 120 manufacturing firms listed in the Borsa Istanbul Stock Exchange during 2005-2012, authors Isik and Tasgin (2017) aimed to re-investigate the associations between firm-specific variables and economic growth indicators. The results of their research have shown that there is no significant impact of market risk and capital intensity on the profitability of Turkish manufacturing firms; however, the research indicates that firm profitability is significant and positively related to past profitability, firm size in terms of total sales, net working capital, and GDP growth but inversely related to financial risk and R&D investments.

## Methodology

As previously stated, this paper aims to investigate factors of profitability in the manufacturing sector in the Republic of Serbia. Profitability was measured as a return on assets (ROA) and return on equity (ROE), the two most common ratios used. Primarily, the descriptive statistics of ROA and ROE were conducted. Furthermore, two regression models were conducted to investigate which internal factors significantly affected ROA and ROE as dependent variables. As independent variables, the following were set: fixed assets ratio, size, current ratio, leverage, and growth. (see Table 1)

Table 1  
Methodology of calculation of variables

Variables	Ref	Type of variables	Indicator	Calculation
<b>Return on assets (ROA)</b>	Y <sub>1</sub>	Dependent (model 1)	Indicates the company's ability to generate earnings from its assets.	ROA = Net Income / Total Assets
<b>Return on equity (ROE)</b>	Y <sub>2</sub>	Dependent (model 2)	Indicates the company's ability to generate earnings from its equity.	ROE = Net Income / Equity
<b>Fixed assets ratio</b>	X <sub>1</sub>	Independent	Indicates the share of fixed assets in total assets	Fixed assets ratio = Fixed assets / Total Assets
<b>Size</b>	X <sub>2</sub>	Independent	Indicates the size of the company	Size = Natural log of Total Assets
<b>Current ratio</b>	X <sub>3</sub>	Independent	Company's short-term liquidity indicator	Current ratio = Current Assets / Current Liabilities
<b>Leverage</b>	X <sub>4</sub>	Independent	Measures the level of debt	Leverage = Total Debts / Equity
<b>Growth</b>	X <sub>5</sub>	Independent	Measures the sales growth	Growth = Sales <sub>t</sub> / Sales <sub>t-1</sub>

Source: Author's illustration based on Rodic et al. 2017; Chandrapala and Knapkova, 2013.

According to the set goals, the following hypothesis is set:

- H<sub>1</sub> – Factors such as fixed assets ratio, size, current ratio, leverage, and growth significantly impact companies' return on assets (ROA) in the Republic of Serbia manufacturing sector.

- H<sub>2</sub> – Factors such as fixed assets ratio, size, current ratio, leverage, and growth significantly impact companies' return on equity (ROE) in the Republic of Serbia manufacturing sector.

To test the hypothesis, a regression analysis will be conducted. The following regression models are set:

$$Y_{1it} = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon_i \tag{1}$$

$$Y_{2it} = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon_i \tag{2}$$

Where:

- Y<sub>1it</sub> – ROA (dependent variable – model 1);
- Y<sub>2it</sub> – ROE (dependent variable – model 2);
- β<sub>0</sub> – Model constant;
- β<sub>i</sub> – Coefficiency of independent variables;
- X<sub>1</sub> – Fixed Assets Ratio (independent variable);
- X<sub>2</sub> – Size (independent variable);
- X<sub>3</sub> – Current ratio (independent variable);
- X<sub>4</sub> – Leverage (independent variable);
- X<sub>5</sub> – Growth (independent variable);
- E – Error with a normal distribution;
- I – Signify each company (i=1,....., N);
- T – Signify the period (t=1,....., t).

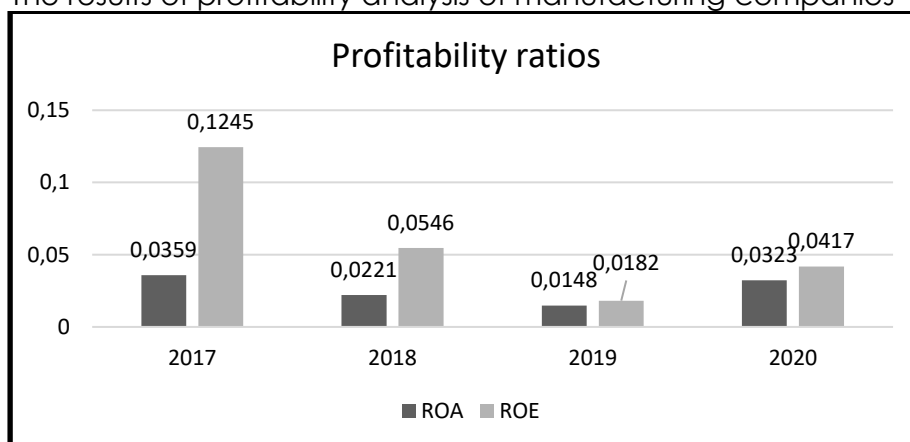
An observation sample of 220 financial statements of manufacturing companies from the Belgrade stock exchange from sector C – manufacturing was used to conduct this research paper. The collected data was during the period 2017-2020.

## Results

The profitability results measured using two ratios, return on assets (ROA) and return on equity (ROE), are presented in Figure 1.

Figure 1

The results of profitability analysis of manufacturing companies



Source: Authors'.

During 2017-2019, return on assets (ROA) and return on equity (ROE) both experienced a decreasing trend; however, they experienced a rise in 2020. Return on assets decreased from 0,0359 in 2017 to 0,0323 in 2020, while return on equity

decreased from 0,1245 in 2017 to 0,0417 in 2020. According to the decreasing trend of ROA, it can be concluded that manufacturing companies have made investments. This goes in hand with the decreasing trend of ROE, representing that companies are becoming less efficient at creating profits and increasing shareholders' value.

Regression analysis was conducted to investigate which factors significantly impact manufacturing companies' profitability in the Republic of Serbia. Profitability, a dependent variable, is measured as ROA and ROE, while the independent variables are the following: fixed assets ratio, size, current ratio, leverage, and growth. The results of descriptive statistics of dependent and independent variables for 2017-2020 are presented in table 2.

Table 2  
Descriptive statistics of dependent and independent variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROA	220	-0,4990	0,2767	0,026310	0,0959546
ROE	220	-1,4023	3,0589	0,059505	0,3490353
Fixed assets ratio	220	0,0230	0,9372	0,524090	0,2182013
Size	220	9,0604	17,8831	14,383829	2,0838739
Current ratio	220	0,2716	17,9751	2,729712	3,3295485
Leverage	220	0,0349	42,7393	2,238430	5,3590998
Growth	220	0,0125	4,4174	1,047958	0,3855591

Source: Authors' calculation based on IBM SPSS

According to the current ratio level, it can be concluded that manufacturing companies do not have a problem with liquidity; however, the average current ratio level of 2,7 may also indicate that cash is not being utilized optimally within companies. The average level of leverage for manufacturing companies on the Belgrade stock exchange in the Republic of Serbia is 2,2. According to this high leverage ratio, companies are using debt to finance their assets and operation. The average level of growth shows that sales growth is positive at the level of 4,79% per year. The results of the correlation matrix are represented in table 3. The results indicate that there is no correlation problem among the variables.

Table 3  
Correlation matrix

	ROA	ROE	Fixed assets ratio	Size	Current ratio	Leverage	Growth
ROA	1	0,688	-0,036	0,258	0,157	-0,172	0,248
ROE	0,688	1	0,145	0,315	0,021	0,447	0,226
Fixed assets ratio	-0,036	0,145	1	0,174	-0,339	0,092	0,102
Size	0,258	0,315	0,174	1	-0,070	0,086	0,012
Current ratio	0,157	0,021	-0,339	-	1	-0,196	-0,086
Leverage	-0,172	0,447	0,092	0,086	-0,196	1	0,063
Growth	0,248	0,226	0,102	0,012	-0,086	0,063	1

Source: Authors' calculation based on IBM SPSS

The regression analysis results of model 1 with the dependent variable return on assets (ROA) are presented in Table 4. The results indicate that size, current ratio, and growth significantly positively impact ROA, while leverage negatively impacts ROA.

Collinearity statistics show that VIF is less than ten and no multicollinearity problem exists.

Table 4

Regression model 1 – dependent variable ROA

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF	
1	(Constant)	-0,23	0,046		-5,035	0		
	X1	-0,021	0,029	-0,047	-0,715	0,476	0,857	1,166
	X2	0,013	0,003	0,289	4,631	0	0,965	1,036
	X3	0,004	0,002	0,15	2,26	0,025	0,856	1,168
	X4	-0,003	0,001	-0,18	-2,875	0,004	0,954	1,048
	X5	0,068	0,015	0,273	4,427	0	0,984	1,016

a. Dependent Variable: ROA, Rsquare 0,22

Source: Authors' calculation based on IBM SPSS

The regression analysis results of model 1 with the dependent variable return on equity (ROE) are presented in Table 5. The results indicate that a significant positive impact on profitability measured as return on equity has size and growth, while leverage negatively impacts it. Collinearity statistics show that VIF is less than ten and no multicollinearity problem exists.

Table 5

Regression model 1 – dependent variable ROE

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF	
1	(Constant)	-1,186	0,378		-3,134	0,002		
	X1	0,235	0,241	0,065	0,974	0,331	0,855	1,17
	X2	0,052	0,024	0,136	2,174	0,031	0,961	1,041
	X3	0,007	0,016	0,028	0,417	0,677	0,856	1,168
	X4	-0,056	0,009	-0,382	-6,066	0	0,937	1,068
	X5	0,402	0,127	0,196	3,158	0,002	0,971	1,03

a. Dependent Variable: ROE, Rsquare 0,45

Source: Authors' calculation based on IBM SPSS

## Discussion

The profitability analysis results of manufacturing companies indicate that profitability had a positive rate in 2017-2020 but at a low level. According to Rodic et al. (2017) referent value of ROA is 10%, while manufacturing companies in Serbia achieved the value of ROA at the average level of 2,63%. These findings indicate that manufacturing companies achieve an average profit of 2,63 RSD on every 100 RSD total assets. The average value of ROE is also positive but at a relatively low value of 5,95%. According to these findings, manufacturing companies achieve an average of 5,95 RSD profit on every 100 RSD of capital. The trend of ROA and ROE during 2017-2020 is the same. During the observed period, the level of ROA, as well as ROE, had a negative trend until 2019. The lowest level of ROA in 2019 was only 1,48%, while the



level of ROE in the same period was 1,82%. The trend of ROA and ROE in 2020 is characterized as positive. The growth of the value of ROA and ROE in 2020 is significant compared to the previous year. Even though there was significant growth in the profitability ratio in 2020, the manufacturing company achieved the highest level of this ratio in 2017.

The findings of this paper add to the literature on profitability factors specific to the manufacturing sector. The paper proposes models to explain how factors affect the profitability ratios measured as ROA and ROE. Based on the findings, several internal factors of profitability are identified as significant factors of profitability ratios.

The results of two regression models on return on assets (ROA) and return on equity (ROE) indicate a significant impact of internal factors on profitability ratios. Results of the first regression model with the dependent variable return on assets (ROA) showed that size, current ratio, and growth positively impact ROA. In contrast, leverage has a significant negative impact on ROA. The result of the  $p$ -value is less than 0,05. These findings indicate that all of these variables are significant at 95%. The results indicate that larger companies achieve a higher rate of ROA.

The current ratio as a liquidity factor indicates that the companies with a higher current ratio (with no problems paying short-term debts) can increase the return on assets. An adequate level of liquidity could help firms to expand their operations, pay their debts on time, and take advantage of long-term profitable investment opportunities (Goddard et al., 2005). Manufacturing companies in Serbia have an adequate level of liquidity (the average current ratio level is 2,72, while the optimal level should be higher than two, according to Rodic et al. 2017).

Sales growth is also one of the significant factors of profitability measured as ROA in the manufacturing sector. Sales growth can increase the rate of ROA. Sales are the main component of income, and its growth increases the profitability ratio.

Leverage is a factor that negatively impacts ROA. These findings indicate that a higher leverage level will lead to a lower rate of ROA. Manufacturing companies in the Republic of Serbia have a problem with leverage. Total debts are more than twice higher as capital. According to the optimal capital structure, the total debt and capital ratio should be 1 (Rodic et al. 2017). So, future increases in leverage levels will harm the profitability ratio.

Manufacturing companies are characterized by a higher fixed assets ratio, more than 50% in the assets structure. The results indicate no significant impact of the fixed assets ratio on the profitability ratio. According to this, asset structure does not affect the profitability ratio.

Rsquare of the first regression model is 0.22, showing that 22% of model variations can be explained. According to the findings of the first regression model, it can be concluded that hypothesis  $H_1$  is partially confirmed.

Results of the second regression model with the dependent variable return on equity (ROE) show that size and growth significantly impact ROE. In contrast, leverage negatively impacts it. The results of the  $p$ -value are less than 0,05, and these findings indicate that all of these variables are significant at the level of 95%. These independent variables' impact has the same direction on ROE as on ROA. Larger companies can achieve a higher rate of ROE. Increasing the sales growth in the current period will lead to a higher rate of ROE. Increasing the leverage level of manufacturing companies with a high leverage ratio will lead to a lower rate of profitability measured as ROE.

On the other hand, the independent variables such as fixed assets ratio and current ratio do not significantly impact the profitability of manufacturing companies in Serbia. The results of the second regression model are very similar to those of the first.

These indicate that the most important factors of profitability, measured as ROA or ROE, are size, sales growth, and leverage with the same direction effect. These findings follow previous research findings (Azhagaiah et al., 2012; Škuflić et al., 2016; Kant, 2018; Pervan et al., 2019).

Rsquare of the second regression model is 0.45 and shows that 45% of model variations are explained. Also, according to these findings, it can be concluded that hypothesis H<sub>2</sub> is partially confirmed.

These research results can be very useful information for future business decisions of various internal and external users since it makes a profile of manufacturing companies by associating companies' internal characteristics with the intensity and direction of profitability ratios.

## Conclusion

The profitability of manufacturing companies from sector C in the Republic of Serbia during the period of 2017-2020 has a declining trend from 2018-2019, with a slight increase in 2020 compared to 2019. In 2019, the amount of ROA was 1,48% and ROE 1,82%, indicating a low rate of profitability. On the other hand, Serbia manufacturing companies achieved an average ROA of 2,63% and 5.95% for ROE, both positive but at a relatively low value. Companies from the manufacturing sector do not have an average problem with liquidity; however, they are over-indebted or indebted significantly, above the ratio of 50:50 capital and debt.

Additionally, two regression models were conducted to investigate which internal factors significantly affected ROA and ROE as dependent variables. Results of the first model showed that size, current ratio, and growth have a significant positive impact on ROA, while leverage significantly negatively impacts ROA. Results of the second model show that size and growth have a significant positive impact on ROE, while leverage has a negative impact on it. The results indicate that larger companies have a higher ROA rate. The growth of liquidity ratio and sales lead to an increase in ROA, while the growth of indebtedness contributes to a reduced ROA. The fixed assets ratio is insignificant in the ROA model. The results for ROE indicate a similar situation; however, the current ratio and fixed assets ratio has shown to be insignificant in the ROE model.

This research's limitation is focusing on the manufacturing sector in one country, the Republic of Serbia, and using companies listed on the Belgrade stock exchange. Future analysis should include similar manufacturing companies and markets in the EU to investigate similarities and differences in profitability. The research results provide information about the profitability of manufacturing companies in the Republic of Serbia. It can be of interest to management and investors of companies to improve the performance of sector C.

## References

1. Akinleye, G. T., Akomolafe, L. (2019), „Capital Structure and Profitability of Manufacturing Firms listed on the Nigerian Stock Exchange“, *Information Management and Business Review*, Vol.11 No. 3, pp. 27-34,
2. Akinleye, G. T., Ogunleye, J.S. (2019), “Liquidity and The Profitability of Manufacturing Firms in Nigeria,” *Applied Finance and Accounting*, Vol.5 No,2, pp.68-73.
3. Azhagaiah, R., Deepa, R. (2012), „Determinants of Profitability of Food Industry in India: A Size-Wise Analysis, *Management* “, Vol.7 No.2, pp. 111-128.
4. Chandrapala, P.; Knapkova, A. (2013), “Firm-specific factors and financial performance of firms in the Czech Republic”, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, Vol.61 No. 7, pp. 2183-2190.

5. Dakić, S., Mijić, K. (2020), „Regression analysis of the impact of internal factors on return on assets: A case of meat processing enterprises in Serbia,” *Strategic Management*, Vol.25 No.1.
6. Goddard, J., Tavakoli, M., & Wilson, J. O. S. (2005), Determinants of profitability in European manufacturing and services: Evidence from dynamic panel model. *Applied Financial Economics*, Vol.15 No.18, pp. 1269-1282.
7. Isik, O., Tasgin, U. (2017), „Profitability and Its Determinants in Turkish Manufacturing Industry: Evidence from a Dynamic Panel Model,” *International Journal of Economics and Finance*, Vol.9 No.8, pp. 66-75.
8. Kant, M. (2018), “Factors influencing the profitability of manufacturing firms listed on the New York Stock Exchange” (Bachelor's thesis, University of Twente).
9. Mijić, K., & Jakšić, D. (2017), “The determinants of agricultural industry profitability: evidence from southeast Europe”. *Custos e Agronegocio on line*, Vol. 13 No. 1, pp. 154-173.
10. Mijić, K., Rađo, D. (2021), Profitability Analysis of Audit Firms – Evidence from Republic of Serbia. *ENTRENOVA ENTERprise Research InNOVation Conference*. Vol.7 No.1, pp. 273-282.
11. Pervan, M., Pervan, I., & Ćurak, M. (2019), “Determinants of firm profitability in the Croatian manufacturing industry: evidence from dynamic panel analysis”. *Economic research-Ekonomska istraživanja*, Vol.32 No.1, pp. 968-981.
12. Rodić, J., Andrić, M., Vukelić, G., Vuković, B. (2017), *Analiza finansijskih izveštaja*. Subotica: Ekonomski fakultet u Subotici.
13. Škuflić, L., Mlinarić, D., & Družić, M. (2016, April), “Determinants of firm profitability in Croatia's manufacturing sector”. In *International Conference on Economic and Social Studies ICESoS 2016-Proceedings Book*, pp. 269-282.

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