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ANALYSIS OF PROFITABILITY OF SERBIAN MANUFACTURING COMPANIES BEFORE AND DURING COVID-19 PANDEMIC

Abstract

The authors analysed the profitability of the Serbian manufacturing companies before and during the Covid-19 pandemic. The sample consists of fifty largest manufacturing companies by operating income in 2022. Observation time includes the period from 2017 to 2022. The financial statements of the selected companies had been used in the analysis covering the period before and during the Covid-19 pandemic in order to make a comparison between two periods. The authors use the IBM SPSS software for the statistical analysis of the data. The main aim of this paper is to determine whether the profitability of the observed companies differed significantly before and during the pandemic. For this purpose paired samples t-test is used. According to the obtain results there were no significant differences in profitability of Serbian manufacturing companies before and during the Covid-19 pandemic. This research may highlight potential areas for improvement in crisis management and government support for the manufacturing sector.

Key words: *Profitability, Financial statements, ROA, Covid-19 pandemic and Serbia*

JEL classification: *G30, G32, G40*

АНАЛИЗА ПРОФИТАБИЛНОСТИ ПРЕДУЗЕЋА ПРЕРАЂИВАЧКЕ ИНДУСТРИЈЕ У СРБИЈИ ПРЕ И ТОКОМ ПАНДЕМИЈЕ ЦОВИД-19

Апстракт

Аутори су анализирали профитабилност предузећа прерађивачког сектора Србије пре и током пандемије Цовид-19. Узорак чини педесет предузећа прерађивачких предузећа, чија је профитабилност анализирана за период од 2017. године до 2022. године. Селекција предузећа извршена је на основу критеријума опадајућих пословних прихода исказаних у билансу успеха 2022. године. Финан-

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сијски извештаји одабраних компанија коришћени су у анализи која покрива период пре и током пандемије како би се направило поређење између два периода. За статистичку анализу података аутори су користили софтвер ИБМ СПСС. Основни циљ овог рада је да се утврди да ли се профитабилност посматраних компанија значајно разликовала пре и током пандемије. У ту сврху коришћен је паиред самплес т-тест. Према добијеним резултатима, није било значајнијих разлика у профитабилности српских прерађивачких предузећа пре и током пандемије. Ово истраживање може указати на потенцијалне области за унапређење менаџмента у кризним ситуацијама и државној подршци прерађивачком сектору.

Кључне речи: *прерађивачка индустрија, профитабилност, РОА, Цовид-19 пандемија, Србија*

Introduction

The Covid-19 pandemic led to a global crisis that affected nearly all aspects of life. The goal of this research is to examine the differences in profitability of Serbian manufacturing companies before and during the COVID-19 pandemic. By analyzing financial data from both periods, this study aims to identify the extent to which the pandemic influenced the performance of manufacturing firms in Serbia. The research will also explore the factors contributing to the changes in profitability, such as government interventions, changes in consumer behavior, and disruptions in supply chains. While it can be asserted that the pandemic did not undermine the stability of major world currencies or financial markets in the long term (Balaban et al., 2023), Zečević et al. (2022) noted that it caused significant disruptions of global supply chains, highlighting the necessity of explore the alternatives. It had a significant impact on the airline industry (Radić et al., 2021). Njegomir (2021) concludes that the Covid-19 pandemic resulted in a record decline in retail sales accelerating the development of the digital economy. According to the World Bank report (2020), Serbia faced a recession caused by the Covid-19 pandemic, which led to a decrease in GDP, an increase in the fiscal deficit, and rising public debt, while Paunović and Blagojević (2021)emphasized that Covid-19 does not impact all companies in the same way.

Research Questions: How did the profitability of Serbian manufacturing companies change before and during the COVID-19 pandemic? What were the key factors that contributed to the changes in profitability of Serbian manufacturing companies during the pandemic?

To what extent did government measures (such as financial aid, tax relief, or lockdowns) impact the profitability of Serbian manufacturing firms? Are there differences in the impact of the pandemic on small, medium, and large manufacturing companies in Serbia? What lessons can be learned from the profitability trends of Serbian manufacturing companies that can be applied to future economic crises?

The profitability of the companies across different sectors is a frequently analyzed concept in numerous scientific studies, considering that a high rate of profitability

significantly contributes to the well-being of individuals, economic entities, the state, and the broader community (Mirjanić and Karić, 2022; Lukić and Vojteški Kljenak, 2023). The following sections will provide a detailed examination of recent empirical studies aimed at analysing the profitability of different companies in the Republic of Serbia.

Literature review

Joksimović and Beke-Trivunac (2021) conclude that the largest global banks were well-capitalized and therefore prepared for the shock caused by the pandemic, thanks to the implementation of stricter regulatory rules during the outbreak of the Covid-19 pandemic. On the other hand, Lukić (2023) concludes that the profitability of the banking sector in the Republic of Serbia was significantly undermined by the pandemic. Knežević et al. (2022) show that the profitability of hospitality companies in the Republic of Serbia experienced a dramatic decline during the pandemic. Small and medium-sized companies in the Republic of Serbia were also significantly affected by the Covid-19 pandemic, which is reflected in the fact that their profitability significantly decreased during the pandemic. (Todić and Milić, 2021). Tica et al. (2023) show that Covid-19 pandemic has negative impact on construction companies in Bosnia and Herzegovina.

Table 1: The impact of COVID-19 on profitability – Results of previous studies

Author's	Sample	Period	Methodology	Results
Bangun et al. (2023)	30 banks listed on ISE	2017-2022	Wilcoxon rank and paired samples t-test	There is diference
Vojtekova and Kliestik (2024)	321 companies from SK NACE I	2016-2021	Nonparametric test	There is diference
Putri et al. (2023)	4 state-owned banks in Indonesia	2019-2020	Comparative quantitative analysis	There is diference
Qadri et al. (2023)	34 banks from the South Asian region	2016-2020	Wilcoxon rank test	There is diference
Surya and Suhendah (2023)	105 companies from food and beverages listed in Indonesia Stock Exchange	2019-2020	Wilcoxon rank and paired samples t-test	There is diference
Purwaningsih and Pernamasari (2023)	44 manufacturing companies listed on IDX	2018-2021	Paired samples t-test	Mixed results
Rathnayaka, R. M. U. R. and Gunasekara, A. L. (2023)	18 material sector companies in Sri Lanka	2018-2021	Nonparametric test	There is diference
Hamzah et al. (2022)	PT United Tractors Tbk	2019-2020	Comparative quantitative analysis	There is diference
Darma et al. (2022)	18 companies incorporated in IDX30	2019-2020	Quantitative descriptive approach	Mixed results
Knežević et al. (2022)	100 hotel companies in Serbia	2019-2020	Wilcoxon rank and paired samples t-test	There is diference
Daryanto et al. (2021)	PT Japfa Comfeed Indonesia	2019-2020	Paired samples t-test	There is no diference

Source: Authors' based on results of previous studies

Considering the results of the previous studies (Table 1), the authors formulated an initial hypothesis positing that there is a significant difference in profitability of the manufacturing companies in the Republic of Serbia before and during COVID-19 pandemic. According to official data from the World Health Organization, the official start of the Covid-19 pandemic is considered to be January 30, 2020, while May 5, 2023, was declared the end of the Covid-19 pandemic. In accordance with the main hypothesis, following auxiliary hypotheses have been formulated.

H_1: There is significant difference in ROE before and during the Covid-19 pandemic in manufacturing companies in Serbia.

H_2: There is significant difference in EBITDA before and during the Covid-19 pandemic in manufacturing companies in Serbia.

H_3: There is significant difference in ROA before and during the Covid-19 pandemic in manufacturing companies in Serbia.

In accordance with the stated hypotheses, the following research tasks have been defined: collecting financial data on ROE, EBITDA, and ROA before and during the Covid-19 pandemic, analyzing descriptive statistics, testing for significant differences, and identifying key factors influencing profitability changes. In accordance with the results of previous studies, the authors expect a significant difference in the profitability of manufacturing sector companies before and during the pandemic.

Research Design, Methodology, Research Tasks and Hypothesis

Financial analysis enables the identification of the relevant profitability indicators by examining the financial statements of enterprises. The authors used the SPSS 20 software program in order to analyse the profitability of manufacturing companies in the period before and during the Covid-19 pandemic. The research methods employed in the study include descriptive and comparative analysis, methods of induction and deduction, as well as content analysis of available literature.

The sample consists of 50 manufacturing companies in the Republic of Serbia. The companies were selected based on the criterion of declining business revenues observed in 2022. Companies for which there were no data for any of the observed years used in the analysis, during the period from 2017 to 2022, were excluded from the sample. The assumption is that financial statements of the observed companies from 2020, 2021, and 2022 were influenced by specific factors arising from the Covid-19 pandemic, while the financial statements from 2017, 2018, and 2019 were not affected by the specific factors arising from the Covid-19 pandemic.

$$ROE = \frac{Net\ Income}{Total\ Equity}$$

$$EBITDA\ margina = \frac{EBITDA}{Business\ Revenue}$$

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

According to data from the Statistical Office of the Republic of Serbia, the manufacturing sector contributed to the GDP of the Republic of Serbia 15.1% in 2017, 14.5% in 2018, 13.7% in 2019, 13.3% in 2020, 13% in 2021, and 13.5% in 2022. In order to adequately analyse the profitability of the manufacturing companies in the Republic of Serbia before and during the Covid-19 pandemic, the authors analysed the following indicators: ROE (Return on Equity), EBITDA margin, and ROA (Return on Assets). ROA is the most commonly used profitability indicator in research papers (Stoiljković, 2024; Milošev, 2021; Vržina and Dimitrijević, 2020; Vuković and Jakšić, 2019). The indicators used in the study were calculated based on data available on the official website of the Serbian Business Registers Agency. Below is presented an overview of the formulas used to calculate the profitability indicators used in this study.

Research results

The means, standard deviations, minimum, and maximum values of the ROE for the observed manufacturing companies on an annual basis, covering the period from 2017 to 2022, are presented in Table 2.

Table 2. Descriptive statistics of ROE in the period from 2017 to 2022

Profitability indicator	N	Minimum	Maximum	Mean	Std. Deviation
ROE2017	50	-,7928	,8681	,232202	,2632365
ROE2018	50	-,7603	,6527	,179084	,2154522
ROE2019	50	-,0655	,6802	,176706	,1514930
ROE2020	50	-,5223	,7423	,141740	,1931576
ROE2021	50	-,2827	,7358	,184938	,1652532
ROE2022	50	-,3515	,9185	,212304	,2324542
Valid N (listwise)	50				

Source: Authors' calculation based on financial sheets from APR using SPSS

The means, standard deviations, minimum, and maximum values of the EBITDA margin for the observed manufacturing companies on an annual basis, covering the period from 2017 to 2022, are presented in Table 3.

Table 3. Descriptive statistics of EBITDA margin in the period from 2017 to 2022

Profitability indicator	N	Minimum	Maximum	Mean	Std. Deviation
EBITDAmargina2017	50	,0214	,3532	,139860	,0890113
EBITDAmargina2018	50	-,0091	,3739	,138320	,0956265
EBITDAmargina2019	50	-,0052	,4193	,135030	,0978576
EBITDAmargina2020	50	-,1154	,4614	,141166	,1118562
EBITDAmargina2021	50	-,0705	,4033	,143526	,1013625
EBITDAmargina2022	50	-,0905	,3943	,138794	,1008692
Valid N (listwise)	50				

Source: Authors' calculation based on financial sheets from APR using SPSS

The means, standard deviations, minimum, and maximum values of the ROA margin for the observed manufacturing companies on an annual basis, covering the period from 2017 to 2022, are presented in Table 4.

Table 4. Descriptive statistics of ROA in the period from 2017 to 2022

Profitability indicator	N	Minimum	Maximum	Mean	Std. Deviation
ROA2017	50	-,3269	,4041	,094312	,1012558
ROA2018	50	-,1734	,3419	,082432	,0892720
ROA2019	50	-,0487	,3444	,083800	,0744266
ROA2020	50	-,2620	,4301	,075804	,0969997
ROA2021	50	-,1922	,4500	,096416	,0927838
ROA2022	50	-,2406	,3936	,103322	,1070317
Valid N (listwise)	50				

Source: Authors' calculation based on financial sheets from APR using SPSS

Based on the results from Tables 1-3, it can be concluded that the profitability of the 50 analyzed manufacturing companies during the period from 2017 to 2022 were similar before and during the Covid-19 pandemic. It is assumed that the increase in the prices of raw materials was accompanied by a rise in sales prices, and consequently, business revenues. As a result, profitability indicators remained stable, suggesting that Covid-19 did not negatively impact the profitability of the observed companies.

In order to obtain adequate results, the authors employed a paired-samples t-test to assess the statistical significance of the differences between the means for the ROE, EBITDA margin, and ROA obtained in 2017, 2018, 2019, 2020, 2021, and 2022. The same test for this purpose was also applied by Surya and Suhendah (2023), Purwaningsih and Pernamasari (2023), Knežević et al. (2022) and Daryanto et al. (2021). In Table 4 are presented the results of the T-test for the differences between the means for the ROE. The statistical significance of the differences between the means was examined using the paired-samples T-test, for the following comparisons: ROE in 2017 and 2020, ROE in 2017 and 2021, ROE in 2017 and 2022, ROE in 2018 and 2020, ROE in 2018 and 2021, ROE in 2018 and 2022, ROE in 2019 and 2020, ROE in 2019 and 2021, and ROE in 2019 and 2022.

The research was conducted at a significance level of 0.05, corresponding to a 95% confidence interval. Since the p-value of the test (0.035) is less than the significance level of 0.05, the null hypothesis of equality between the means is rejected, leading to the conclusion that there is a statistically significant difference between the average ROE in 2017 and the average ROE in 2020. Conversely, the null hypothesis of equality between the means is accepted, concluding that there is no statistically significant difference between the means: of the ROE in 2017 and 2021, given that the p-value of the test (0.202) is greater than the significance level of 0.05; of the ROE in 2017 and 2022, given that the p-value of the test (0.680) is greater than the significance level of 0.05; of the ROE in 2018 and 2020, given that the p-value of the test (0.320) is greater than the significance level of 0.05; of the ROE in 2018 and 2021, given that the p-value of the test (0.865) is greater than the significance level of 0.05; of the ROE in 2018 and 2022, given that the p-value of the test (0.501) is greater than the significance level of 0.05; of

the ROE in 2019 and 2020, given that the p-value of the test (0.082) is greater than the significance level of 0.05; of the ROE in 2019 and 2021, given that the p-value of the test (0.668) is greater than the significance level of 0.05; of the ROE in 2019 and 2022, given that the p-value of the test (0.291) is greater than the significance level of 0.05.

Table 5. T-test of differences between arithmetic means of ROE

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ROE2017 - ROE2020	,0904620	,2956800	,0418155	,0064307	,1744933	2,163	49	,035
Pair 2	ROE2017 - ROE2021	,0472640	,2586402	,0365773	-,0262407	,1207687	1,292	49	,202
Pair 3	ROE2017 - ROE2022	,0198980	,3389754	,0479384	-,0764377	,1162337	,415	49	,680
Pair 4	ROE2018 - ROE2020	,0373440	,2627007	,0371515	-,0373147	,1120027	1,005	49	,320
Pair 5	ROE2018 - ROE2021	-,0058540	,2429008	,0343514	-,0748856	,0631776	-,170	49	,865
Pair 6	ROE2018 - ROE2022	-,0332200	,3468905	,0490577	-,1318052	,0653652	-,677	49	,501
Pair 7	ROE2019 - ROE2020	,0349660	,1392054	,0196866	-,0045957	,0745277	1,776	49	,082
Pair 8	ROE2019 - ROE2021	-,0082320	,1350573	,0191000	-,0466149	,0301509	-,431	49	,668
Pair 9	ROE2019 - ROE2022	-,0355980	,2358397	,0333528	-,1026229	,0314269	-1,067	49	,291

Source: Authors' calculation based on financial sheets from APR using SPSS

In Table 6 are presented the results of the T-test for the differences between the means of the EBITDA margin. Using the paired-samples T-test, the statistical significance of the differences between the means was examined for the following comparisons: EBITDA margin in 2017 and 2020, EBITDA margin in 2017 and 2021, EBITDA margin in 2017 and 2022, EBITDA margin in 2018 and 2020, EBITDA margin in 2018 and 2021, EBITDA margin in 2018 and 2022, EBITDA margin in 2019 and 2020, EBITDA margin in 2019 and 2021, and EBITDA margin in 2019 and 2022.

The research was conducted at a significance level of 0.05, corresponding to a 95% confidence interval. The null hypothesis of equality between the means is accepted, concluding that there is no statistically significant difference between the means: of the EBITDA margin in 2017 and 2020, given that the p-value of the test (0.883) is greater than the significance level of 0.05; of the EBITDA margin in 2017 and 2021, given that the p-value of the test (0.640) is greater than the significance level of 0.05; of the EBITDA

margin in 2017 and 2022, given that the p-value of the test (0.910) is greater than the significance level of 0.05; of the EBITDA margin in 2018 and 2020, given that the p-value of the test (0.682) is greater than the significance level of 0.05; of the EBITDA margin in 2018 and 2021, given that the p-value of the test (0.400) is greater than the significance level of 0.05; of the EBITDA margin in 2018 and 2022, given that the p-value of the test (0.963) is greater than the significance level of 0.05; of the EBITDA margin in 2019 and 2020, given that the p-value of the test (0.266) is greater than the significance level of 0.05; of the EBITDA margin in 2019 and 2021, given that the p-value of the test (0.126) is greater than the significance level of 0.05; of the EBITDA margin in 2019 and 2022, given that the p-value of the test (0.695) is greater than the significance level of 0.05.

Table 6. T-test of differences between arithmetic means of EBITDA margin

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	EBITDAmargina 2017 – EBITDAmargina 2020	-,0013060	,0625344	,0088437	-,0190781	,0164661	-,148	49	,883
Pair 2	EBITDAmargina 2017 – EBITDAmargina 2021	-,0036660	,0550531	,0077857	-,0193119	,0119799	-,471	49	,640
Pair 3	EBITDAmargina 2017 – EBITDAmargina 2022	,0010660	,0662609	,0093707	-,0177651	,0198971	,114	49	,910
Pair 4	EBITDAmargina 2018 – EBITDAmargina 2020	-,0028460	,0488888	,0069139	-,0167401	,0110481	-,412	49	,682
Pair 5	EBITDAmargina 2018 – EBITDAmargina 2021	-,0052060	,0433694	,0061334	-,0175314	,0071194	-,849	49	,400
Pair 6	EBITDAmargina 2018 – EBITDAmargina 2022	-,0004740	,0714101	,0100989	-,0207685	,0198205	-,047	49	,963

Pair 7	EBITDAmargina 2019 – EBITDAmargina 2020	-,0061360	,0385477	,0054515	-,0170911	,0048191	-1,126	49	,266
Pair 8	EBITDAmargina 2019 – EBITDAmargina 2021	-,0084960	,0385956	,0054582	-,0194647	,0024727	-1,557	49	,126
Pair 9	EBITDAmargina 2019 – EBITDAmargina 2022	-,0037640	,0674513	,0095390	-,0229334	,0154054	-,395	49	,695

Source: Authors' calculation based on financial sheets from APR using SPSS

Table 7. T-test of the differences between arithmetic means of ROA

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ROA2017 - ROA2020	,0185080	,1131062	,0159956	-,0136364	,0506524	1,157	49	,253
Pair 2	ROA2017 - ROA2021	-,0021040	,1058078	,0149635	-,0321742	,0279662	-,141	49	,889
Pair 3	ROA2017 - ROA2022	-,0090100	,1300159	,0183870	-,0459601	,0279401	-,490	49	,626
Pair 4	ROA2018 - ROA2020	,0066280	,0962954	,0136182	-,0207388	,0339948	,487	49	,629
Pair 5	ROA2018 - ROA2021	-,0139840	,0881504	,0124663	-,0390361	,0110681	-1,122	49	,267
Pair 6	ROA2018 - ROA2022	-,0208900	,1301843	,0184108	-,0578880	,0161080	-1,135	49	,262
Pair 7	ROA2019 - ROA2020	,0079960	,0562421	,0079538	-,0079878	,0239798	1,005	49	,320
Pair 8	ROA2019 - ROA2021	-,0126160	,0609292	,0086167	-,0299319	,0046999	-1,464	49	,150
Pair 9	ROA2019 - ROA2022	-,0195220	,0926834	,0131074	-,0458623	,0068183	-1,489	49	,143

Source: Authors' calculation based on financial sheets from APR using SPSS

In Table 7 are presented the results of the T-test for the differences between the means of the ROA. Using the paired-samples T-test, the statistical significance of the differences between the means was examined for the following comparisons: ROA in 2017 and 2020, ROA in 2017 and 2021, ROA in 2017 and 2022, ROA in 2018 and 2020, ROA in 2018 and 2021, ROA in 2018 and 2022, ROA in 2019 and 2020, ROA in 2019 and 2021, and ROA in 2019 and 2022.

The research was conducted at a significance level of 0.05, corresponding to a 95% confidence interval. The null hypothesis of equality between the means is accepted, concluding that there is no statistically significant difference between the means: of the ROA in 2017 and 2020, given that the p-value of the test (0.253) is greater than the significance level of 0.05; of the ROA in 2017 and 2021, given that the p-value of the test (0.889) is greater than the significance level of 0.05; of the ROA in 2017 and 2022, given that the p-value of the test (0.626) is greater than the significance level of 0.05; of the ROA in 2018 and 2020, given that the p-value of the test (0.629) is greater than the significance level of 0.05; of the ROA in 2018 and 2021, given that the p-value of the test (0.267) is greater than the significance level of 0.05; of the ROA in 2018 and 2022, given that the p-value of the test (0.262) is greater than the significance level of 0.05; of the ROA in 2019 and 2020, given that the p-value of the test (0.320) is greater than the significance level of 0.05; of the ROA in 2019 and 2021, given that the p-value of the test (0.150) is greater than the significance level of 0.05; of the ROA in 2019 and 2022, given that the p-value of the test (0.143) is greater than the significance level of 0.05. The results obtained do not confirm the hypotheses that were formed based on previous empirical research. However, the previous studies had a completely different research sample. Additionally, the results of the research may indicate that the management of manufacturing companies effectively managed costs during the pandemic period and adjusted sales prices in a way that the pandemic did not affect the profitability of the analyzed companies. Additionally, the research findings may also lead to the conclusion that the government's measures to mitigate the negative effects of the pandemic contributed to the reduction of costs for manufacturing companies.

Conclusion

Based on the results presented in Tables 1-6, the authors conclude that the profitability of the observed manufacturing companies had remained stable during the period from 2017 to 2022. Despite the negative impact of the Covid-19 pandemic on almost all areas of life, it appears that the increase in the prices of raw materials was accompanied by a rise in sales prices, and consequently, business revenues in manufacturing companies. As a result, profitability indicators remained stable, suggesting that Covid-19 did not negatively affect the profitability of the observed companies in the Republic of Serbia.

The authors utilized the paired-samples T-test to test the statistical significance of the difference between the means for indicators such as ROE, EBITDA margin, and ROA in 2017, 2018, 2019, 2020, 2021, and 2022. The research was conducted at a significance level of 0.05, corresponding to a confidence interval of 95%. Considering that the corresponding p-values of the applied test exceed the significance level of 0.05, the null hypotheses regarding the equality of the ROE means in the period before (2018 and 2019) and during the pandemic

(2020, 2021, and 2022) cannot be rejected. The statistically significant difference between the ROE means in 2017 and 2020 were exceptions. Since the corresponding p-values of the test exceeded the significance level of 0.05, the null hypotheses regarding the equality of the EBITDA margin means in the period before (2017, 2018, and 2019) and during the Covid19 pandemic (2020, 2021, and 2022) cannot be rejected. The null hypotheses regarding the equality of the ROA means in the period before (2017, 2018, and 2019) and during the Covid-19 pandemic (2020, 2021, and 2022) also cannot be rejected taking into account that the corresponding p-values of the applied test exceeded the significance level of 0.05.

This study provides practical implications for corporate management informing investors about the stability of manufacturing companies. Its scientific contribution lies in advancing the understanding of financial performance during economic disruptions. However, certain limitations must be acknowledged, including the relatively short time frame of analysis. Future research should extend the analysis to long-term financial effects, and compare different industries within Serbia.

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