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Financial Leverage and Financial Performance Before and During The Pandemic

Wisudanto¹, I Putu Gede Nuka Nandaka², Hanuf Machfirotul Rizan³

¹Management Study Program, Airlangga University, Indonesia, wisudanto@feb.unair.ac.id

²Management Study Program, Airlangga University, Indonesia, nuka666nandaka@gmail.com

³Management Study Program, Airlangga University, Indonesia.

Corresponding Author: wisudanto@feb.unair.ac.id¹

Abstract: This study aims to examine the differences in financial performance before and during the pandemic and the effect of financial leverage on financial performance before and during the pandemic. In this study, the proxy for measuring financial performance is ROE, and the measurement of financial leverage is DAR. The sample for this study was taken using purposive sampling, and the analysis used panel data regression with EViews 9 software. The sample in this study was the manufacturing industry during the 2017–2022 period. The results of the hypothesis indicate that ROE differs before and during the pandemic using the paired Wilcoxon test. Furthermore, the results of the hypothesis of financial leverage before the pandemic using the Fixed Effect Model (FEM) test showed a positive effect on financial performance. Meanwhile, financial leverage during the pandemic using the Random Effect Model (REM) test showed a negative effect on financial performance.

Keywords: Financial leverage, ROE, Size, Age, Pandemic.

INTRODUCTION

The introduction contains the research background in a concise and clear manner; Finance is the key to every business. Corporate finance is used for working capital and capital expenditures. It is also crucial for maintaining the company's continued growth. Some companies use debt for funding, while others use equity financing to meet their financial needs. The continued growth of globalization has made competition in the business world increasingly intense and competitive. Fierce competition drives companies to continuously strive to increase profits. This factor is also closely linked to financial performance, which is a crucial component in achieving company goals (Ali et al., 2022).

The manufacturing industry is specifically profit-oriented, playing a role in transforming raw materials into goods ready for marketing or use in other production processes, thereby creating added value and contributing significantly to company profits. The industrial sector has the potential to drive economic growth, increasing production volume and the number of goods produced. Growth in the manufacturing sector can provide expanding job prospects and increasing community incomes (Syara et al., 2019).

The pandemic has impacted the global economy and can affect all aspects of human life, both individual and social dynamics within society, including companies in Indonesia (Wisudanto et al., 2023). Indonesia, experiencing the economic crisis caused by the pandemic, has had a widespread impact on various industrial sectors. The pandemic's impact not only affected public health but also resulted in a significant decline in profits and financial performance, worsening companies' financial situations and hampering the growth and stability of several industries (Devi, 2020).

Financial performance is one of the factors influencing the pandemic, as seen through investment portfolios. A portfolio is a collection of assets held by an investor, encompassing various types of investments, such as stocks and bonds, and reflecting the goals and objectives they seek to achieve. Increasing potential returns within an investment portfolio through the use of financial leverage can allow investors access to a wider range of assets and stocks. This can increase potential returns if the investment is profitable, while simultaneously increasing returns and risks (Wisudanto et al., 2021).

Despite various efforts, the uncertainty surrounding the pandemic's end continues to pose numerous economic challenges. Along with mitigation efforts, the global economy has slowed significantly and at an unprecedented rate. The impact of the pandemic is clearly visible in Indonesia's record 2.07% GDP decline in Q4 2020 (BPS, 2021).

Table 1. Contribution of the Manufacturing Industry to the Indonesian Economy 2017-2022

YEAR	CONTRIBUTION (%)
2017	20,50%
2018	20,27%
2019	19,70%
2020	20,79%
2021	19,25%
2022	18,34%

Source: Central Statistics Agency (BPS) 2022

Based on the report from the Central Statistics Agency (BPS) in Figure 1.1, it can be concluded that the manufacturing industry plays a very important role as a leading sector that contributes the most to Gross Domestic Product (GDP), namely 20.50% in 2017, ranking fourth in the world. In 2018, the manufacturing industry contributed 20.27% and in 2019, 19.70%. In the 2018-2019 period, there was a very drastic decline in domestic growth, reaching -3.75%, due to the COVID-19 cases, which impacted decreasing demand from abroad. Another impact of COVID-19 was the restriction of business fields, resulting in the Indonesian economy experiencing a contraction, increasing unemployment and poverty in Indonesia (BPS, 2021).

Haque & Varghese (2021) stated that most companies have the potential to remain operational. This continued effort may prevent or delay bankruptcy in the face of structural changes, including changes in shareholder ownership, which will also alter the proportion. This requires companies to be prudent in determining their financing. Some companies choose debt, while others choose equity financing. The decision to use a company's financial structure depends on its organizational structure, size, and decision-making policies (J. Ali et al., 2022).

Healthy and sustainable economic development requires more than just funding. While funding is key to improving product quality and competing with other companies, improving a company's own performance is crucial for supporting growth and competitiveness. Companies

hope that issuing shares to investors will generate funds to improve their performance. If these results are positive, investors will be able to assess the company's performance and value it highly. This, in turn, gives investors a better chance of maintaining and increasing its share price and attracting more investment in the future (Al-janadi, 2021).

The impact of financial leverage on corporate performance is a highly complex topic that is frequently debated among policymakers and researchers. Modigliani and Miller's (1958, 1963) theory suggests that capital structure continues to play a fundamental role in corporate finance. Contributions from empirical studies and other schools of thought also provide additional insights into the differential relationship between financial leverage and corporate financial performance. For most companies, capital structure plays a crucial role in strategic and operational decisions (Berger et al., 1997; Anderson et al., 2004). Furthermore, financial leverage promotes effective monitoring and reduces managerial opportunism, thereby ensuring discipline through the enforcement of lender rights (Qian et al., 2015).

High financial leverage among companies increased corporate earnings, leading to increased excessive risk-taking for several years before the 2007-2008 global financial crisis. The crisis loosened macroeconomic and financial structures, resulting in higher operational instability in many developed and emerging markets. High financial costs negatively impact earnings per share. High financial leverage also means high interest payments, resulting in lower earnings per share (M. Ali, 2014).

The above study clearly identifies that most companies will usually prefer fixed payments for a certain period, for the use of debt in the company's capital structure that finances fixed payments can affect the company's performance, because high debt can affect interest costs and financial burdens that must be borne by the company. Avoiding fixed payments, companies use equity financing to generate funds and to provide ownership to equity holders. Share ownership divided among various shareholders can affect company performance in several aspects that vary depending on the ownership structure, type of shareholder, and how corporate decisions are managed.

Pecking Order Theory

The Pecking Order Theory, introduced by Myers and Majluf (1984), states that companies essentially have a hierarchy in selecting funding sources. Companies tend to prioritize the use of internal funds, such as retained earnings, over external financing through debt or new share issuance. This is based on considerations to avoid the high information costs that often arise when companies must seek external funding. In many cases, these information costs include the risks a company may incur due to market perceptions of new share issuances or requests for large loans.

Trade-Off Theory

The Trade-Off Theory, first introduced through Modigliani and Miller's theory of capital structure irrelevance in 1958, and later expanded with the concept of interest tax deductions in 1963, offers a deeper understanding of the balance between the benefits and risks of using debt. The Trade-Off Theory, also known as the equilibrium theory of capital structure, emphasizes that companies can increase their value by utilizing debt up to a certain point. This is due to the tax shield benefits of debt interest, which can reduce the company's tax burden. However, this theory also emphasizes the risk of bankruptcy, which increases with increasing leverage. Companies will continue to increase debt until the tax benefits of additional debt are equal to the potential costs associated with financial distress or bankruptcy (Myers, 2001).

COVID-19 Situation

The COVID-19 pandemic began in late 2019 in Wuhan, China, and quickly spread worldwide. The World Health Organization (WHO) declared COVID-19 a global pandemic.

The disease is caused by the SARS-CoV-2 virus, which is highly contagious through direct contact and respiratory droplets. Its impact is widespread, including disruptions to the health system, economy, education, and social life. Its spread reached all provinces in a short time, with initial response marred by unpreparedness, weak coordination, and limited capacity of the health and economic systems. Policies implemented included large-scale social restrictions (PSBB), strengthening health service capacity, and providing economic assistance to affected communities. This pandemic demonstrated the importance of coordinated governance, social solidarity, transparent public communication, and strengthening the health system to face similar crises in the future (Yunita, 2021).

Financial Performance

Financial performance reflects management's achievement in achieving strategic goals and generating optimal profits. This encompasses various aspects to meet shareholder expectations and achieve success (Wisudanto et al., 2024). Financial performance also reflects how well a company manages its operations to achieve desired results with efficiency and effectiveness, as seen through the financial condition reflected in published financial reports. Financial statement analysis is an effective method for understanding a company's financial condition. This information is crucial for assessing management performance in previous periods and serves as a basis for planning future corporate strategies (Sudana, 2015). Financial performance needs to be analyzed so that companies can review and evaluate the company's strategies and achieve its targets. Financial performance is also used as a review tool to identify prospects and potential for company development (Hasanudin et al., 2020).

Financial Leverage

Financial leverage arises when a company finances its operations using debt with a fixed burden in the form of interest payments (Sudana, 2015). Management also has the strategic option of using debt as a source of capital to fund its operations. Therefore, the use of debt policy is carried out by measuring the debt-to-asset ratio (DAR), which indicates the proportion of total debt to total assets. The higher the DAR, the greater the proportion of total debt used to finance the company's assets (Wisudanto et al., 2023).

Financial Leverage on Financial Performance

Financial leverage is used to obtain funding sources through debt to finance operational activities. It also serves to evaluate and analyze the proportion of equity and debt used to finance a company's assets (Muttaqin, 2023). Simply put, financial leverage indicates how a company's assets are invested by debt (Mwangi et al., 2014). The maximum financial leverage ratio indicates that the company is using more debt than equity.

METHOD

Difference Test

Research Approach

The descriptive quantitative approach aims to analyze hypotheses using measurable data, examine differences in independent variables, and test the influence of independent variables on dependent variables using statistical techniques and panel data analysis models.

Data Types and Sources

Secondary data was obtained from the financial reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2017 to 2022. Data was obtained from the IDX website at www.idx.co.id or from the company's official website.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2. Descriptive Statistics Before and During the Pandemic (2017-2022)

Variable	Obs	Mean	Max	Min	Std. Dev
ROE_sebelum pandemi	375	7.70	82.94	-54.6	12.37
ROE_saat pandemi	375	4.93	52.73	-81.26	14.12

Source: Eviews 9, processed data

Table 2. explains that before the pandemic, the highest ROE value was 82.94 and the lowest was -54.6, with an average of 7.70 with a standard deviation of 12.37. During the pandemic, the highest ROE value was 52.73 and the lowest was -81.26, with an average of 4.93 with a standard deviation of 14.12.

Wilcoxon difference test

Table 3. Wilcoxon Difference Test Results Before and During the Pandemic (2017-2022)

Method	Value	p-Value
Wilcoxon/mann-Whitney	0.193150	0.0186

According to table 3, the output resulting from the Value of 0.193150 is the result of calculations based on the distribution of data in both groups which shows the magnitude of a difference that occurs with a p-Value of 0.0186 <0.05 ($\alpha = 5\%$) which can be concluded that the results of the Wilcoxon paired difference test show that there is a significant difference in ROE before and during the pandemic.

Panel Data Regression Test Before the Pandemic

Descriptive Statistics Before the Pandemic

Table 4. Descriptive Statistics Before the Pandemic (2017-2019)

Variable	Obs	Mean	Max	Min	Std. Dev
ROE_sebelum pandemi	375	7.70	82.94	-54.6	12.375
LEV_sebelum pandemi	375	38.02	89.75	1.36	18.834
SIZE_sebelum pandemi	375	28.48	33.49	24.62	1.659
AGE_sebelum pandemi	375	3.50	4.83	1.10	0.473

Sumber: Eviews 9, data diolah

Table 4. explains that before the pandemic, the highest ROE value was 82.94 and the lowest was -54.6, while the average was 7.70 with a Std. Deviation of 12,375. The highest LEV value was 89.75 and the lowest was 1.36, while the average was 38.02 with a Std. Deviation of 18,834. The highest SIZE value was 33.49 and the lowest was 24.62, while the average was 28.48 with a Std. Deviation of 1,659. The highest AGE value was 4.83 and the lowest was 1.10, while the average was 3.50 with a Std. Deviation of 0.473.

Testing the Best Model Before the Pandemic

Testing the CEM with FEM (Chow Test)

Table 5. Chow Test Results Before the Pandemic (2017-2019)

Effect Test	Statistic	p-Value
Cross- Section F	4.935080	0.0000

According to Table 4.4, the resulting output from the p-value is $0.0000 < 0.05$ ($\alpha = 5\%$). Therefore, H0 (CEM model) is rejected and H1 (FEM model) is accepted. Thus, the Fixed Effect Model (FEM) is selected as the most appropriate model. The selection of this FEM model allows for the Hausman test to proceed to the next stage.

FEM Test with REM (Hausman Test)

Table 6. Hausman Test Results Before the Pandemic (2017-2019)

Test Summary	Chi-sq. Statistic	p-Value
Cross- Section Random	10.148373	0.0173

Sumber: Eviews 9, data diolah

According to table 6, the resulting output shows a p-value of $0.0173 < 0.05$ ($\alpha = 5\%$). Therefore, H0 (REM Model) is rejected and H1 (FEM model) is accepted, so the Fixed Effect Model (FEM) is selected as the most appropriate model. The selection of the FEM model is strengthened by the results of the Chow test and the Hausman test. Therefore, the Lagrange Multiplier test is not necessary. Thus, the results of this research hypothesis are selected, namely the Fixed Effect Model (FEM).

Pre-pandemic Estimation Results

Table 7. Panel Data Regression Before the Pandemic (2017-2019)

	Coefficient	Std. Error	t-Statistic	p-Value
C	124.1972	100.6842	1.233531	0.2186
LEV	0.167585	0.094547	1.772516	0.0775*
SIZE	-2.998690	3.803968	-0.788306	0.4313
AGE	-10.69071	12.41491	-0.861119	0.3900
R-squared	0.729079			
F-Statistic	5.233891			
Prob(F-statistic)	0.000000			

*** signifikan 1% ** signifikan 5%, *signifikan 10%

According to Table 7, the output generated by the Fixed Effects Model (FEM) shows that the t-test is used to partially evaluate the influence of the independent variables on the dependent variable. Meanwhile, the F-test results show an F-statistic of 5.233891 with a Prob (F-statistic) of 0.000000.

The panel regression results of the FEM model show:

1. LEV: t-Statistic 1.772516, Probability $0.0775 < 0.1$ ($\alpha = 10\%$), it is concluded that Financial Leverage (DAR) has a significant positive effect on financial performance (ROE).
2. SIZE: t-Statistic -0.788306, Probability $0.4313 > 0.05$ ($\alpha = 5\%$), it is concluded that Size has an insignificant negative effect on financial performance (ROE).
3. AGE: t-Statistic -0.861119, Probability $0.3900 > 0.05$ ($\alpha = 5\%$), it is concluded that Age has an insignificant negative effect on financial performance (ROE).

Classical Assumptions

Multicollinearity Test

Table 8. Multicollinearity Test Before the Pandemic (2017-2019)

	LEV	SIZE	AGE
LEV	1.00000	0.27590	0.15209
SIZE	0.27590	1.00000	0.22831

AGE	0.15209	0.22831	1.00000
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Table 8. explains that the correlation values between the independent variables (financial leverage, size, and age) are all less than 0.80. This indicates that there is no significant multicollinearity problem between the independent variables, meaning that multicollinearity will not affect the accuracy of the regression model estimation.

Heteroscedasticity Test

Table 9. Heteroscedasticity Test Before the Pandemic (2017-2019)

	Coefficient	Std. Error	t-Statistic	p-Value
C	3.551966	15.25817	0.232791	0.8161
LEV	0.006224	0.014328	0.434368	0.6644
SIZE	-0.080658	0.576471	-0.139916	0.8888
AGE	-0.002880	1.881414	-0.001531	0.9988

According to table 9, the output produced by the p-Value on the Leverage variable is $0.6644 > 0.05$, Size is $0.8888 > 0.05$, and Age is $0.9988 > 0.05$. Therefore, it can be concluded that the results of all variables have a p-Value > 0.05 so they are free from heteroscedasticity.

Panel Data Regression Test During the Pandemic

Descriptive Statistics During the Pandemic

Table 10. Descriptive Statistics During the Pandemic (2020-2022)

Variable	Obs	Mean	Max	Min	Std. Dev
ROE_saat pandemi	375	4.93	52.73	-81.26	14.127
LEV_saat pandemi	375	37.42	88.66	0.25	19.648
SIZE_saat pandemi	375	28.62	33.66	24.46	1.730
AGE_saat pandemi	375	3.59	4.85	1.79	0.415

Table 10, explains that before the pandemic, the highest ROE value was 52.73 and the lowest was -81.26, while the average was 4.93 with a Std. Deviation of 14.127. The highest LEV value was 88.66 and the lowest was 0.25, while the average was 37.42 with a Std. Deviation of 19.648. The highest SIZE value was 33.66 and the lowest was 24.46, while the average was 28.62 with a Std. Deviation of 1.730. The highest AGE value was 4.85 and the lowest was 1.79, while the average was 3.59 with a Std. Deviation of 0.415.

Testing the Best Model During the Pandemic

Testing the CEM with FEM (Chow Test)

Table 11. Chow Test Results During the Pandemic (2020-2022)

Effect Test	Statistic	p-Value
Cross- Section F	4.703319	0.0000

According to table 11, the output generated from the p-Value is $0.0000 < 0.05$ ($\alpha = 5\%$) so, H0 (CEM model) is rejected and H1 (FEM Model) is accepted. Thus, the selected model is

the Fixed Effect Model (FEM). The selection of the Fixed Effect Model (FEM) allows for proceeding to the next stage with the Hausman test.

FEM Test with REM (Hausman Test)

Table 12. Hausman Test Results During the Pandemic (2020-2022)

Test Summary	Chi-sq. Statistic	p-Value
Cross- Section Random	3.925316	0.2696

Sumber: Eviews 9, data diolah

According to table 4.11, the output generated from the p-Value is $0.2696 > 0.05$ ($\alpha = 5\%$). Therefore, H0 (REM Model) is accepted and H1 (FEM model) is rejected, so the Random Effect Model (REM) is selected as the most appropriate model. This is because the selected Chow test is the Fixed Effect Model (FEM) and the selected Hausman test result is the Random Effect Model (REM), so further testing with the Lagrange Multiplier (LM) is needed to determine the appropriate model.

CEM Test with REM (Lagrange Multiplier Test)

Table 13. Lagrange Multiplier Test Results During the Pandemic (2017-2019)

Breusch-pagan	t-Statistic	p-Value
Cross- Section Random	112.9176	0.0000

Sumber: Eviews 9, data diolah

According to Table 13, the output resulting from the p-value is $0.0000 < 0.05$ ($\alpha = 5\%$), so H0 (CEM Model) is rejected and H1 (REM Model) is accepted. Thus, the selected model is the Random Effect Model (REM), which can be concluded as the best model during the pandemic period, namely the Random Effect Model (REM).

Estimation Results During the Pandemic

Table 14. Panel Data Regression Results During the Pandemic (2020-2022)

	Coefficient	Std. Error	t-Statistic	p-Value
C	-61.21904	16.62193	-3.683028	0.0003
LEV	-0.297654	0.046594	-6.388292	0.0000***
SIZE	2.993611	0.579580	5.165141	0.0000***
AGE	-2.352944	2.320895	-1.013809	0.3113
R-squared	0.127171			
F-Statistic	18.01828			
Prob(F-statistic)	0.000000			

*** signifikan 1% ** signifikan 5%, *signifikan 10%

Sumber: Eviews 9, data diolah

The selected model from the Chow and Hausman test during the pandemic (2020-2022) was the Random Effects Model (REM), as follows:

According to Table 4.13, the output of the Random Effects Model (REM) in the t-test is used to partially evaluate the effect of the independent variables on the dependent variable. Meanwhile, the f-test from the table yielded an F-statistic value of 18.01828, with a significance probability of 0.000000.

The panel regression results of the REM model show:

1. LEV: t-Statistic -6.388292, Probability 0.0000 < 0.01 ($\alpha = 1\%$), it can be concluded that Financial Leverage (DAR) has a significant negative effect on financial performance (ROE).
2. SIZE: t-Statistic 5.165141, Probability 0.0000 < 0.01 ($\alpha = 1\%$), it can be concluded that Size has a significant positive effect on financial performance (ROE).
3. AGE: t-Statistic -1.013809, Probability 0.3113 > 0.05 ($\alpha = 5\%$), it can be concluded that Age has an insignificant negative effect on financial performance (ROE).

8. Classical Assumptions

Multicollinearity Test

Table 15. Multicollinearity Test During the Pandemic (2020-2022)

	LEV	SIZE	AGE
LEV	1.00000	0.29425	0.09467
SIZE	0.29425	1.00000	0.21782
AGE	0.09467	0.21782	1.00000

Sumber: Eviews 9, data diolah

Table 15, explains that the correlation values between the independent variables (financial leverage, size, and age) are all less than 0.80. This indicates that there is no significant multicollinearity problem between the independent variables, meaning that multicollinearity will not affect the accuracy of the regression model estimation.

Heteroscedasticity Test

Table 16. Heteroscedasticity Test During the Pandemic (2020-2022)

	Coefficient	Std. Error	t-Statistic	p-Value
C	-2.124270	3.610250	-0.588400	0.5566
LEV	0.031814	0.009744	3.264925	0.0012
SIZE	0.095164	0.125801	0.756467	0.4498
AGE	-0.081230	0.504420	-0.161036	0.8722

According to table 16, the output produced by the p-Value on the Leverage variable is $0.0012 < 0.05$, Size is $0.4498 > 0.05$, and Age is $0.8722 > 0.05$. So it can be concluded that the results of the size and age variables have a p-Value value > 0.05 so that they are free from heteroscedasticity and leverage is not free from heteroscedasticity.

Research Discussion

Comparison of Return on Equity (ROE) Before and During the Pandemic

Based on the results of the Wilcoxon Difference Test presented in Table 4.2, it can be seen that there is a significant difference in Return on Equity (ROE) between the pre- and during the pandemic period. This test shows a p-value of $0.0186 < 0.05$ ($\alpha = 5\%$), indicating that this difference is statistically significant. In this context, a significant difference means that the financial performance of the manufacturing sector, as measured by ROE, experienced significant changes before and during the pandemic. Return on Equity (ROE) is an important indicator that describes a company's ability to generate net income from each rupiah of equity invested by shareholders. Before the pandemic, the manufacturing sector demonstrated a higher level of efficiency in converting equity into net income, as reflected in higher ROE values. This

means that manufacturing companies during this period were able to maximize the use of their capital to generate greater profits, which in turn increased the company's value in the eyes of shareholders and investors. This aligns with the basic principle of financial theory, which states that a higher ROE indicates better financial performance and greater potential for growth in a company's value (Suryawathi, 2014). However, during the pandemic, the manufacturing sector experienced a significant decline in ROE. This decline indicates that, amid global economic uncertainty, many manufacturing companies are facing difficulties in optimally utilizing their equity to generate net income. Several factors may have contributed to the decline in ROE during the pandemic, including the implementation of health protocols. This decline in ROE indicates that companies are unable to generate as much profit as before the pandemic using the same equity, which could impact the company's value.

The Effect of Financial Leverage, Size, and Age on Company Performance Before the Pandemic

This study found that financial leverage, measured by the Debt to Asset Ratio (DAR), had a significant positive effect on Return on Equity (ROE) at a 10% level in the pre-pandemic period. According to Pecking Order Theory, companies tend to prioritize internal funding sources (retained earnings) before resorting to external funding such as debt or share issuance. However, in the pre-pandemic context, when financial leverage proved to have a significant positive effect, this can be interpreted as a situation where companies utilized debt to optimally fund their assets and operations. Under these conditions, the benefits of using leverage, such as tax savings on interest (tax shields), supported the company's financial performance. Pecking Order Theory also states that companies that use debt are in a position to demonstrate confidence in future profitability because they believe they can meet their interest and debt payment obligations (Sudana, 2015). Before the pandemic, the economy was relatively stable, allowing companies to manage their debt burden well, resulting in a higher ROE.

The Effect of Financial Leverage, Size, and Age on Company Performance During the Pandemic

This study found that financial leverage had a significant negative effect on Return on Equity (ROE) at the 1% level during the pandemic. This means that increased debt can lead to a decline in a company's financial performance in terms of return on equity. This aligns with the trade-off theory that excessive debt use can increase financial costs and bankruptcy risk, thereby reducing ROE (Sudana, 2015). During the pandemic, companies with high levels of leverage may experience difficulties in meeting their debt payments and face a greater risk of default, which can reduce company value and impact financial performance during the pandemic.

CONCLUSION

Based on the results of the analysis, several conclusions regarding the variables studied are as follows:

1. The results of the test on the difference in return on equity (ROE) before and during the pandemic demonstrated a significant difference. This indicates that the financial performance of manufacturing companies, as projected by return on equity (ROE), differed between before and during the pandemic. This demonstrates that before the pandemic, many companies operated under more stable and profitable conditions, while during the pandemic, operational activities decreased due to lockdowns, resulting in a decline in financial income.
2. Test results on the financial leverage variable demonstrated a significant positive effect on return on equity (ROE) before the pandemic. This is because high financial leverage significantly impacted ROE before the pandemic, as companies could leverage debt to increase profits through tax savings and increased investment capital.

3. Test results on the financial leverage variable during the pandemic showed a significant negative effect on return on equity (ROE). This was triggered by increased financial leverage, which tended to reduce the company's ability to generate returns on equity. Unstable economic conditions during the pandemic increased the risk of using leverage, so companies with higher debt levels tended to experience greater pressure on net income.

REFERENCE

- Ali, M. (2014). Relationship between Financial Leverage and Financial Performance (Evidence of Listed Chemical Companies of Pakistan). *Research Journal of Finance and Accounting*, 5(23), 46–56.
- Binh, T.T., & hang (2019). The impact of capital structure on financial performance: Evidence from listed companies in vietnam. *Journal of asian finance, economics and business*.
- Bui et al (2023). The Effect of Capital Structure on firm Value: A study of Companies Listed on the Vietnamese stock market. *International Journal of Financial studies*.
- BKPM. (2018). Badan Koordinasi Penanaman Modal. www.BKPM.go.id. <https://peraturan.bpk.go.id/Details/169022/peraturan-bkpm-no-7-tahun-2018>
- BPS. (2021). Pertumbuhan Ekonomi Indonesia Triwulan IV-2020. *Www.Bps.Go.Id*, 13, 12. <https://www.bps.go.id/pressrelease/2021/02/05/1811/ekonomi-indonesia-2020-turun-sebesar-2-07-persen--c-to-c-.html>
- Brealey, R. A., Myers, S. C., & Allen, F (2019). Principles of Corporate finance (13nd ed). new york.
- Chung, K. H., & Zhang, H. (2016). Corporate Governance and Institutional Ownership. *The Journal of Financial and Quantitative Analysis*, 46(1), 247–273. <https://doi.org/10.1017/S0022109010000682>
- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance*, 57(6), 2741–2771. <https://doi.org/10.1111/1540-6261.00511>
- Doğan, M. (2013). Does Firm Size Affect The Firm Profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, 4(4), 53–60.
- Elyasiani, E., & Jia, J. (2010). Distribution of institutional ownership and corporate firm performance. *Journal of Banking and Finance*, 34(3), 606–620. <https://doi.org/10.1016/j.jbankfin.2009.08.018>
- Elviana, et al. (2023). Pengaruh kinerja keuangan, ukuran, dan umur perusahaan terhadap nilai perusahaan dengan pengungkapan Corporate Social Responsibility sebagai variabel moderasi. *Journal EPJA* 1(4).
- Ghozali, I. (2013). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21*. Badan Penerbit Universitas Diponegoro.
- Hasanudin, Nurwulandari, A., Adnyana, I. M., & Loviana, N. (2020). The effect of ownership and financial performance on firm value of oil and gas mining companies in Indonesia. *International Journal of Energy Economics and Policy*, 10(5), 103–109. <https://doi.org/10.32479/ijeep.9567>
- Haque, S., & Varghese, R. (2021). The COVID-19 Impact on Corporate Leverage and Financial Fragility. *International Monetary Fund*, Nov, 14–15.
- Ibhagui, O. W., & Olokoyo, F. O. (2018). Leverage and firm performance : New evidence on the role of firm size. *North American Journal of Economics and Finance*, August 2017, 1–26. <https://doi.org/10.1016/j.najef.2018.02.002>.
- Khalid, S., Ali, A., Baloch, Q. B., & Ali, N. (2014). Analysis of the Impact of Leverage on Various Measures of Corporate Performance , using Arellano and Bond Dynamic Panel Data Estimation Technique. *Abasyn Journal Of Social Sciences*, 7(1), 1–10.
- Kumala et al. (2021). Pengaruh Pandemi Virus Covid-19 terhadap laporan keuangan triwulan pada perusahaan LQ-45 yang terdaftar di Bursa Efek Indonesia. *E-JRA*, 10(03), 74-83.

- Kumar, J. (2006). Corporate Governance and Dividends Payout in India. *Journal of EmergingMarket Finance*, 5(1), 15- 58.
- Kusmayadi et al. (2022). Analysis of gas, oil, and coal company performance during pandemic of covid-19 : a case study of Indonesia. *International journal of energy economics and policy*, 12(1), 23-31.
- Lun, Y. H. V., & Quaddus, M. A. (2011). Expert Systems with Applications Firm size and performance : A study on the use of electronic commerce by container transport operators in Hong Kong. *Expert Systems With Applications*, 38(6), 7227– 7234. <https://doi.org/10.1016/j.eswa.2010.12.029>
- Manurung et al.,(2020). Relevankah Teori struktur Modal di Indonesia?. *Jurnal Akuntansi Multiparadigma*, 2020, 11 (2), 373-385
- Martin-Reyna, J. M. S., & Duran-Encalada, J. A. (2015). Effects of family ownership, debt and board composition on mexican firms performance. *International Journal of Financial Studies*, 3(1), 56–74. <https://doi.org/10.3390/ijfs3010056>
- Mulyati dan Nugrogo. (2022). Pengaruh mekanisme Good Corporate Governance dan umur perusahaan terhadap kinerja perusahaan perbankan yang terdaftar di BEI periode 2016-2020. *Jurnal mahasiswa bisnis dan manajemen*, 01(04), 64-78.
- Mwangi, L. W., Makau, Stephen, M., & Kosimbei, G. (2014). Effects of Capital Working Management on Performance of Non-Financial Companies Listed in NSE, Kenya. *Euoropean Journal of Business and Management*, 6(11), 195–205.
- Qian et al. (2015). Ownership Concentration, Family Ownership and leverage: Evidence from Malaysia. *Malaysian Journal of economic studies* s2 (2): 117-133
- Saleh, M., Zahirdin, G., & Octaviani, E. (2017). Ownership structure and corporate performance: Evidence from property and real estate public companies in Indonesia. *Investment Management and Financial Innovations*, 14(2), 252–263. [https://doi.org/10.21511/imfi.14\(2-1\).2017.10](https://doi.org/10.21511/imfi.14(2-1).2017.10)
- Salim, M., & Yadav, R. (2012). Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies. *Procedia - Social and Behavioral Sciences*, 65(ICIBSoS), 156–166. <https://doi.org/10.1016/j.sbspro.2012.11.105>
- Setiawan, R., & Gestanti, L. (2018). CEO Education, Karakteristik Perusahaan dan Kinerja Perusahaan. *Jurnal Ilmiah Manajemen*, 2(2), 101–109. <https://doi.org/10.1017/CBO9781107415324.004>
- Sudana, M. (2015). *Teori dan Praktik: Manajemen Keuangan Perusahaan* (2nd ed.). Erlangga.
- Suryawhaty, I. G. (2014). Analisis Kinerja keuangan sebelum dan sesudah merger pada perusahaan yang terdaftar di Bursa Efek Indonesia. *Jurnal Ilmiah Akuntansi dan Humanika* 3(2).
- Susmita. (2022). Analsiis Perbedaan Kinerja Keuanagan Perusahaan Transportasi di BEI sebelum dan Sesudah Pandemi Covid-19. *Jurnal Komunikasi bisnis dan manajemen* 9(1).
- Syara, F.A. (2019). Faktor-faktor yang mempengaruhi produksi industri manufaktur di Indonesia. *Jurnal Kajian ekonomi dan pembangunan*, 1 (2), 365-374.
- Velnampy, T., & Anojan, V. (2014). Financial Performance of State and Private Sector Commercial Banks: A Comparative Study during War and Post War Scenarios of Sri Lanka. *European Journal of Business and Innovation Research*, 2(1), 93–105.
- Viana, Natalis Christian, (2022). Efek Tata Kelola Perusahaan Terhadap Kinerja Perusahaan di Masa Pandemi Covid-19. *Jurnal Manajemen & Bisnis*, 4(3), 401- 412.
- Widya et al., (2023). Struktur modal likuiditas dan ukuran perusahaan penentu kinerja keuangan sektor property dan estate. *Jurnal ikrath-ekenomika* 6(2).
- Wisudanto et al., (2021). penggunaan Holding Period Return pada portofolio Saham dan Optimalisasinya ditinjau dari Studi Literatur. *jurnal Ipteks Terapan*, 15(4), 479-484.
- Wisudanto et al., (2023). Impact of Pasca Covidd-19 on Real Sector: The Study, Expectations

- and Determination of policy Directions for SDG's and Ziswaf. *Al- Azhar Journal of islamic Economic*, 117-113.
- Wisudanto et al., (2023). the influeece of investment decions, free cash flow, and policy on the financial performance of construction companies, *Jurnal ilmiah MEA (manajemen ekonomi, dan akuntansi)*, 7(3).
- Wisudanto et al., (2024). Analisa modal kinerja terhadap kinerja keuangan PT Adhi karya (persero) Tbk. *Jurnal Wicida.ac.id/php/sebatik*, 28(1)
- Wisudanto et al., (2024). mengukur kinerja dan risiko keuangan emiten BUMN Subsektor Industri Farmasi (F211). *Jurnal Wicida.ac.id/php/sebatik*, 28(1)
- Yaseen Al-janadi (2021). Ownership Structure and firm performance in the middle east a meta analysis. *Jurnal of risk and financial management*, 14(577)