



(Research) Article

The Effect of Financial Performance on Firm Value in Transportation Sector Companies Listed on the Indonesia Stock Exchange (IDX) During 2020–2024

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Abstract: This study aims to analyze the effect of financial performance on firm value in transportation sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The research uses a quantitative approach with a causal associative method, employing secondary data obtained from annual financial statements and capital market databases. Financial performance is measured using three indicators—Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE)—while firm value is measured using Earnings Per Share (EPS) and Price to Book Value (PBV). Data analysis is conducted using the Structural Equation Modeling (SEM) approach based on Partial Least Squares (SmartPLS). The results show that financial performance has a positive and significant effect on firm value, as indicated by a path coefficient of 0.8622, a t-statistic of 31.2125, and a p-value of 0.000. These findings imply that the better a company's financial performance, the higher its firm value. The results also support the Signaling Theory, which explains that strong financial performance serves as a positive signal to investors about a company's future prospects. The study highlights the strategic importance of profitability improvement, cost efficiency, and transparency in financial reporting to enhance firm value and strengthen investor confidence, especially in the transportation sector that plays a crucial role in post-pandemic economic recovery.

Keywords: Financial Performance; Firm Value; Indonesia Stock Exchange; Signaling Theory; Transportation Sector.

Received: August 02, 2025

Revised: September 02, 2025

Accepted: September 24, 2025

Published: October 07, 2025

Curr. Ver.: October 15, 2025



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1. Introduction

Financial performance is one of the main indicators that reflects a company's ability to manage its resources efficiently and effectively to generate profits. Good financial performance enhances investor confidence, strengthens competitive positioning, and indicates the company's stability and growth prospects in the future. In the context of the capital market, financial performance is not only measured by the amount of profit earned but also by financial ratios that represent profitability, efficiency, and the return generated for shareholders' investments.

Several ratios commonly used to measure financial performance include Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE). NPM indicates how much net profit is generated from every rupiah of sales, ROA reflects the ability of assets to generate earnings, while ROE describes the level of return on the capital invested by shareholders. These three indicators provide a comprehensive overview of a company's ability to create value for its shareholders through its operational activities (Shi et al., 2024).

Meanwhile, firm value reflects investors' perceptions of a company's success in achieving its objectives, as represented by its stock price in the market. A high firm value indicates that the market gives a positive assessment of the company's prospects and managerial performance. Common measures used to assess firm value include Earnings Per Share (EPS) and Price to Book Value (PBV). EPS shows the amount of profit earned per share, while PBV compares the market price of the stock with its book value.

The relationship between financial performance and firm value has been extensively discussed in financial literature. Theoretically, good financial performance is expected to increase investor confidence, thereby enhancing firm value. However, in practice, not every improvement in financial performance is immediately followed by an increase in firm value. This may be influenced by external factors such as macroeconomic conditions and market expectations, as well as internal factors like dividend policy, capital structure, and corporate governance (Dian Prasasti, 2022).

In this study, financial performance is treated as a reflective latent construct measured by the indicators NPM, ROA, and ROE. Meanwhile, firm value is also treated as a reflective latent construct measured by EPS and PBV. This approach allows for a more comprehensive causal analysis between constructs using Structural Equation Modeling based on Partial Least Squares (SmartPLS).

Furthermore, the transportation sector during the 2020–2024 period is particularly worthy of investigation due to its strategic role in supporting national economic recovery following the COVID-19 pandemic. This sector experienced significant fluctuations in financial performance caused by mobility restrictions, operational cost adjustments, and shifts in consumer behavior. Analyzing this period provides valuable insights into how transportation companies adapted their financial strategies to maintain profitability and sustain firm value amidst dynamic economic conditions (Lindgren et al., n.d.).

Through this model, the study aims to provide a deeper understanding of how financial performance affects firm value and to serve as a foundation for management and investors in making strategic decisions to enhance both performance and corporate value in the future.

2. Theoretical Review

2.1 Kinerja Keuangan

Financial performance is a measure of a company's success in generating profits and managing its resources efficiently. According to (Brigham & Houston, 2021), financial performance reflects the overall financial health of a company and its ability to generate profit from its operations.

Financial ratios are used to assess management's effectiveness in achieving the company's goals. Some common indicators include:

- a) Return on Assets (ROA): describes the company's ability to generate net profit from the total assets employed (Widita, 2025).
- b) Return on Equity (ROE): indicates the extent to which shareholders' equity is able to generate profit for the owners (Ayuriany et al., 2023).
- c) Net Profit Margin (NPM): measures how much net profit is earned from each unit of sales (Velte, 2025).

2.2 Nilai Perusahaan

Firm value reflects the extent to which the market assesses management's success in running the company. According to (Gitman & Zutter, 2015), firm value reflects investors' expectations about the company's ability to generate future cash flows.

Common indicators used to measure firm value include:

- a) Earnings Per Share (EPS): shows the net profit earned per share and serves as one of the key bases for investor evaluation (Lenormand et al., 2016).
- b) Price to Book Value (PBV): compares the market value of the company's shares with the book value of its equity (Mukherjee & Raghuram Kadali, 2022).

A high firm value indicates that investors perceive the company as having strong growth prospects and good profitability. Conversely, a decline in firm value reflects decreasing market confidence in the company's performance and governance.

- a. Net Profit Margin (NPM): measures how much net profit is earned from each unit of sales (Velte, 2025).

2.3 Hubungan Kinerja Keuangan dan Nilai Perusahaan

Theoretically, Signaling Theory explains that companies provide signals to the market through information disclosures, such as financial performance reports or dividend announcements, to reduce information asymmetry between management and investors. Positive signals—such as increasing profits, dividend payments, or high firm value—indicate good company prospects, thereby attracting investors and increasing stock prices. Conversely, negative signals may reduce investor confidence and lower the firm's market value. (Spence, 1973) Signaling theory explains that the financial information disclosed by a company serves as a signal for investors in assessing the company's performance and future prospects. Financial ratios such as ROA, ROE, and NPM act as profitability signals that can influence investment decisions.

Financial performance reflects management's ability to manage assets, capital, and other resources efficiently to generate profit and create added value for shareholders. Financial ratios such as Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM) provide a comprehensive picture of the company's profitability from various perspectives—namely, the effectiveness of asset utilization, return on equity, and the ability to generate net profit from sales. Simultaneously, financial performance has an impact on the firm's value. (Rianti et al., 2023) (Ari Ani et al., 2025) (Amrulloh et al., 2022)

3. Research Method

This study employs a quantitative approach with a causal associative method, aiming to examine the cause-and-effect relationship between financial performance and firm value. The quantitative approach is chosen because it allows an objective depiction of phenomena through measurable numerical data analysis. Meanwhile, the causal nature of the study is used to explain how changes in financial performance variables can directly or indirectly affect firm value.

The population of this research includes all infrastructure, utilities, and transportation sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The sample selection is carried out using purposive sampling based on the following criteria:

- Companies are consistently listed on the IDX throughout the observation period.
- Companies publish complete annual financial statements.
- Companies have the required financial ratio data such as NPM, ROA, ROE, EPS, and PBV.

Companies are not delisted during the research period. The final sample meeting these criteria becomes the object of analysis in this study.

The data used are secondary data obtained from the companies' annual financial reports. The main data sources include the official IDX website (<https://www.idx.co.id>), the official websites of each company, and capital market databases such as Yahoo Finance or RTI Business to complement information related to stock prices and market value. The use of secondary data is considered relevant because it is objective, verifiable, and publicly accessible.

Tabel 1. Data Sample

Sampel Perusahaan Transportasi 2020-2025
PT. Temas Tbk
PT. Adi Sarana Armada Tbk
PT. Satria Antaran Prima Tbk
PT. Pelayaran Nelly Dwi Putri Tbk
PT. Batavia Prosperindo Trans Tbk
PT. Mineral Sumberdaya Mandiri Tbk
PT. Armada Berjaya Trans Tbk

(Sabir et al., 2024)

In this study, financial performance is treated as a reflective latent construct, measured through three main indicators: Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE).

- NPM describes the company's ability to generate net profit from each unit of sales.
- ROA indicates the effectiveness of asset utilization in generating profit.
- ROE represents the rate of return on equity invested by shareholders.

Meanwhile, firm value is also treated as a reflective latent construct, measured by two indicators: Earnings Per Share (EPS) and Price to Book Value (PBV).

- EPS shows the net profit earned per share.
- PBV compares the market value of shares with their book value.

Data analysis is conducted using Structural Equation Modeling (SEM) based on Partial Least Squares (SmartPLS). This technique is selected because it can analyze complex causal relationships among latent variables, even when the sample size is relatively small and the data are not normally distributed. The analysis stages include:

Evaluation of the measurement model (outer model) to test construct validity and reliability, and

Evaluation of the structural model (inner model) to assess the strength and direction of relationships among latent variables.

Significance testing is performed using the bootstrapping technique, where a t-statistic value greater than 1.96 and a p-value below 0.05 indicate a significant relationship.

Conceptually, the research model illustrates that financial performance, consisting of NPM, ROA, and ROE, affects firm value, represented by EPS and PBV. Through this model, the study aims to provide empirical evidence of how effectively a company's financial performance contributes to enhancing its value in the eyes of investors and the capital market.

The analysis is conducted using the Structural Equation Modeling (SEM) method based on Partial Least Squares (SmartPLS) to examine the causal relationship between the latent variables of financial performance (NPM, ROA, and ROE) and firm value (EPS and PBV). The discussion begins with a description of the research data, followed by the results of the measurement model (outer model) and structural model (inner model) testing to assess validity, reliability, and the relationships among variables.

Through this discussion, the study seeks to explain the extent to which financial performance influences the enhancement of firm value. The findings are then interpreted with reference to financial theories and previous research, providing a comprehensive overview of the role of profitability in determining firm value and its implications for managerial decision-making and investment policy in the Indonesian capital market.

3.1 Validity and Reliability Testing

The factor loading value is used to test the convergent validity of each indicator with respect to the latent construct it measures. An indicator is considered valid when its loading factor exceeds the recommended minimum threshold of 0.7. This indicates that the indicator can adequately and consistently explain the latent variable. According to Hartono and Abdillah (2009), the higher the loading factor value, the greater the contribution of the indicator in forming the latent construct it represents. Thus, indicators with a loading factor greater than 0.7 are considered to meet the criteria for convergent validity and can be retained in the research model.

The results of the testing in this study show that all indicators—both in the financial performance construct (NPM, ROA, and ROE) and the firm value construct (EPS and PBV)—have loading factor values above 0.7. This means that each indicator has a good level of compatibility with the construct it represents and can accurately reflect the latent variable.

With these criteria being met, it can be concluded that all indicators in this study are convergently valid, and therefore, they are suitable for further analysis in the inner model evaluation using the SmartPLS approach.

Tabel 2. Loading Factor

Variabel	Indikator	Loading Factor	Validity
Kinerja Keuangan	NPM	0,877	Valid
	ROA	0,899	Valid
	ROE	0,901	Valid
	EPS	0,720	Valid
Nilai Perusahaan	PBV	0,942	Valid

Composite Reliability is a measure used to assess the level of internal consistency among indicators in measuring a latent construct. Indicators that exhibit high consistency will produce a higher Composite Reliability value, indicating that the variable is reliable in explaining the construct it represents. According to Hartono and Abdillah (2009), a variable is considered to have good reliability when its Composite Reliability value exceeds 0.70. This value signifies that the indicators within the construct have a high degree of uniformity and can yield stable measurement results.

The results of the testing in this study show that all latent variables—both financial performance and firm value—have Composite Reliability values above 0.70. This indicates that each indicator within the respective constructs consistently measures the intended variable.

Thus, it can be concluded that all constructs in this research model meet the criteria for good reliability and are therefore suitable for further analysis in the next stage, namely the testing of relationships among variables in the structural model (inner model). These findings also strengthen the validity of the research results, as they demonstrate that the measurement instruments used are reliable and trustworthy.

Tabel 3. Composite Reliability.

Variabel	Composite Reliability
Kinerja Keuangan	0,921433133
Nilai Perusahaan	0,822930114

3.2 Hypothesis Testing

The bootstrapping results are used to test the significance of relationships among latent variables in the structural model (inner model). This procedure involves repeatedly resampling from the original dataset to generate an empirical distribution of parameter estimates. Through the bootstrapping technique, t-statistic and p-value values are obtained to determine whether the relationships among variables in the research model are statistically significant.

According to (Hair & Alamer, 2022), a research hypothesis is considered supported (significant) if the t-statistic value exceeds 1.96 at a 5% significance level ($p\text{-value} < 0.05$). Conversely, if the $t\text{-statistic} \leq 1.96$ or $p\text{-value} \geq 0.05$, the relationship between variables is deemed not significant, and the hypothesis is not supported. Thus, bootstrapping results play a crucial role in determining the empirical validity of the tested structural model.

In this study, the bootstrapping results are used to determine the extent to which financial performance, measured through NPM, ROA, and ROE, affects firm value, measured through EPS and PBV. The bootstrapping data presented in the following table show the path coefficients, t-statistics, and p-values for each relationship among variables, which serve as the basis for determining whether each proposed hypothesis is statistically supported or not supported..

Tabel 3.Hasil Pengolahan Data Uji Hipotesis.

Hipotesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Kinerja Keuangan -> Nilai Perusahaan	0,8622	0,8818	0,0276	31,2125	0,0000

Based on the results of the bootstrapping test in the structural model (inner model), the path coefficient value obtained for the relationship between financial performance and firm value is 0.8622. This value indicates a strong and positive relationship, meaning that the better a company's financial performance, the higher its firm value.

Furthermore, the t-statistic value of 31.2125 far exceeds the minimum threshold of 1.96, and the p-value of 0.0000 (< 0.05) confirms that the relationship is statistically significant. Therefore, it can be concluded that the hypothesis stating that financial performance has a positive and significant effect on firm value is supported by the empirical data.

4. Discussion

Furthermore, the significant relationship between financial performance and firm value indicates that investors in the Indonesian capital market still regard profitability as the main factor in company valuation. When a company shows improvements in NPM, ROA, and ROE ratios, it increases investors' expectations regarding dividend distribution and potential stock price growth. Thus, enhanced financial performance not only provides internal benefits in the form of efficiency and operational stability but also yields external impacts such as higher market value and greater public trust in the company.

Overall, the results of this study reaffirm the importance of optimal financial performance management for companies. Management should focus on improving profitability through cost efficiency strategies, asset optimization, and productivity enhancement to increase investment attractiveness and strengthen firm value in the eyes of the market. Therefore, strong financial performance not only reflects internal success but also serves as a fundamental driver for sustainable firm value growth.

These findings reinforce the signaling theory proposed by (Spence, 1973), which states that good financial performance serves as a positive signal to investors regarding the company's future prospects. Increased profitability, as reflected in the NPM, ROA, and ROE ratios, builds investor confidence in the company's ability to create value, which is ultimately reflected in higher firm value indicators such as EPS and PBV. This finding is also consistent with previous studies by (Amrulloh et al., 2022), (Rianti et al., 2023), and (Ari Ani et al., 2025), which demonstrate that financial performance has a significant positive effect on firm value.

5. Managerial Implications

Managerially, the results of this study have strategic implications for corporate decision-making. First, management should focus on strengthening profitability as the main driver of firm value enhancement. This can be achieved through cost structure optimization, product innovation, and efficiency in asset and working capital management.

Second, companies must ensure transparency and accountability in their financial reporting, as reliable financial information serves as an important signal to investors. The higher the market's confidence in the quality of financial information, the stronger the positive perception of the company's value will be.

Third, in the context of competition within the infrastructure, utilities, and transportation sectors, management needs to strike a balance between long-term growth and short-term financial stability. Maintaining healthy profitability ratios will be key to preserving firm value and enhancing investment attractiveness.

Overall, these findings emphasize that effective financial performance management is not merely an accounting aspect but a corporate strategy that directly influences the value and sustainability of companies in the Indonesian capital market.

References

- Amrulloh, A., Wibawa, K. D., Fadilla, R. N., & Aditya, F. (2022). Kinerja keuangan perusahaan sub sektor rokok yang terdaftar di Bursa Efek Indonesia periode 2016–2020. *Jurnal Ekonomi Bisnis, Manajemen dan Akuntansi (JEBMA)*, 2(2), 60–68. <https://doi.org/10.47709/jebma.v2i2.1829>
- Ari Ani, D., Tim, U., Semarang, K., & Tengah, J. (2025). Kinerja keuangan dan nilai perusahaan: Bukti empiris dari pengaruh ROA, ROE, NIM, dan DER. *Jurnal Ekonomi dan Keuangan*, 3(2), 163–175. <https://doi.org/10.61132/moneter.v3i2.1819>
- Ayuriany, T., Lee, J., & Hidayati, I. (2023). What access-for-all entails? Examining commuting experiences from subjective and objective accessibility in a fast-growing city, Jakarta. *Asian Transport Studies*, 9, 100115. <https://doi.org/10.1016/j.eastsj.2023.100115>
- Brigham, E. F., & Houston, J. F. (2021). *Fundamentals of financial management*. Cengage Learning. <https://books.google.co.id/books?id=9uUXEAAAQBAJ>
- Dian Prasasti. (2022). Pengaruh investasi, tenaga kerja dan pengeluaran pemerintah terhadap pertumbuhan ekonomi di kabupaten & kota Sulawesi Selatan. *Jurnal Ilmu Ekonomi (JIE)*, 6(3), 478–490.
- Gitman, L. J., & Zutter, C. J. (2015). *Principles of managerial finance*. Pearson Education. <https://books.google.co.id/books?id=tx2-ngEA-CAAJ>
- Hair, J., & Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- Lenormand, M., Bassolas, A., & Ramasco, J. J. (2016). Systematic comparison of trip distribution laws and models. *Journal of Transport Geography*. <https://doi.org/10.1016/j.jtrangeo.2015.12.008>
- Lindgren, E., Pettersson-Lidbom, P., & Tyrefors, B. (n.d.). *The causal effect of transport infrastructure: Evidence from a new historical database*.
- Mukherjee, J., & Raghuram Kadali, B. (2022). A comprehensive review of trip generation models based on land use characteristics. *Transportation Research Part D: Transport and Environment*, 109, 103340. <https://doi.org/10.1016/j.trd.2022.103340>
- Rianti, S., Ridwan, P., Pramukti, A., Faisal, M., Pelu, A. R., & Muslim, M. (2023). Financial performance on firm value with corporate social responsibility disclosure as moderating variable. *Paradoks: Jurnal Ilmu Ekonomi*, 6(2), 71–85. <http://www.kemenperin.go.id>
- Sabir, M., Akram, M., & Mian, R. U. (2024). Transport, logistics, and economic growth nexus: A cross-country analysis. *Transport and Telecommunication*, 25(4), 462–472. <https://doi.org/10.2478/ttj-2024-0033>
- Shi, J., Bai, T., Zhao, Z., & Tan, H. (2024). Driving economic growth through transportation infrastructure: An in-depth spatial econometric analysis. *Sustainability (Switzerland)*, 16(10), 4283. <https://doi.org/10.3390/su16104283>
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374. <https://competitionandappropriation.econ.ucla.edu/wp-content/uploads/sites/95/2017/08/Spence1973.pdf>
- Velte, P. (2025). Audit quality and materiality disclosure quality in integrated reporting: The moderating effect of carbon assurance quality. *Corporate Social Responsibility and Environmental Management*, 32(3), 3785–3801. <https://doi.org/10.1002/csr.3153>
- Widita, A. (2025). Rural-urban migration and household transportation expenditures: A causal exploration method using Indonesian panel data. *Transportation Research Interdisciplinary Perspectives*, 31, 101408. <https://doi.org/10.1016/j.trip.2025.101408>