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Debt and Investment Policies as Determinants of Firm Value: Evidence from Indonesia's Land Transportation Sector

Kebijakan Hutang dan Keputusan Investasi sebagai Determinan Nilai Perusahaan: Bukti pada Sektor Transportasi Darat Indonesia

Rani Octaria*, Nur Salma, Hasbullah

Universitas Mitra Indonesia, Lampung, Indonesia

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ABSTRACT

Maintaining firm value is a strategic problem in Indonesia's capital-intensive land transportation business, which is also extremely vulnerable to demand shocks, fuel prices, and infrastructure expenses. There is currently little data on how internal finance policies affect business value in this particular industry because most prior research has employed mixed-industry samples. This study examines how investment choices and debt policies affect the firm value of land transportation businesses listed between 2020 and 2024 on the Indonesia Stock Exchange (IDX). Data from seven companies (35 firm-year observations) were gathered from audited financial statements using a quantitative method, and SPSS 26 was used for multiple linear regression analysis. The Debt to Assets Ratio (DAR), Price Earnings Ratio (PER), and Price to Book Value (PBV) serve as proxies for debt policy, investment decisions, and company value, respectively. The finding indicates that while investment choices do not significantly affect business value, debt policy does have a positive and significant impact. Nonetheless, investment choices and debt policies significantly affect the business value, accounting for 60.4% of the variance. These results demonstrate how crucial financing structure to value creation in capital-intensive land transportation companies and suggest that management should maximize leverage use while better informing the market about long-term investment plans.

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ABSTRAK

Mempertahankan nilai perusahaan merupakan masalah strategis dalam bisnis transportasi darat Indonesia yang padat modal, yang juga sangat rentan terhadap guncangan permintaan, harga bahan bakar, dan biaya infrastruktur. Saat ini terdapat sedikit data tentang bagaimana kebijakan keuangan internal memengaruhi nilai bisnis dalam industri khusus ini karena sebagian besar penelitian sebelumnya menggunakan sampel industri campuran. Studi ini mengkaji bagaimana pilihan investasi dan kebijakan utang memengaruhi nilai perusahaan bisnis transportasi darat yang terdaftar antara tahun 2020 dan 2024 di Bursa Efek Indonesia (BEI). Data dari tujuh perusahaan (35 observasi tahun perusahaan) dikumpulkan dari laporan keuangan yang telah diaudit menggunakan metode kuantitatif, dan SPSS 26 digunakan untuk analisis regresi linier berganda. Rasio Utang terhadap Aset (DAR), Rasio Harga terhadap Pendapatan (PER), dan Harga terhadap Nilai Buku (PBV) masing-masing berfungsi sebagai proksi untuk kebijakan utang, keputusan investasi, dan nilai perusahaan. Temuan menunjukkan bahwa meskipun pilihan investasi tidak secara signifikan memengaruhi nilai bisnis, kebijakan utang memiliki dampak positif dan signifikan. Meskipun demikian, pilihan investasi dan kebijakan utang bekerja sama untuk memengaruhi nilai bisnis secara signifikan, mencakup 60,4% varians. Hasil ini menunjukkan betapa pentingnya struktur pembiayaan bagi penciptaan nilai di perusahaan transportasi darat yang padat modal dan menyarankan bahwa manajemen harus memaksimalkan penggunaan leverage sekaligus memberikan informasi yang lebih baik kepada pasar tentang rencana investasi jangka panjang.

Corresponding Author:
Rani Octaria
Universitas Mitra Indonesia, Lampung, Indonesia
**email*: ranioctaria22@gmail.com

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INTRODUCTION

The transport sector and its logistics system are one of the most strategic for the national economy, which is crucial for a country like Indonesia that holds an Archipelago with a large territory. The movement of people and goods is a catalyst for economic growth. But in reality, the actual performance of the companies within this industry group, more specifically the passenger land transportation sub-sector still has a very wide fluctuation. According to data from the Central Statistics Agency (BPS), growth in the transportation sector has fallen from 19.87% in 2022 to 13.96% in 2023, with forecasts predicting a decrease to as low as9.52% in 2024. Traditionally, the transport segment incurs high level of investment with instability suffering from depressed demand, increasing operational costs as well as enhanced competition. The value of the firm is an essential consideration to evaluate company performance and businesses' investment interest, and it can also be calculated through the ratio of Price to Book Value (PBV). The variations in firm value: found for do reporting companies in this sub-sec/or are believed to be affected by the debts policies and investments of companies.

Debt policy measured by Debt to Asset Ratio (DAR) indicates how much a firm is reliant on external financing. A greater amount of debt may signpost opportunity for growth and act as a good sign about future performance (Haryono et al., 2017). The PBV, as a measure of firm value, is not only influenced by the debt ratio, but also by investment policy success. These investment decisions are manifested through the Price Earnings Ratio (PER) which determines market anticipations of future profitability. Generally, investment decision takes the account of capital allocation and net out flows to firm (Oktavia & Nugraha, 2020).

Land Transport sector, part and parcel of the national transport industry as an important segment, is capital intensive and it heavily relies on the public infrastructure. This sub-sector is also very vulnerable to rises in operating costs, which are mainly influenced by fuel prices and tolls. The sub-sector has experienced volatile performance and changes in firm value over the last five years of analysis. To demonstrate the phenomenon, Table 1 provides the Price to Book Value (PBV) of certain land transportation companies under IDX during that time period.

Table 1. Price to Book Value of Transportation Companies, 2020–2024

Code	2020	2021	2022	2023	2024	Average
ASSA	23,6	20,17	14,43	14,18	13,27	17,13
BIRD	0,05	0,05	0,05	0,04	0,04	0,05
IMJS	96,04	90,86	78,27	73,07	73,7	82,39
LRNA	0,8	0,91	1,03	0,57	0,6	0,78
WEHA	0,75	0,82	0,74	0,64	0,59	0,71
BPTR	4,05	3,96	3,5	3,12	2,95	3,52
TRJA	54,03	47,05	43,13	42,54	39,18	45,19

Source: www.idx.co.id (Processed data, 2025)

The great differences in PBV of land transportation companies which are listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024 were interpreted as a result of different strategies and managerial performance. For example, the average PBV of PT Indomobil Multi Jasa Tbk (IMJS) and PT Transkon Jaya Tbk (TRJA) was high compared to that of PT Blue Bird Tbk (BIRD). These distinctions indicate that the internal factors, such as debt policy and investment decisions, affect firm value. Debt policy reflects the firm's approach to structuring external financing, while investment decisions reflect managerial choices in allocating capital to generate future returns. These financial policies are expected to influence firm value, which can be observed through market performance indicators. Both are considered as significant determinants of the value of firms, yet they do not always generate perfectly coherent effects. This argument is supported by previous empirical studies as well, for instance Haryono et al. (2017) and that of Oktavia and Nugraha (2020), who demonstrate similar effects across industries for debt policy and investment decisions on firm value.

In light of the notable fluctuations in firm value observed among Indonesia's land transportation companies during recent years, there remains limited sector-specific evidence explaining how internal financial policies drive these variations. Previous studies predominantly examined mixed-industry samples, making it unclear whether the dynamics of debt usage and investment allocation apply similarly within the land transportation sector, which is uniquely capital-intensive, highly sensitive to fuel and infrastructure costs, and exposed to post-pandemic demand shifts. This study addresses this gap by focusing specifically on land transportation firms listed on the IDX from 2020–2024, offering a more targeted understanding of how debt policy and investment decision patterns influence firm value within this strategic sector. The novelty of this research lies in its sector-specific approach, which provides contextual evidence that has not been extensively covered in prior literature. Therefore, this study aims to examine the extent to which variations in debt policy and investment decisions are associated with firm value within this

industry context. Rather than presenting the hypotheses explicitly in list form, the study evaluates whether each variable, both individually and together, contributes to differences in firm value among the observed companies.

RESEARCH METHOD

Research Design

This study applies a quantitative research design. In line with the research objective of analyzing the effect of debt policy and investment decisions on firm value, the research framework is illustrated as follows:

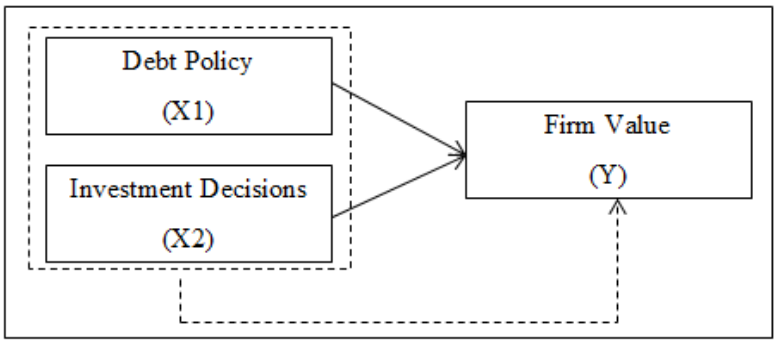

Figure 1. Conceptual Framework

Figure 1 illustrates the conceptual framework used in this study. Debt policy (DAR) and investment decisions (PER) are positioned as independent variables, while firm value (PBV) functions as the dependent variable. The framework assumes that firms' financing structure and capital allocation choices shape how investors evaluate the company's overall worth. Specifically, higher reliance on debt may signal growth opportunities and strengthen firm value when managed efficiently, while investment decisions reflect managerial confidence in future earnings. The model further implies that these two financial policies may influence firm value both individually and simultaneously, forming the basis for the empirical analysis in this research.

Population and Sample

The population in this research were transportation and logistics firms that were listed on Indonesia Stock Exchange (IDX) from 2020 to 2024 which amounted to 37 companies. Based on purposive sampling, we defined our sample by the criteria of inclusion in land transportation sub-sector and availability of full financial information. The clear selection criteria are shown in Table 2.

Table 2. Criteria for Sample Selection

No	Description	Total
1	Transportation and logistics companies already listed on IDX in 2020-2024.	37
2	Companies that are not included in the passenger land transportation sub-sector on IDX in 2020–2024.	(28)
3	Transportation companies with unavailable or incomplete data during the 2020–2024 period.	(2)
	Number of samples meeting the criteria	7
	Number of financial reports studied (7 companies × 5 years)	35

Based on the above sample selection criteria, the transportation companies eligible as research observations amount to 35 firm-year samples, categorized as 7 companies with annual data multiplied by 5 years of financial reports from 2020–2024.

Table 3. List of Research Samples

No	Code	Company Name
1	ASSA	Adi Sarana Armada Tbk.
2	BIRD	Blue Bird Tbk.
3	IMJS	Indomobil Multi Jasa Tbk.
4	LRNA	Eka Sari Lorena Transport Tbk.
5	WEHA	WEHA Transportasi Indonesia Tb
6	BPTR	Batavia Prosperindo Trans Tbk.
7	TRJA	Transkon Jaya Tbk.

Source: www.idx.co.id, 2025

Operational Definitions

Table 4. Operational Definitions

No	Variable	Definition	Indicator	Scale
1	Debt Policy (X1) Debt to Assets Ratio	Based on Kasmir (2017), the Debt to Assets Ratio (DAR) indicates the proportion of a company's assets that are financed through debt.	DAR = Total Debt / Total Assets	Ratio
2	Investment Decision (X2) Price to Earnings Ratio	Based on Kasmir (2017), the Price to Earnings ratio (PER) reflects the amount investors are prepared to pay for each unit of the company's earnings.	PER = Price per Share / Earnings per Share	Ratio
3	Firm Value	Referring to Kasmir (2017), the Price to Book Value (PBV)		Ratio

(Y) Price to Book Value	ratio compares a company's share market price to its book value per share.	PBV = Current Stock Price / Book Value per Share

Data Collection Technique

The study used documentation by collecting audited financial statements from the IDX official website (www.idx.co.id). Literature study was also conducted by reviewing academic journals, books, and other relevant sources.

Data Analysis Technique

The study employed multiple linear regression to examine the influence of debt policy and investment decisions on firm value. Statistical analysis was performed using SPSS software to generate regression coefficients, significance values, and model fit measures.

1. Classical Assumption Test: before performing regression analysis, several classical assumption tests were conducted to ensure the reliability and validity of the model.
    a. Normality Test, to confirm that the residuals follow a normal distribution.
    b. Multicollinearity Test, to ensure that the independent variables are not highly correlated.
    c. Heteroscedasticity Test, to check whether the residuals have constant variance across observations.
    d. Autocorrelation Test, to verify that residuals are independent over time. These tests ensure that the regression estimates can be interpreted accurately and are free from statistical bias.
2. Hypothesis Testing
    a. Multiple regression analysis of linear type: Sugiyono (2023) states that multiple linear regression analysis is an analysis technique used by researchers to be able to predict how the state (increase and decrease) of a dependent variable occurs if two or more independent variables are utilized as predictors (condition is increased or decreased).
    b. Determination Coefficient (R^2). R^2 - The coefficient of determination: is a measure that uses to determine how much the model can be useful in explaining the variation of dependent variable. Determination Coefficient (R^2) According to Siregar (2017), coefficient of determination which is known as R^2 is a number showing or calculating the contribution / influence that has been given by independent variable over variation from dependent variable.

c. c. t-Test. The t-test simply indicates how much power an independent variable by itself has as a predictor of variability in the dependent variable. When t_count is greater than t_table and p-value ≤ 0.05, the hypothesis is acceptable. This indicates that in isolation the independent variable has a strong impact on the dependent variable. If t-value (t_count) 0.05, the hypothesis is not accepted which means that partially independent variable does not have significant effect on dependent variable.

d. F-Test. The F-test is employed to test the collective impact of all independent variables on the dependent variable. The significance of one determinant is tested by the F-test. The F-test based simultaneous test is employed to examine the significance of the effect of all independent variables together on dependent variable.

RESULTS AND DISCUSSION

Normality Test

Table 5. Normality Test

Test	Statistic	p-value	Decision
Kolmogorov-Smirnov	0.127	0.167	Data are normally distributed

The results of the Kolmogorov–Smirnov test show a p-value of 0.167, indicating that the residuals are normally distributed. It means that the regression model meets the normality assumption, allowing the estimation results to be interpreted reliably. Normal distribution of residuals is important because it ensures that the predicted relationship between variables reflects actual data patterns rather than statistical irregularities. This is consistent with the assumption underlying classical linear regression models, where normal residuals support valid hypothesis testing (Hail & Leuz, 2023).

Heteroscedasticity Test

Table 6. Heteroscedasticity Test

Variable	Sig. Value	Decision
Debt Policy (DAR)	0.074	No heteroskedasticity
Investment Decisions (PER)	0.486	No heteroskedasticity

The Glejser test results show that both DAR and PER have p-values greater than 0.05, indicating that the model does not exhibit heteroscedasticity. It means that the variance of the residuals is consistent across observations, allowing the regression estimates to be interpreted reliably. A stable residual variance is essential because it ensures that the model's predictive accuracy is not biased toward companies with either very high or very low values. This condition is particularly relevant in the land transportation sector, where firms differ in size and asset intensity, yet this test confirms that such differences do not distort the model's statistical behavior.

Multicollinearity Test

Table 7. Multicollinearity Test

Variable	Collinearity Tolerance	Statistics VIF	Decision
Debt Policy (DAR)	0.810	1.235	No multicollinearity
Investment Decisions (PER)	0.810	1.235	No multicollinearity

The multicollinearity test results show that both DAR and PER have tolerance values above 0.10 and VIF values well below 10. It indicates that the two independent variables are not highly correlated with each other. The absence of multicollinearity means that the effect of debt policy and investment decisions on firm value can be evaluated independently, without one variable distorting affect each other. This is important in the context of this study because land transportation firms may adopt different financial strategies depending on their operational scale and asset structure. The test results confirm that the regression model can accurately capture the unique contribution of each financial policy to firm value.

Autocorrelation Test

Table 8. Autocorrelation Test

Model	Asymp.Sig(2tailed)	Decision
1	0.696	No autocorrelation

The Durbin–Watson statistic of 1.664 falls within the acceptable range ($du < DW < 4 - du$), indicating that the regression model does not experience autocorrelation. It means that the residuals are independent across observations, and the model is not influenced by systematic error patterns over time. This is particularly relevant in this study because firm financial performance data were observed across multiple years (2020–2024), where temporal dependence would be possible. The

absence of autocorrelation confirms that changes in firm value across time are explained by the model's predictors rather than by repeated time-based effects, allowing the regression results to be interpreted with confidence in terms of causal influence.

Multiple Linear Regression Analysis

Table 9. Multiple Linear Regression Analysis

Model	B	Std. Error	Beta	T	Sig.
(Constant)	-2461.092	830.480		-2.963	0.006
Debt Policy (DAR)	85.175	16.508	0.638	5.160	0.000
Investment Decisions (PER)	0.823	0.414	0.246	1.990	0.055

Based on Table 9, the multiple linear regression equation can be formulated as follows: PBV = -2461,092 + 85,175(DAR) + 0,823(PER). The interpretation of these results is as follows (1) The positive and significant coefficient of DAR indicates that companies with higher debt usage tend to have higher firm value. This supports the Trade-Off Theory, which explains that debt can increase firm value when used at an optimal level because it provides financing leverage and potential tax benefits (Sartono, 2018). In the land transportation sector, debt is commonly used to finance fleets and operational expansion, which may strengthen investor confidence. This result is consistent with findings by Haryono et al. (2017) who also show that debt structure can enhance firm value in Indonesian companies. (2) The PER variable does not significantly influence firm value in this study. This suggests that investment activities may not immediately signal value creation in the land transportation sector, which has high operating costs and longer capital recovery periods. Therefore, investment benefits may take time to be recognized by the market. This result is in line with Oktavia and Nugraha (2020), who report that investment decisions do not always directly affect firm value under uncertain market conditions. (3) When examined together, debt policy and investment decisions significantly influence firm value, with debt policy showing the stronger effect. This highlights that during the 2020–2024 period, financing structure considerations were more influential than investment signaling in shaping market valuation. The result reinforces the idea that financial leverage decisions play a central role in value formation within capital-intensive industries such as transportation (Chen & Zhao, 2021).

In summary, the regression results show that debt policy has a significant and positive influence on firm value, while investment decisions do not demonstrate a statistically meaningful effect during the study period. This indicates that financing decisions play a more immediate role in

shaping firm value in the land transportation sector, whereas the impact of investment activities may require a longer time horizon to be reflected in market valuation.

Coefficient of Determination (R^2)

Table 10. Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.777[a]	0.604	0.579	1936.78221

a. *Predictors: (Constant*), Price to Earnings Ratio, Debt to Assets Ratio

The R^2 value of 0.604 indicates that debt policy and investment decisions collectively explain 60.4% of the variation in firm value among land transportation companies. It means that the model has a relatively strong explanatory power, suggesting that financial policy plays an important role in determining firm value in this sector. However, the remaining 39.6% implies that other factors—such as profitability, market sentiment, operational efficiency, or macroeconomic conditions—also influence firm value but are not included in this model. This aligns with the view that firm value is shaped by both internal financial decisions and external business environment conditions.

t-Test

Table 11. t-Test

Model	B	Std. Error	Beta	T	Sig.
(Constant)	-2461.092	830.480		-2.963	0.006
Debt Policy (DAR)	85.175	16.508	0.638	5.160	0.000
Investment Decisions (PER)	0.823	0.414	0.246	1.990	0.055

The t-test results indicate that debt policy (DAR) has a positive and significant effect on firm value, suggesting that firms with greater use of debt tend to be valued higher by the market. It supports the Trade-Off Theory, which states that optimal debt usage can enhance firm value through financial leverage benefits as long as risk remains manageable (Sartono, 2018).

In contrast, investment decisions (PER) do not show a significant effect at the 5% level. It implies that investment activities during the 2020–2024 period may not have been perceived by investors as immediate value drivers, likely due to slower capital return cycles and cost pressures in the land transportation sector. This aligns with Oktavia and Nugraha (2020), who found that

investment decisions may require longer time horizons to be reflected in market valuation when industry conditions are uncertain.

F-Test

Table 12. F-Test

	Fhitung	Sig	Decision
1	24.405	0.000	significant

The F-test result shows a p-value of 0.000, indicating that debt policy and investment decisions jointly have a significant influence on firm value. It means that both variables, when considered together, contribute to explaining variations in firm valuation within the land transportation sector. The result is consistent with the view in firm value theory, which states that strategic financial policies collectively shape market perception (Chen & Zhao, 2021). In this context, debt supports operational expansion while investment spending reflects expectations of future performance. Therefore, the combination of financing and investment decisions plays a meaningful role in shaping how investors assess company value, even though their individual effects differ in statistical strength.

CONCLUSION

Based on the analysis of land transportation companies listed on the IDX during the 2020–2024 period, this study concludes that debt policy has a positive and significant effect on firm value, indicating that the strategic use of debt can enhance investor confidence and support operational expansion. Meanwhile, investment decisions do not show a significant effect on firm value, suggesting that the benefits of investment activities may require a longer time horizon before their benefits are reflected in market valuation. When evaluated simultaneously, debt policy and investment decisions are found to affect firm value collectively, with the model explaining 60.4% of the variation in firm value.

These results imply that companies in the land transportation sector should prioritize careful management of their financing structure, ensuring that debt is used at an optimal level to support growth without increasing financial risk excessively. Managers should also recognize that investment activities may not produce immediate market responses, especially in capital-intensive industries with longer asset recovery cycles. Therefore, investment decisions should be communicated transparently to investors to strengthen market perception of long-term value creation.

This study is limited to one industry sub-sector and a specific observation period, which may restrict the generalizability of the findings. Future research could expand the analysis to multiple industries or longer time periods to provide broader insight. Additionally, incorporating other variables such as profitability, company size, operational efficiency, or corporate governance could provide a deeper understanding of the factors influencing firm value.

REFERENCES

Chen, L., & Zhao, X. (2021). Capital Structure and Firm Value: Evidence from Emerging Markets. Journal of International Financial Management & Accounting, 32(3), 458–475.

Fridana & Asandimitra. (2020). *Analisis Faktor yang Memengaruhi Keputusan Investasi (Studi pada Mahasiswi di Surabaya).* Jurnal Muara Ilmu Ekonomi dan Bisnis.

Hail, L., & Leuz, C. (2023). Financial Reporting and Capital Market Efficiency. Journal of Accounting Research, 61(2), 345–395.

Haryono, Anggraeni, Fitriny, dan Fatima. (2017). *Pengaruh Struktur Modal dan Struktur Kepemilikan Terhadap Nilai Perusahaan.* Jurnal Akuntansi dan Keuangan Indonesia 14 (2).

Kasmir. (2019). *Analisis Laporan Keuangan. Edisi Pertama. Cetakan Keduabelas.* Depok: PT Raja Grafindo Persada.

Oktavia, D., dan Nugraha. (2020). *Pengaruh Keputu san Investasi, Keputusan pendanaan, dan Kebijakan Dividen Terhadap Nilai Perusahaan Konsumsi yang Terdaftar di Bursa Efek Indonesia Periode 2016-2018*. Jurnal Computech dan Bisnis 14.

Sartono, R. A. (2018). *Manajemen Keuangan Teori dan Aplikasi, Edisi Keempat, Cetakan Keenam.* Yogyakarta; BPEE.

Silvia, Sari, Salma, Sari. (2022). *Pengaruh Manajemen Keuangan Terhadap Nilai Perusahaan Sektor Property.* Jurnal Akuntansi dan Bisnis.

Tambunan, E.H. (2019). *Pengaruh Keputusan Investasi dan Kebijakan Hutang Terhadap Nilai Perusahaan pada Perusahaan Konstruksi Di BEI.* Universitas Sam Ratulangi.

Tandelilin, E. (2021). *Pasar Modal Manajemen Portofolio & Investasi.* PT Kanisius. Yogyakarta..