

The Influence of Capital Structure, Dividend Policy, Operational Efficiency, Profitability, and Firm Size on Firm Value

Edi Komara¹, Insan Fajri Ibrahim²

^{1,2} STIE Indonesia Banking School, Indonesia

Correspondence: edi.komara@ibs.ac.id

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ABSTRACT

This research is designed to evaluate how firm value—measured through the Price to Book Value (PBV) metric—is driven by capital structure, dividend policy, operational efficiency, profitability, and firm size. To operationalize these independent factors, the study utilizes the Debt to Equity Ratio (DER), Dividend Payout Ratio (DPR), Operating Expenses to Operating Income (BOPO), Return on Assets (ROA), and total assets as the respective proxies. This study uses quantitative methods with panel data regression analysis and secondary data from the financial statements of banks listed on the Indonesia Stock Exchange. The sample size of this study was eight banks classified as KBMI 3 and 4. The results indicate that capital structure, dividend policy, and profitability have a positive effect on firm value, while operational efficiency and firm size have a negative effect. This study recommends that company management should focus on increasing profitability and maintaining operational efficiency and financial policies to enhance firm value.



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INTRODUCTION

The banking industry plays a vital role in supporting national economic growth through its intermediation function, which involves collecting and distributing funds to the public. This positions the banking sector as one of the strategic sectors in maintaining the stability of the financial system. According to Simanungkalit et al. (2025), banks serve as a primary driver of economic activity through credit distribution and public fund management. In this context, firm value becomes a crucial indicator that reflects investor perceptions of the company's performance and future prospects (Hidayat & Santoso, 2022; Utami & Darmawan, 2023). A high firm value indicates strong investor confidence and the company's ability to create wealth for its shareholders (Putri & Handayani, 2023; Lestari et al., 2021).

In the banking sector, firm value is generally measured using Price to Book Value (PBV), which reflects how much the market values the company's book value (Nugroho & Firmansyah, 2021; Saputra et al., 2022). Therefore, increasing firm value is a primary objective for every bank to maintain competitiveness and business sustainability (Pratama & Wiksuana, 2022). Within the context of Indonesian banking, the classification of banks based on core capital is known as, Kelompok Bank Berdasarkan Modal Inti (KBMI), which is established by the Financial Services Authority (Otoritas Jasa Keuangan, 2021). Banks categorized under KBMI 3 and KBMI 4 possess large core capital and more complex operational capabilities compared to other groups (Rahman & Nugraha, 2023).

During the 2020–2024 period, the banking sector experienced significant dynamics due to the COVID-19 pandemic, which resulted in a decline in economic activity and an increase in credit risk (Hidayat & Santoso, 2022). This condition affected the financial performance of banks, including profitability and operational efficiency, which ultimately impacted firm value (Nugroho & Firmansyah, 2021; Utami & Darmawan, 2023). Nevertheless, banks classified under KBMI 3 and KBMI 4 tended

to exhibit better resilience because they were supported by substantial capital and stronger risk management capabilities (Rahman & Nugraha, 2023; Putri & Handayani, 2023).

Firm value is influenced by various internal factors, including capital structure, dividend policy, operational efficiency, profitability, and firm size. Capital structure represents the financing decision between debt and equity that can affect a company's risk and value (Pratama & Wiksuana, 2022; Kurniawan & Putra, 2022). An optimal capital structure can improve the efficiency of the cost of capital and enhance firm value, whereas excessive debt utilization can increase financial risk (Hidayat & Santoso, 2022; Nugroho & Firmansyah, 2021).

Firm value can be enhanced through an appropriate dividend policy, as demonstrated by Rahman & Nugraha (2023) and Hidayat & Santoso (2022). This is because such a policy reflects the issuer's readiness to distribute profits, with the market generally perceiving a high Dividend Payout Ratio (DPR) as a favorable signal (Utami & Darmawan, 2023; Saputra et al., 2022). However, investors do not focus solely on dividends; banking efficiency as reflected in the BOPO ratio serves as another crucial benchmark. In this regard, a lower BOPO ratio indicates significantly more efficient operational performance (Nugroho & Firmansyah, 2021).

Profitability, proxied by Return on Assets (ROA), also plays an important role in enhancing firm value because it reflects the company's capability to generate profits from its assets (Utami & Darmawan, 2023; Saputra et al., 2022). Studies show that profitability has a positive effect on firm value (Lestari et al., 2021; Putri & Handayani, 2023). Meanwhile, firm size reflects the operational scale and capacity of a company to access funding sources, although its effect on firm value still shows inconsistent results (Pratama & Wiksuana, 2022; Hidayat & Santoso, 2022).

Driven by these phenomena and the conflicting evidence in existing literature, this empirical study seeks to investigate how firm value is influenced by capital structure, dividend policy, operational efficiency, profitability, and firm size. The focus is specifically directed toward KBMI 3 and 4 banking institutions spanning the 2020–2024 period. Beyond its academic value, this research is intended to assist both corporate managers and investors in formulating sound financial strategies.

RESEARCH METHODS

The initial population for this research comprises 12 banking institutions listed on the Indonesia Stock Exchange that fall under the KBMI 3 and KBMI 4 classifications between 2020 and 2024. To refine this group, a purposive sampling approach was implemented based on predefined parameters, including the consistency of dividend payouts and the completeness of financial reports. This selection framework narrowed the focus to 8 qualifying banks, yielding a cumulative dataset of 40 observations across the five-year observation window.

The dependent variable in this study is firm value, proxied by Price to Book Value (PBV). PBV is a ratio used to measure how much the market values a company's book value, thereby reflecting investor perceptions of the company's performance and future prospects (Nugroho & Firmansyah, 2021; Saputra et al., 2022). A higher PBV value indicates a higher level of investor confidence in the company (Putri & Handayani, 2023). $PBV = (\text{Stock Price}) / (\text{Book Value per Share})$

Capital structure is proxied by the Debt to Equity Ratio (DER), which is a ratio that shows the comparison between total debt and total equity of the company. Capital structure reflects corporate policy in determining funding sources, where optimal debt utilization can enhance firm value, but excessive use can increase financial risk (Pratama & Wiksuana, 2022; Hidayat & Santoso, 2022). $DER = (\text{Total Debt}) / (\text{Total Equity})$

Dividend policy is proxied by the Dividend Payout Ratio (DPR), which is a ratio that shows the percentage of net income distributed to shareholders in the form of dividends. Dividend policy provides a positive signal to investors regarding the company's performance and prospects, thereby influencing firm value (Utami & Darmawan, 2023; Rahman & Nugraha, 2023). $DPR = (\text{Dividend per Share}) / (\text{Earning per Share})$

Operational efficiency is measured using the BOPO ratio (Operating Expenses to Operating Income). This ratio reflects the company's ability to manage operational costs to generate revenue, where a lower BOPO value indicates more efficient company performance (Nugroho & Firmansyah, 2021; Sari & Rahmawati, 2021). $BOPO = (\text{Operating Expenses}) / (\text{Operating Income})$

Profitability is proxied by Return on Assets (ROA), which is a ratio that shows the company's ability to generate profit from its total assets. A high ROA reflects good corporate performance and can

increase investor confidence in the company (Lestari et al., 2021; Utami & Darmawan, 2023). $ROA = (\text{Net Income}) / (\text{Total Assets})$

Firm size reflects the operational scale and the company's ability to access funding sources, where larger companies tend to have higher levels of investor confidence (Pratama & Wiksuana, 2022), although its effect on firm value is not always consistent (Hidayat & Santoso, 2022). $SIZE = \ln(\text{Total Assets})$

RESULTS AND DISCUSSION

Descriptive Analysis

Descriptive statistical analysis was conducted to describe the characteristics of the research data, which include the minimum, maximum, mean, and standard deviation values for each variable. The results of the descriptive analysis are presented below.

Tabel 1. Tabel Analisis Deskriptif.

	PBV	DER	DPR	BOPO	ROA	SIZE
Mean	1.620850	5.252350	0.528350	73.29380	0.019150	33.91698
Median	0.906000	5.340500	0.455000	76.50500	0.018500	33.97100
Maximum	4.778000	6.626000	1.760000	91.45900	0.038000	35.42600
Minimum	0.481000	3.165000	0.075000	32.00600	0.004000	32.35100
Std. Dev	1.315648	0.903744	0.319241	16.48678	0.008940	1.062036
Observations	40	40	40	40	40	

Based on the descriptive statistics in Table 1, the total number of data observations obtained from 8 banking companies over five years is 40 observations.

The PBV variable has a mean value of 1.620850, with a maximum value of 4.778000 and a minimum value of 0.481000. The standard deviation of 1.315648 indicates that firm value within the sample has a relatively high variation, showing a significant difference among companies regarding market valuation relative to their book value. The DER variable has a mean value of 5.252350, with a maximum value of 6.626000 and a minimum value of 3.165000. The standard deviation of 0.903744 indicates that the leverage level of the companies is relatively high and the data dispersion is small, suggesting that the capital structure across companies tends to be homogeneous. The DPR variable has a mean value of 0.528350, with a maximum value of 1.760000 and a minimum value of 0.075000. The standard deviation of 0.319241 shows a fair amount of variation in dividend payout policies, reflecting differing corporate strategies in distributing profits to shareholders. The BOPO variable has a mean value of 73.29380, with a maximum value of 91.45900 and a minimum value of 32.00600. The standard deviation of 16.48678 indicates a high level of variation in the companies' operational efficiency, showing significant differences in their ability to control operating costs relative to revenue. The ROA variable has a mean value of 0.019150, with a maximum value of 0.038000 and a minimum value of 0.004000. The standard deviation of 0.008940 indicates that the companies' profitability levels are relatively low with low variation, suggesting that asset performance across companies tends to be similar. The SIZE variable has a mean value of 33.91698, with a maximum value of 35.42600 and a minimum value of 32.35100. The standard deviation of 1.062036 indicates that the firm size within the sample is relatively homogeneous with a low level of data dispersion.

Variable Correlation

As illustrated by the empirical results in Table 2, the connections between the explanatory variables and PBV vary considerably. The strongest determinants of firm value are ROA and BOPO; ROA possesses a commanding positive correlation (0.784414), while BOPO demonstrates a pronounced negative correlation (-0.719551), which underlines the fact that superior efficiency (lower BOPO) relates heavily to increased PBV. In contrast, the remaining variables show much weaker associations. The firm size (SIZE) and DPR both have mild positive correlations of 0.265108 and 0.140719, respectively, meaning their upward movements only slightly relate to a higher PBV. Lastly, the DER variable reflects a near-zero negative correlation (-0.014784), proving that capital structure leverage has virtually no linear relationship with the bank's market value in this dataset.

Overall, the variables most dominantly correlated with PBV are ROA (strong positive) and BOPO (strong negative).

Table 2. Correlation of Research Variables

	PBV	DER	DPR	BOPO	ROA	SIZE
PBV	1.000000					
DER	-0.014784	1.000000				
DPR	0.140719	0.028686	0.000000			
BOPO	-0.719551	0.176123	0.058899	1.000000		
ROA	0.784414	0.018197	-0.092321	-0.693205	1.000000	
SIZE	0.265108	0.351090	0.035981	-0.375673	0.377646	1.000000

Research Model

Panel data regression analysis was conducted to determine the effects of capital structure, dividend policy, operational efficiency, profitability, and firm size on firm value. The following table presents the results of the linear regression analysis.

Table 3. Panel Data Linear Regression Results

Variable	Coefficient	Prob.	Kesimpulan
C	7.192325	0.1206	-
DER	0.129814	0.3875	Tidak Berpengaruh
DPR	0.908438	0.0184	Berpengaruh Positif
BOPO	-0.031928	0.0050	Berpengaruh Negatif
ROA	85.34984	0.0001	Berpengaruh Positif
SIZE	-0.177717	0.1929	Tidak Berpengaruh
R-squared	0.734494		
Adjusted R-squared	0.695449		
Prob (F-statistic)	0.000000		

Based on the results of the multiple linear regression analysis in the table, the following equation is obtained:

$$PBV = 7.192325 + 0.129814DER_{it} + 0.908438DPR_{it} - 0.031928BOPO_{it} + 85.34984ROA_{it} - 0.177717SIZE_{it}$$

Based on the multiple linear regression equation, the discussion of the results is as follows: The DER variable shows a probability value (p-value) of 0.3875, which is greater than the significance level of 0.05, with a regression coefficient value of 0.129814. This result indicates that H0 cannot be rejected; thus, it can be concluded that DER has no effect on Firm Value. Consequently, the first hypothesis of this study is rejected, meaning that DER does not affect Firm Value. The DPR variable shows a probability value of 0.0184, which is smaller than the significance level of 0.05, with a regression coefficient value of 0.908438. This explains that DPR, as an independent variable, has a positive effect on Firm Value. The BOPO variable shows a probability value of 0.0050, which is smaller than the significance level of 0.05, with a regression coefficient value of -0.031928. This explains that BOPO, as an independent variable, has a negative effect on Firm Value. The ROA variable shows a probability value of 0.0001, which is smaller than the significance level of 0.05, with a regression coefficient value of 85.34984. This explains that ROA, as an independent variable, has a positive effect on Firm Value. The SIZE variable shows a probability value of 0.1929, which is greater than the significance level of 0.05, with a regression coefficient value of -0.177717. This explains that SIZE, as an independent variable, has no effect on Firm Value. Based on the table, the Adjusted R-squared value is 0.695449, or 69.54%. This means that 69.54% of the changes (increase/decrease) in Firm Value are influenced by the variables selected by the researcher, namely Capital Structure (DER), Dividend Policy (DPR), Operational Efficiency (BOPO), Profitability (ROA), and Firm Size. Meanwhile, the remaining 30.46% is influenced by other variables not included in this study.

CONCLUSION

The Capital Structure variable, proxied by DER, has no effect on Firm Value in the KBMI 3 and 4 banking sectors for the 2020–2024 period. This indicates that DER does not directly increase Firm Value. The Dividend Policy variable, proxied by DPR, has a positive effect on Firm Value in the KBMI 3 and 4 banking sectors for the 2020–2024 period. This indicates that DPR can directly increase

Firm Value. The Operational Efficiency variable, proxied by BOPO, has a negative effect on Firm Value in the KBMI 3 and 4 banking sectors for the 2020–2024 period. This indicates that a lower BOPO value will increase Firm Value, as a higher BOPO reflects inefficiency in cost management, which directly suppresses profitability and lowers market perception of the company's performance. The Profitability variable, proxied by ROA, has a positive effect on Firm Value in the KBMI 3 and 4 banking sectors for the 2020–2024 period. This indicates that ROA can directly increase Firm Value. The Firm Size variable, proxied by SIZE, has no effect on Firm Value in the banking sector for the 2020–2024 period. This indicates that Size does not directly increase Firm Value.

Research Implications, Limitations, and Suggestions

The results of this study imply that banking management needs to focus more attention on increasing profitability as a primary effort to enhance firm value. Optimizing asset utilization to generate profits serves as a crucial strategy to attract investor confidence. Furthermore, although other variables such as capital structure, dividend policy, operational efficiency, and firm size show lesser or nonsignificant effects, companies still need to manage these aspects optimally to maintain financial performance stability and business sustainability.

This study has several limitations, including the research object being limited only to KBMI 3 and KBMI 4 banking companies, which may not fully reflect long-term conditions. Additionally, the variables used are still limited, thus not yet fully capable of explaining the variations in firm value. Moreover, several variables showed non-significant results, indicating the presence of other factors outside the research model.

Therefore, future research is suggested to expand the research object to other sectors or banking groups, extend the research period, and incorporate other variables such as liquidity, company growth, or macroeconomic factors to obtain more comprehensive results. For companies, it is recommended to remain focused on strategies that enhance profitability while optimally managing other financial factors to boost firm value and investor confidence.

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