

UNLOCKING DIVIDEND POLICY: HOW PROFITABILITY AND MARKET VALUATION DRIVE PAYOUTS IN INDONESIAN STATE OWNED BANKS

Ni Asa Rembokowati, Muhammad Haris Fadhillah

Universitas Koperasi Indonesia

niasania@ikopin.ac.id, mharisfadhillah@ikopin.ac.id

Jl. Raya Jatinangor No.KM. 20, RW.5, Cibeusi, Kec. Jatinangor, Kabupaten Sumedang, Jawa Barat

Editor's Request	Your Response	Review Submitted	Review Due
2025-10-2	2025-10-2	2025-8-18	2025-8-18

Abstract

This study analyzes the determinants of dividend policy in state-owned banks in Indonesia during 2019–2024 with the Dividend Payout Ratio (DPR) as a proxy for dividend policy and the independent variables of profitability (NPM), market valuation (PBV), leverage (DER), and earnings performance (EPS). Quarterly data were analyzed using a Fixed Effect Model (FEM) panel regression with t-test, F-test, and adjusted R-squared as model diagnostics. The results show that profitability (NPM) has a positive and significant effect on dividend policy according to signaling theory, while market valuation (PBV) has a significant negative effect, indicating that banks with high valuations tend to retain earnings. Leverage (DER) and earnings performance (EPS) do not have a significant effect, but all four variables simultaneously influence dividend policy with an adjusted R² of 0.891596, reflecting the model's high explanatory power. These findings confirm the dominant role of profitability and the negative influence of market valuation in the formation of dividend policy, contributing to the literature on dividend policy in emerging markets and providing practical implications for investors, regulators, and bank management in optimal dividend strategies.

Keywords: Dividend Policy; Profitability; Market Valuation; Leverage; Earnings Performance

Abstrak

Penelitian ini menganalisis determinan kebijakan dividen pada bank-bank BUMN di Indonesia selama 2019–2024 dengan Dividend Payout Ratio (DPR) sebagai proksi kebijakan dividen dan variabel independen profitabilitas (NPM), valuasi pasar (PBV), leverage (DER), serta kinerja laba (EPS). Data triwulanan dianalisis menggunakan regresi panel Fixed Effect Model (FEM) beserta uji t, uji F, dan adjusted R-squared sebagai diagnostik model. Hasil menunjukkan profitabilitas (NPM) berpengaruh positif dan signifikan terhadap kebijakan dividen sesuai teori sinyal, sedangkan valuasi pasar (PBV) berpengaruh signifikan negatif, mengindikasikan bank dengan valuasi tinggi cenderung menahan laba. Leverage (DER) dan kinerja laba (EPS) tidak berpengaruh signifikan, namun secara simultan keempat variabel memengaruhi kebijakan dividen dengan adjusted R² sebesar 0,891596, mencerminkan daya jelaskan model yang tinggi. Temuan ini menegaskan peran dominan profitabilitas dan pengaruh negatif valuasi pasar dalam pembentukan kebijakan dividen, memberikan kontribusi bagi literatur kebijakan dividen di pasar berkembang serta implikasi praktis bagi investor, regulator, dan manajemen bank dalam strategi dividen optimal.

Kata kunci: Kebijakan Dividen; Profitabilitas; Valuasi Pasar; Leverage; Kinerja Laba

INTRODUCTION

Dividend policy continues to be a subject of enduring interest in corporate finance, representing a critical strategic decision where firms must carefully balance shareholder rewards with the need to retain capital for sustainable growth. In the banking sector, this balance assumes heightened significance as dividend distributions directly influence regulatory capital buffers, market confidence, and long-term financial stability. The importance is particularly pronounced for Indonesia's state-owned banks (Bank Umum Milik Negara - BUMN), which occupy a dual role as both dominant market players and instruments of national economic policy, making their dividend decisions consequential for a wide range of stakeholders including investors, regulators, and the broader economy.

Extensive empirical research has established profitability metrics such as Net Profit Margin (NPM) and Return on Assets (ROA) as fundamental determinants of dividend payouts, with more profitable firms typically demonstrating greater capacity to distribute dividends. Market valuation indicators, particularly Price to Book Value (PBV), have similarly emerged as influential factors, potentially serving as signals of management's confidence in future growth prospects. However, existing studies present conflicting perspectives, especially concerning state-owned banks. While some research suggests a positive relationship between profitability and dividend payouts, other findings, including Lembong's (2020) study of Indonesian BUMN banks, indicate that higher profitability may paradoxically lead to lower dividends as earnings are retained to support strategic objectives.

The period from 2019 to 2024 presents a particularly compelling case for examination, encompassing both the unprecedented disruptions of the COVID-19 pandemic and the subsequent economic recovery phase. This turbulent era likely prompted significant adjustments in dividend policies as banks navigated between maintaining investor returns and preserving capital amid uncertainty. Yet, current literature lacks comprehensive analysis of how key financial indicators - including leverage (Debt-to-Equity Ratio/DER), earnings performance (Earnings per Share/EPS), and market valuation (PBV) - collectively influenced dividend decisions during this period within Indonesia's unique banking context. The distinctive institutional environment of Indonesian state-owned banks, characterized by special regulatory frameworks and public ownership structures, may further yield dividend behaviors that diverge from conventional corporate finance theories.

This study aims to address these research gaps by conducting a comprehensive analysis of dividend determinants in Indonesian BUMN banks during the 2019-2024 period. By examining both individual and combined effects of NPM, PBV, DER, and EPS on dividend payout ratios using quarterly data, the research seeks to provide nuanced insights into how these financial metrics interact in shaping dividend policies. The findings promise to contribute meaningfully to academic discourse on dividend policy in emerging markets while offering practical guidance for bank managers and policymakers operating in similar institutional environments. Furthermore, the focus on a period marked by significant economic volatility adds valuable perspective to understanding how dividend policies evolve under stress conditions, potentially informing more resilient financial strategies for future crises.

Profitability reflects a firm's capacity to generate earnings, which is a major determinant of dividend payout. Firms with higher profits are expected to distribute more dividends since they have sufficient retained earnings (Fama & French, 2001). Empirical studies in Indonesia also confirm a positive association between profitability and dividends (Putra & Lestari, 2020). In this study, profitability is proxied by Net Profit Margin (NPM), which measures the efficiency of converting sales into net income.

H1: Net Profit Margin (NPM) has a positive effect on dividend policy in state owned banks in Indonesia.

Market valuation reflects investor perceptions of a firm's growth prospects. Firms with high market valuation (measured through Price to Book Value, PBV) may retain earnings to finance investment opportunities, reducing the likelihood of dividend distribution (Rozeff, 1982). Firms with higher market valuations typically have easier access to external funding, leading them to pay larger dividends as a sign of confidence in their performance stability (Baker & Wurgler, 2004; Lintner, 1956). Market valuation is proxied by Price to Book Value (PBV).

H2: Price to Book Value (PBV) has a positive influence on dividend policy in state owned banks in Indonesia.

Leverage indicates a firm's reliance on debt financing. Based on agency theory, firms with high levels of debt will prefer to retain earnings to meet longterm obligations rather than distribute dividends (Jensen & Meckling, 1976). On the other hand, higher leverage reduces the free cash flow available for dividends because firms must prioritize debt repayment (Jensen, 1986). Prior findings also reveal that highly leveraged firms are less likely to pay dividends to avoid financial distress (Gill, Biger, & Tibrewala, 2010). In this study, leverage is proxied by Debt to Equity Ratio (DER)

H3: Debt to Equity Ratio (DER) has a negative effect on dividend policy in state owned banks in Indonesia

Earnings performance shows the firm's consistency in generating sustainable returns. Strong earnings performance may increase management's confidence to commit to dividend payouts (Lintner, 1956). Empirical evidence supports that firms with stable earnings are more likely to distribute dividends (Denis & Osobov, 2008). According to the dividend life cycle theory, companies with stable earnings

growth are better able to consistently maintain dividend payments (DeAngelo, DeAngelo, & Stulz, 2006). In this study, earnings performance is proxied by Earnings per Share (EPS).

H4: Earnings per Share (EPS) has a positive effect on dividend policy in state owned banks in Indonesia

A simultaneous test is needed to ensure that all independent variables in the regression model collectively contribute to explaining dividend policy (Gujarati & Porter, 2009). While each factor may individually influence dividend policy, it is important to examine their joint effect to understand the broader financial dynamics (Setiawan et al., 2024).

H5: Net Profit Margin (NPM), Price to Book Value (PBV), Debt to Equity Ratio (DER), and Earnings per Share (EPS) simultaneously influence dividend policy in state owned banks in Indonesia.

METHOD

This study employs a quantitative research approach with a causal research design, aiming to examine the effect of selected independent variables on the dependent variable both partially and simultaneously. The causal design is considered appropriate because the objective of this research is to identify and analyze cause and effect relationships between financial performance indicators and dividend policy

The population of this study consists of all state owned banks (BUMN) in Indonesia that are publicly listed on the IDX during the observation period of 2019–2024. These banks include PT Bank Mandiri Tbk (BMRI), PT Bank Rakyat Indonesia Tbk (BBRI), PT Bank Negara Indonesia Tbk (BBNI), PT Bank Tabungan Negara Tbk (BBTN), and PT Bank Syariah Indonesia Tbk (BRIS). Because the number of state-owned banks listed on the IDX is limited to these five institutions, this study adopts a census method rather than purposive sampling. Hence, all members of the population are included in the analysis, ensuring that the results are comprehensive and representative of the entire group of state owned banks.

This research employs secondary data, which are obtained from publicly available financial information, including annual reports, financial statements, and historical market data. The primary source of data collection is Stockbit.com, which provides comprehensive financial and market data of publicly listed companies in Indonesia. Additional data validation was conducted using the official websites of the respective banks and the Indonesia Stock Exchange (IDX) to ensure accuracy and reliability. The time frame of the study covers six years, from 2019 to 2024, providing adequate observations for panel data analysis.

The variables in this study are divided into dependent and independent variables, with specific financial ratios employed as proxies: (1) dividend policy (Y), proxied by the Divident Payout Ratio (DPR), which measures the proportion of net income distributed to shareholders as dividends; (2) profitability (X_1), proxied by Net Profit Margin (NPM), calculated as the ratio of net income to total revenue, this reflects the efficiency of banks in generating profits relative to their operating income; (3) market valuation (X_2), proxied by Price to Book Value (PBV), which captures the market's assessment of a bank's value relative to its book value, a higher PBV indicates stronger investor confidence and growth expectations; (4) leverage (X_3), proxied by Debt to Equity Ratio (DER), which measures the proportion of debt relative to shareholder equity, indicating the financial risk and capital structure of the bank; and (5) earnings performance (X_4), proxied by Earnings per Share (EPS), representing the profitability available to each outstanding share, often considered by investors in assessing a firm's ability to pay dividends. These proxies have been widely utilized in corporate finance and dividend policy studies (e.g., Jensen, 1986; Fama & French, 2001; Gill et al., 2010), providing a strong theoretical basis for their selection in the present study.

The study applies panel data regression analysis using the Fixed Effects Model (FEM), as determined through model specification tests including the Chow test, Hausman test, and Lagrange Multiplier test. Panel data regression is chosen due to its ability to control for both individual heterogeneity across banks and time-specific effects, thereby producing more efficient and unbiased estimators compared to pure cross-sectional or time-series approaches (Baltagi, 2005). The regression equation can be expressed as follows:

$$DPR_{it} = \alpha + \beta_1 NPM_{it} + \beta_2 PBV_{it} + \beta_3 DER_{it} + \beta_4 EPS_{it} + \varepsilon_{it}$$

To ensure the validity of the regression model, several statistical tests are conducted. The study applies: (1) t-test; (2) F-test; and (3) adjusted R-squared. The significance level is set a 5% ($\alpha = 0.05$), with all statistical analyses are conducted using EViews software version 13. This methodological

framework is expected to provide robust empirical findings regarding the determinants of dividend policy in Indonesian state owned banks.

RESULT AND DISCUSSION (Just Title, Times New Roman, 12)

Before conducting regression analysis, descriptive statistics were generated to provide an overview of the data distribution for each variable during the observation period of 2019–2024. The results show variation in profitability (NPM), market valuation (PBV), leverage (DER), and earnings performance (EPS) among the five state owned banks. This variability indicates that the data are suitable for regression analysis, as they capture cross sectional and time series differences across the observed firms.

To determine the most appropriate regression model, three panel data specification tests were conducted, the Chow test, the Hausman test, and the Lagrange Multiplier (LM) test. The Chow test produced a probability value of less than 0.05, indicating that the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model (CEM). The Hausman test also produced a probability value below 0.05, supporting the selection of FEM over the Random Effect Model (REM). Therefore, the regression analysis in this study was conducted using the Fixed Effect Model (FEM), as it accounts for unobserved heterogeneity among banks.

Specification Test	Prob.	Model Selection
Chow Test	0.000 < 0.05	Fixed Effect Model (FEM)
Hausman Test	0.000 < 0.05	Fixed Effect Model (FEM)
Lagrange Multiplier Test	0.000 < 0.05	Random Effect Model (REM)

Table 1: Model Selection
Source: processed data, 2025

The results of the Jarque-Bera normality test yielded a probability value of 0.3093, which is greater than the significance level of 0.05. This finding indicates that the residuals are normally distributed. Other classical assumption tests also show no major violations, thereby confirming the reliability of the regression model.

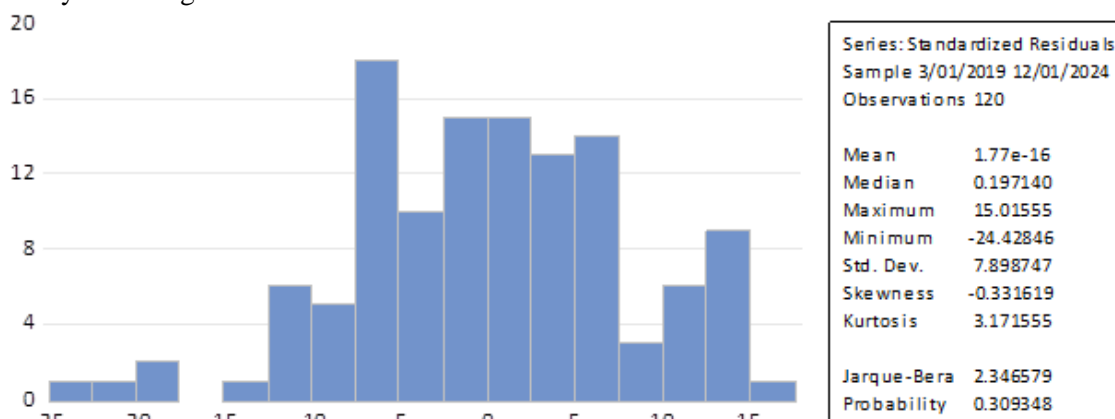


Figure 1. Normality Test Results
Source: processed data, 2025

The result of the Fixed Effect Model are presented in Table 2.

Variable	Coefficient	t-Statistic	Prob.	Interpretation
C (Constant)	37.44126	13.73300	0.0000	Significant
NPM	0.529051	3.579330	0.0005	Significant (+)
DER	-3.272509	-1.526601	0.1297	Not significant
EPS	-0.041752	-1.771220	0.0793	Not significant
PBV	-3.770748	-2.655237	0.0091	Significant (-)
F-statistic	123.3434		0.0000	Significant (simultaneous)
Adjusted R²	0.891596			89.16% explained

Table 2: The Fixed Effect Model Results
Source: processed data, 2025

The results demonstrate that profitability, measured by Net Profit Margin (NPM), has a positive and significant effect on dividend policy, as proxied by the Dividend Payout Ratio (DPR). This finding aligns with the signaling theory proposed by Miller and Rock (1985), which suggests that firms with higher profitability are more likely to distribute dividends as a signal of financial strength and future prospects. Similar evidence was reported by Setiawan, Wahyudi, and Muharam (2024), who found that profitability significantly influenced dividend payout decisions in Indonesian banks.

In contrast, leverage (DER) was found to have a negative but statistically insignificant effect on dividend policy. This outcome partially supports agency theory (Jensen & Meckling, 1976), which posits that highly leveraged firms prefer to retain earnings to meet debt obligations rather than distribute dividends. However, the insignificance suggests that leverage may not be a decisive factor in dividend policy among Indonesian state owned banks, possibly because these banks enjoy government backing, which reduces financial distress risks.

Earnings performance, proxied by EPS, was also negatively related to dividend policy but statistically insignificant. This result diverges from the life cycle theory (DeAngelo, DeAngelo, & Stulz, 2006), which argues that firms with strong and consistent earnings tend to distribute more dividends. A possible explanation is that state owned banks prioritize reinvestment or capital adequacy compliance over distributing dividends, despite reporting strong earnings.

Interestingly, market valuation (PBV) shows a significant negative effect on dividend policy. This finding contradicts traditional expectations (Lintner, 1956; Baker & Wurgler, 2004), which argue that firms with higher valuations distribute more dividends as a signal of confidence. Instead, the negative relationship observed here indicates that state owned banks with higher market valuations may prefer to retain earnings for growth opportunities, rather than paying them out as dividends. This finding highlights the unique dynamics of the Indonesian banking sector, where investor expectations and regulatory considerations may diverge from classical theory.

Finally, the F-test result confirms that profitability, market valuation, leverage, and earnings performance collectively influence dividend policy. With an Adjusted R² of 0.891596, the model explains approximately 89.16% of the variation in dividend payout ratios, suggesting a strong explanatory power of the selected variables

Hypothesis	Coefficient	Probability	Conclusion
NPM_{it} has a positive significant effect on DPR_{it}	0.529051	0.0005	H1 Accepted
DER_{it} has a negative insignificant effect on DPR_{it}	-3.272509	0.1297	H2 Rejected
EPS_{it} has a negative insignificant effect on DPR_{it}	-0.041752	0.0793	H3 Rejected
PBV_{it} has a negative significant effect on DPR_{it}	-3.770748	0.0091	H4 Rejected
$NPM_{it}, DER_{it}, EPS_{it}, PBV_{it}$ simultaneously affect DPR_{it}			H5 Accepted

Table 3: Summary of Hypotheses Testing Results
Source: processed data, 2025

The results reveal that only profitability shows a consistent positive and significant effect on dividend policy in Indonesian state owned banks, consistent with signaling theory. Meanwhile, market valuation was significant but in the opposite direction, suggesting a preference for earnings retention in highly valued banks. Both leverage and earnings performance failed to demonstrate significant effects, indicating that these variables may not strongly determine dividend decisions in the unique context of BUMN banks. However, the findings are expected to not only enrich the empirical literature on dividend policy in emerging markets and public financial institutions, but also guide stakeholders, investors, policymakers, and bank executives in refining strategies that balance profitability with investor signaling and capital resilience

CONCLUSION AND RECOMMENDATION

This study examined the determinants of dividend policy in Indonesian state owned banks (BUMN) for the period 2019–2024 using panel data regression with a Fixed Effect Model (FEM).

Dividend policy was proxied by the Dividend Payout Ratio (DPR), while the independent variables included profitability (NPM), market valuation (PBV), leverage (DER), and earnings performance (EPS).

The results demonstrate that profitability (NPM) has a significant positive effect on dividend policy, supporting the view that firms with higher profitability distribute dividends to signal financial strength. Market valuation (PBV) was found to have a significant negative effect, suggesting that highly valued banks prefer earnings retention over dividend distribution. Meanwhile, leverage (DER) and earnings performance (EPS) did not show significant effects on dividend policy. However, the joint F-test confirmed that all four variables simultaneously have a significant effect, with an adjusted R² of 89.16%, indicating strong explanatory power.

The findings provide empirical support for signaling theory in the context of Indonesian banking, particularly regarding the role of profitability. However, the negative relationship between market valuation and dividend policy challenges traditional dividend theories such as Lintner (1956) and life cycle theory, highlighting the unique dynamics of state owned banks. These results contribute to the ongoing debate about the applicability of classical dividend theories in emerging markets.

For state owned bank managers, the results indicate that profitability remains the primary driver in dividend decisions, consistent with investor expectations. Regulators and policymakers should note that high market valuations do not always translate into higher dividends, as banks may prioritize capital adequacy and reinvestment. For investors, understanding that profitability is a strong indicator of dividend potential can enhance portfolio strategies when investing in state owned banks. This study has several limitations. First, the sample is limited to state owned banks, which may restrict the generalizability of the results to private or foreign banks operating in Indonesia. Second, this study only focuses on financial ratios without including macroeconomic factors such as interest rates, inflation, or regulatory changes, which can also influence dividend policy. Finally, the observation period is limited to 2019–2024, which may not fully capture longterm patterns.

Future studies could broaden their scope by including private banks or cross country comparisons within ASEAN to test the robustness of dividend theory across different institutional settings. Including macroeconomic and regulatory variables can also provide a more comprehensive understanding of dividend determinants. Furthermore, applying alternative econometric approaches, such as dynamic panel models, can strengthen the robustness of the findings.

REFERENCES

- Baker, M., & Wurgler, J. (2004). A catering theory of dividends. *The Journal of Finance*, 59(3), 1125–1165.
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics*, 81(2), 227–254. <https://doi.org/10.1016/j.jfineco.2005.07.005>
- Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89(1), 62–82. <https://doi.org/10.1016/j.jfineco.2007.06.006>
- Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60(1), 3–43. [https://doi.org/10.1016/S0304-405X\(01\)00038-1](https://doi.org/10.1016/S0304-405X(01)00038-1)
- Gill, A., Biger, N., & Tibrewala, R. (2010). Determinants of dividend payout ratios: Evidence from United States. *The Open Business Journal*, 3(1), 8–14. <https://doi.org/10.2174/1874915101003020008>
- Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). New York: McGraw-Hill.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Lembong, H. S. (2020). *The Effect of Profitability on Dividend Policy in Indonesian State-Owned Banks*. *Journal of International Conference Proceedings*, 3(2), 121–130. DOI:10.32535/jicp.v0i0.911

- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *American Economic Review*, 46(2), 97–113.
- Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(4), 411–433.
- Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *The Journal of Finance*, 40(4), 1031–1051. <https://doi.org/10.1111/j.1540-6261.1985.tb02362.x>
- Putra, I. G. A. D., & Lestari, N. P. N. E. (2020). Profitability, liquidity, leverage, and firm size on dividend policy. *International Research Journal of Management, IT and Social Sciences*, 7(3), 124–132. <https://doi.org/10.21744/irjmis.v7n3.924>
- Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of Financial Research*, 5(3), 249–259. <https://doi.org/10.1111/j.1475-6803.1982.tb00299.x>
- Setiawan, S., Wahyudi, S., & Muharam, H. (2024). *Determinants of bank's dividend policy: A life cycle theory test in Indonesia*. *Managerial Finance*, 50(8), 1409–1423. DOI:10.1108/MF-12-2022-0553