# EMPIRICAL EXAMINATION OF THE RELATIONSHIP BETWEEN COST EFFICIENCY, CAPITAL STRUCTURE, AND DIVIDEND POLICY ON THE FIRM VALUE OF BUMN KARYA CONSTRUCTION COMPANIES

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## Abstract

This study examines the impact of project cost efficiency, capital structure, and dividend policy on firm value in state-owned construction companies in Indonesia. The study is driven by the weakening financial performance and declining market valuation of construction SOEs, which operate in capital-intensive and project-based environments. A quantitative approach is applied using panel data regression, with data derived from financial reports of construction SOEs listed on the Indonesian capital market. The findings reveal that cost efficiency and dividend policy contribute positively to firm value, indicating that effective cost management and consistent dividend distribution are perceived as signals of strong performance and financial stability. In contrast, capital structure shows a negative relationship with firm value, suggesting that higher reliance on debt increases financial risk and weakens investor confidence. However, when assessed simultaneously, these variables do not demonstrate a significant combined effect, implying that firm value is influenced not only by internal financial decisions but also by external factors such as project risk and industry dynamics. These results highlight the importance of adopting adaptive financial strategies, particularly in strengthening cost control, maintaining balanced dividend policies, and managing financial risk to support sustainable firm value.

**Keywords:** Cost Efficiency, Capital Structure, Dividend Policy, Firm Value

## INTRODUCTION

The construction sector plays a strategic role in Indonesia's economy through its contribution to infrastructure development and national economic growth. During the 2020–2024 period, this sector accounted for an average of 10.2% of the Gross Domestic Product (BPS, 2024). This role has been primarily carried out by State-Owned Enterprises in the construction sector through the implementation of national strategic infrastructure projects with a total value exceeding IDR 600 trillion since 2019 (Kementerian PUPR, 2024).

However, the substantial contribution of the construction sector is not aligned with the financial performance of State-Owned Enterprises in the construction sector. Net profit margins declined significantly from 5.8% in 2019 to 1.6% in 2023, accompanied by an increase in the Debt-to-Equity Ratio from 2.3 to 4.7 times (BPK RI, 2024). This condition is reflected in a decline of more than 40% in the stock prices of State-Owned Enterprises in the construction sector over the same period, indicating a weakening market perception of firm value (Bursa Efek Indonesia, 2024).

The decline in firm value cannot be separated from the impact of the COVID-19 pandemic at the beginning of the observation period. The pandemic caused delays in project implementation, disruptions in material supply chains, and postponements in progress payments, thereby exacerbating cash flow conditions in construction companies (World Bank, 2021). This situation increased firms' reliance on debt-based financing to ensure project continuity.

From a financial perspective, firm value reflects investors' perceptions of a company's performance, risk profile, and future prospects (Rahmadani et al., 2017). One internal factor that plays a crucial role in shaping firm value is cost efficiency. Horngren et al. (2015) argue that cost efficiency represents a firm's ability to optimize resource utilization without compromising output quality. In project-based construction companies, cost inefficiencies frequently arise due to cost overruns and project completion delays.

In addition to cost efficiency, capital structure also influences firm value. The use of debt provides tax benefits up to a certain level; however, excessive leverage increases bankruptcy risk and weakens investor confidence (Brigham & Houston, 2019). Empirical studies report mixed results regarding the effect of leverage on firm value, particularly in construction firms that depend heavily on long-term project financing. This inconsistency indicates a research gap in the context of State-Owned Enterprises in the construction sector, which are characterized by relatively high leverage levels (Deny & Riduwan, 2021; Welly, 2019).

Another factor affecting firm value is dividend policy. Dividend policy is perceived by the market as a signal of a firm's future prospects and cash flow stability (Marhaeningtyas & Hartono, 2020; Fitriana, 2021). In practice, State-Owned Enterprises in the construction sector tend to adopt relatively conservative dividend policies, with payout ratios ranging between 15% and 25% of net income. Prior studies suggest that the impact of dividend policy on firm value remains inconclusive across sectors, thereby warranting further examination in the capital-intensive and project-based construction sector (Kementerian BUMN, 2024; Jihan et al., 2023).

Most previous studies have focused primarily on the effects of profitability or firm size on firm value. Research that simultaneously examines cost efficiency, capital structure,

and dividend policy within the context of State-Owned Enterprises in the construction sector remains limited. Therefore, this study aims to analyze the effects of these three variables on the firm value of State-Owned Enterprises in the construction sector.

## REVIEW OF LITERATURE

### Firm Value

Firm value reflects the market's assessment of a company's ability to create economic benefits for its shareholders. According to Brigham and Houston (2019), firm value represents investors' expectations regarding a company's risk level and future cash flow potential. Firm value also indicates the extent to which managerial decisions related to investment, financing, and profit distribution are able to enhance the company's attractiveness in the eyes of investors (Gitman & Zutter, 2018).

The measurement of firm value is commonly based on market-based ratios, as these ratios directly capture investors' perceptions of a company's performance and future prospects. One of the most frequently used indicators is the Price to Book Value (PBV) ratio, which compares the market price of a company's shares with their book value per share. This ratio reflects the extent to which the market values a company relative to its accounting value, thereby providing insight into how effectively the firm is perceived to generate value beyond its recorded assets.

$$PBV = \frac{Market\ Price\ per\ Share}{Book\ Value\ per\ Share}$$

A high PBV value indicates that the market perceives the firm as having strong growth prospects and a good ability to generate future profits. Conversely, a low PBV suggests that the market assigns a lower valuation to the firm, which may reflect higher risk or limited business prospects.

### Cost Efficiency (BOPO)

Cost efficiency reflects a firm's ability to manage resources optimally to produce output at the lowest possible cost. Horngren et al. (2015) define cost efficiency as the control of expenditures without compromising the quality of goods or services produced.

The conceptual foundation of cost efficiency is rooted in Cost Accounting Theory and Production Efficiency Theory, which emphasize the optimal use of inputs to maximize output (Mankiw, 2021). Cost efficiency represents the effectiveness of managerial control and the operational stability of a firm.

High cost efficiency improves profitability and strengthens cash flows, thereby enhancing the firm's ability to create sustainable value. In this context, cost efficiency is positioned as an internal mechanism that influences market perceptions of firm value.

In this study, cost efficiency is measured using the ratio of Cost of Goods Sold to Revenue (COGS/Revenue), which indicates the proportion of production costs relative to the firm's revenue.

$$\text{COGS to Revenue} = \frac{\text{Cost of Goods Sold}}{\text{Revenue}}$$

A lower ratio indicates that the firm is able to generate revenue with relatively lower costs, reflecting a higher level of efficiency. Conversely, a higher ratio suggests an inefficient cost structure, which may exert downward pressure on profitability and firm value.

Project cost efficiency plays a crucial role in maintaining the financial soundness of State-Owned Enterprises in the construction sector, which operate in project-based and capital-intensive businesses. Cost efficiency indicators reflect a firm's ability to control expenditures, sustain profitability, and preserve firm value.

**Capital Structure (DER)**

Capital structure reflects the composition of a firm's financing derived from debt and equity. Brigham and Houston (2019) state that capital structure determines the level of financial risk and the cost of financing borne by the firm.

The conceptual foundation of capital structure is explained by the Trade-Off Theory, originally proposed by Modigliani and Miller (1963) and further developed by Kraus and Litzenberger (1973). This theory posits that the use of debt provides tax-saving benefits up to an optimal level.

However, excessive debt beyond the optimal level increases financial risk and bankruptcy costs, thereby reducing firm value. A balanced capital structure enables firms to maximize the benefits of debt while avoiding excessive financial risk.

In this study, capital structure is measured using the Debt to Equity Ratio (DER), which represents the proportion of total debt to total equity of the firm.

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

A high Debt to Equity Ratio (DER) indicates a strong reliance on debt financing, which increases financial risk and repayment pressure on the firm. Conversely, a low DER reflects a more conservative financing structure with better-controlled financial risk, which may enhance firm value.

Capital structure plays a crucial role in maintaining corporate financial stability and performance. The Debt to Equity Ratio (DER) is commonly used to assess the proportion of debt-based financing relative to shareholders' equity. A high DER represents an aggressive financing strategy associated with higher financial risk, while a low DER indicates a more conservative structure that may limit financing flexibility. In construction companies such as State-Owned Enterprises in the construction sector, large project-based capital requirements tend to encourage extensive use of debt financing. Therefore, management must carefully balance the benefits of leverage against the associated financial risks to maintain a sound capital structure and sustain firm value.

**Dividend Policy (DPR)**

Dividend policy refers to management decisions regarding the proportion of earnings distributed to shareholders and the portion retained within the firm. According to Gitman and Zutter (2018), dividend policy reflects a balance between profit distribution and the firm's internal financing needs.

The conceptual foundation of dividend policy is explained by Signaling Theory, introduced by Spence (1973) and further developed by Ross (1977). This theory posits that dividends serve as informational signals regarding a firm's future prospects and financial stability. Stable dividend payments are perceived by investors as indicators of strong performance and sustainable cash flows.

In addition, the Bird in the Hand Theory, proposed by Gordon (1963), argues that investors prefer certain dividend income over uncertain capital gains. This preference implies

that dividend policy plays a significant role in shaping investor perceptions and influencing firm value.

In this study, dividend policy is measured using the Dividend Payout Ratio (DPR), which represents the proportion of net income distributed to shareholders.

$$DPR = \frac{\text{Dividends Paid}}{\text{Net Income}} \times 100\%$$

A high Dividend Payout Ratio (DPR) reflects the company's commitment to distributing profits to shareholders, which can enhance investor confidence and increase firm value. Conversely, a low DPR indicates the retention of earnings for internal financing, which may limit positive investor perceptions of firm value.

Dividend policy influences firm value through information signaling and investor income preferences. The Dividend Payout Ratio is used to assess the proportion of earnings distributed as dividends; however, its impact on firm value varies across sectors due to differences in business characteristics, financing needs, and risk profiles. Accordingly, dividend policy must be assessed in a contextual manner for construction companies, including State-Owned Enterprises in the construction sector.

**Hypothesis Development and Conceptual Framework**

**Project Cost Efficiency and Firm Value**

Project cost efficiency reflects a firm's ability to control project expenses effectively to ensure that activities are completed within budget. Based on Production Efficiency Theory and Cost Management Theory, firms that manage costs efficiently tend to achieve more stable profitability and cash flows, which enhances investor confidence. From a signaling perspective, efficient cost control also indicates strong managerial capability and lower project risk, thereby improving firm value, particularly in construction companies such as state-owned enterprises that face high operational costs and risk of cost overruns.

Empirically, cost efficiency can be measured using indicators such as COGS to Revenue, Operating Expense Ratio, Asset Turnover, and project-based tools like Earned Value Management (EVM). Previous studies support its positive effect on firm performance. Yonatan (2025), Sandopart et al. (2023), and Priatna et al. (2020) consistently show that better cost efficiency improves financial performance and ultimately increases firm value.

H1: Project cost efficiency affects firm value.

**Capital Structure and Firm Value**

Capital structure represents the proportion of debt and equity used by a firm, influencing both financial risk and stability. According to the Trade-Off Theory, firms aim to balance the benefits of debt, such as tax advantages, with the associated risks, including interest burdens and potential financial distress. When managed optimally, capital structure can enhance firm value by signaling financial strength and growth potential to investors.

Empirical findings show mixed results. Thio and Susilandari (2021) find that excessive debt reduces firm value due to higher perceived risk, while Prasetyo (2023) suggests that moderate debt can improve firm value by supporting financing needs. Oktaviani et al. (2019) also highlight that the impact of capital structure depends on cash flow stability and industry characteristics. In construction firms, especially state-owned enterprises, high leverage is common but must be carefully managed to avoid negative market perception.

H2: Capital structure affects firm value.

**Dividend Policy and Firm Value**

Dividend policy reflects management decisions regarding profit distribution between shareholders and retained earnings. According to Signaling Theory, dividend payments convey information about a firm's financial health and future prospects, while the Bird-in-the-Hand Theory suggests that investors prefer certain dividend income over uncertain capital gains. On the other hand, the Residual Dividend Theory emphasizes that dividends are distributed only after investment needs are fulfilled.

Dividend policy is commonly measured using the Dividend Payout Ratio (DPR) and Dividend Yield (DY). Empirical studies show varying results. Zikri and Albeta (2025) find a positive effect of dividends on firm value, while Pranata and Awaludin (2024) report no significant effect in certain sectors. Jihan Nabilah et al. (2023) also highlight inconsistent findings, indicating that the impact depends on earnings stability and investor preferences. In construction firms, dividend policies tend to be conservative due to fluctuating cash flows, which may influence investor perception and firm value.

H3: Dividend policy affects firm value.

**Simultaneous Effect on Firm Value**

Firm value is the result of integrated managerial decisions related to operations, financing, and profit distribution. Cost efficiency supports stable earnings, capital structure determines financial risk, and dividend policy signals firm performance to investors. These variables are interconnected; efficient cost management improves the firm's ability to manage debt, while a balanced capital structure supports sustainable dividend distribution.

Together, these factors create synergy that strengthens financial stability, enhances investor confidence, and ultimately increases firm value. Therefore, firm value is not determined by a single factor but by the combined effect of multiple financial decisions.

H4: Project cost efficiency, capital structure, and dividend policy have a positive and significant effect on firm value.

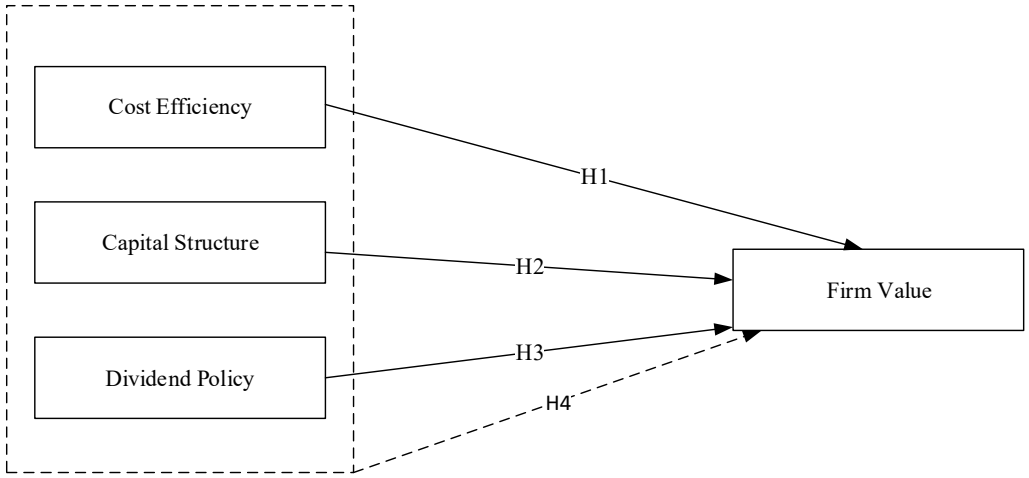


**Figure 1.**
**Conceptual Framework**

## RESEARCH METHOD

This study adopts a quantitative approach with a causal research design to examine the relationships between financial variables and firm value. The data used are secondary

data in the form of panel data, combining cross-sectional and time-series observations. The panel data approach is selected because it allows for a more comprehensive analysis by capturing variations across firms and over time, thereby improving the accuracy of estimation results. The study focuses on analyzing the effects of cost efficiency, capital structure, and dividend policy on firm value.

The population of this study consists of State-Owned Enterprises (SOEs) in the construction sector listed on the Indonesia Stock Exchange. The sampling technique employed is purposive sampling, based on specific criteria: (1) companies are consistently listed during the 2020–2024 period, (2) companies publish audited annual financial statements, and (3) companies have complete data for all research variables. These criteria ensure that the selected sample is relevant and provides reliable information for analysis. The data are obtained from annual financial reports, official capital market publications, and reports issued by related government institutions.

The dependent variable in this study is firm value, measured using the Price to Book Value (PBV) ratio, which reflects market perception of the company's performance. The independent variables include cost efficiency, capital structure, and dividend policy. Cost efficiency (EFF) is measured using the ratio of Cost of Goods Sold to Revenue (COGS/Revenue), representing the firm's ability to control operational costs. Capital structure (DER) is measured using the Debt to Equity Ratio, indicating the proportion of debt relative to equity. Dividend policy (DPR) is measured using the Dividend Payout Ratio, which reflects the proportion of earnings distributed to shareholders. All variables are measured on a ratio scale to ensure consistency in quantitative analysis.

This study employs panel data regression analysis using three estimation approaches: the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The selection of the most appropriate model is determined through the Chow Test, Hausman Test, and Lagrange Multiplier Test. To ensure the robustness of the model, classical assumption tests are conducted, including tests of normality, multicollinearity, heteroskedasticity, and autocorrelation. Hypothesis testing is performed using the t-test to examine the partial effect of each independent variable and the F-test to evaluate the simultaneous effect. The coefficient of determination ($R^2$) is used to assess the explanatory power of the model.

The regression model used in this study is formulated as follows:

$$PBVit=\alpha+\beta1EFFit+\beta2DERit+\beta3DPRit+\varepsilon it$$

Where PBV represents firm value, EFF represents cost efficiency, DER represents capital structure, and DPR represents dividend policy, while i denotes firm and t denotes time.

## RESULTS AND DISCUSSION

### Estimation Model

The Chow Test is used to determine whether a panel regression model should employ the Common Effect Model (CEM) or the Fixed Effect Model (FEM). This test examines whether there are sufficiently significant differences in intercepts across cross-sectional units that need to be modeled as fixed. According to Ghozali (2019), the Chow Test is conducted by comparing the probability value from the F-test. The hypotheses for the Chow Test are as follows:

H0: The appropriate model is the Common Effect Model (CEM).
H1: The appropriate model is the Fixed Effect Model (FEM).

The model selection decision is based on the probability value of the F-test. If the probability value is greater than 0.05, it indicates that differences in intercepts among observational units are not significant, making the Common Effect Model more appropriate. Conversely, if the probability value is below 0.05, significant differences exist among companies, and the Fixed Effect Model is deemed more suitable.

**Table 1.**
**Chow Test**

| Effects Test | Statistic | d.f. | P-value |
|---|---|---|---|
| Cross-section F | 15.6861 | (3,13) | 0.0001 |
| Cross-section Chi-square | 30.6073 | 3 | 0.0000 |

*Source: Processed data using Eviews12, 2025*

The results of the study show that the Chow Test yielded a value of 0.0000, well below the 0.05 threshold. This indicates that there are significant differences among cross-sectional units in the data, making the Fixed Effect Model the most appropriate model to describe these conditions.

The Hausman Test is used to choose between the Fixed Effect Model (FEM) and the Random Effect Model (REM). This test evaluates whether individual differences in the model are correlated with the independent variables. According to Ghozali (2019), if such a correlation exists, the FEM is more appropriate; if not, the REM is more efficient. The hypotheses for the Hausman Test are:
H0: The Random Effect Model (REM) is the appropriate model.
H1: The Fixed Effect Model (FEM) is the appropriate model.

If the probability value is greater than 0.05, it indicates no correlation between individual effects and the independent variables, making the Random Effect Model more efficient and suitable. Conversely, if the probability value is below 0.05, a significant correlation exists, and the Fixed Effect Model is deemed more appropriate.

**Table 2.**
**Hausman Test**

| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | P-value |
|---|---|---|---|
| Cross-section random | 47.0582 | 3 | 0.0000 |

*Source*: *Processed data using Eviews12, 2025*

The study results show that the probability value of the Hausman Test is 0.0000, which is below the 0.05 threshold. This condition indicates a correlation between individual company effects and the independent variables used in the model. Therefore, the Hausman Test concludes that the Fixed Effect Model is more appropriate than the Random Effect Model.

The Lagrange Multiplier (LM) Test is used to determine whether a panel regression model is better suited to the Random Effect Model (REM) rather than the Common Effect Model (CEM). According to Ghozali (2019), the LM Test evaluates whether the variance of the error components across cross-sectional units significantly differs from zero. The hypotheses for the LM Test are as follows:
H0: The Common Effect Model (CEM) is the appropriate model.

H1: The Random Effect Model (REM) is the appropriate model.

If the probability value is greater than 0.05, it indicates that there is no significant difference in variances among observational units, and the Common Effect Model is considered adequate. Conversely, if the probability value is less than 0.05, significant differences in variances exist, making the Random Effect Model more appropriate.

**Table 3.**
**Lagrange Multiplier Test**

| Test Type | Statistic | P-value |
|---|---|---|
| Cross-section | 14.4214 | 0.0001 |
| Time | 1.8053 | 0.1791 |
| Both | 16.2267 | 0.0001 |

*Source*: *Processed data using Eviews12, 2025*

The study results show that the probability value of the LM Test is 0.0001, which is below the 0.05 threshold. This indicates that there is a significant variance among companies in the panel data, and the Random Effect Model better represents these characteristics. Therefore, the LM Test concludes that the Random Effect Model is the most appropriate model to use.

**Table 4.**
**T Test**

| Variable | Coefficient | T-statistic | P-value |
|---|---|---|---|
| Constant | −164.4591 | −2.2970 | 0.0355 |
| Cost Efficiency | 0.0237 | 2.8348 | 0.0120 |
| Capital Structure | −0.0007 | −2.6752 | 0.0166 |
| Dividend Policy | 0.0061 | 2.5173 | 0.0229 |

*Source*: *Processed data using Eviews12, 2025*

Partial effect of independent variables on the dependent variable: Cost Efficiency: The t-test result for the cost efficiency variable shows a t-value of 2.834834, which is greater than the critical t-value (2.834834 > 2.10092204) and a p-value of 0.0120 < 0.05. Thus, cost efficiency has a positive and significant effect on firm value.

Capital Structure: The t-test result for the capital structure variable shows a t-value of –2.675159. In absolute terms, the t-value is 2.675159, which is greater than the critical t-value (2.675159 > 2.10092204) with a p-value of 0.0166 < 0.05. This indicates that capital structure has a negative and significant effect on firm value.

Dividend Policy: The t-test result for the dividend policy variable shows a t-value of 2.517273, which is greater than the critical t-value (2.517273 > 2.10092204) and a p-value of 0.0229 < 0.05. Therefore, dividend policy has a positive and significant effect on firm value.

**Table 5.**
**F Test**

| Statistic | Value |
|---|---|
| R-squared | 0.2075 |
| Adjusted R-squared | 0.0589 |

| Statistic | Value |
|---|---|
| S.E. of regression | 38.6799 |
| F-statistic | 1.3962 |
| Prob (F-statistic) | 0.2802 |

*Source*: *Processed data using Eviews12, 2025*

The results indicate that, simultaneously, the three independent variables in the model do not have a significant effect on firm value. In other words, cost efficiency, capital structure, and dividend policy are unable to collectively explain the variation in firm value at the 5% significance level.

**Table 6.**
**$R^2$ Test**

| Statistic | Value |
|---|---|
| R-squared | 0.2075 |
| Adjusted R-squared | 0.0589 |
| S.E. of regression | 38.6799 |
| F-statistic | 1.3962 |
| Prob (F-statistic) | 0.2802 |

*Source*: *Processed data using Eviews12, 2025*

The Adjusted R-squared value of 0.058879 indicates that the model can only explain 5.88% of the variation in firm value. This means that the variables of cost efficiency, capital structure, and dividend policy contribute only minimally to changes in firm value, while approximately 94.12% of the variation is influenced by factors outside the scope of the study model.

**Discussion**

The analysis results indicate a relationship among the research variables, suggesting that changes in cost efficiency, capital structure, and dividend policy are associated with changes in firm value.

Effect of Cost Efficiency on Firm Value

The findings indicate that cost efficiency has a positive and significant influence on firm value. This suggests that the ability of firms to manage operational and project costs effectively is interpreted by the market as a reflection of strong managerial performance. Efficient cost control contributes to improved financial outcomes, which in turn enhances investor confidence and overall firm valuation.

From a theoretical perspective, this result is consistent with Production Efficiency Theory, which emphasizes that optimal utilization of inputs leads to better output performance (Mankiw, 2021). In addition, Signaling Theory explains that efficient cost management serves as a positive signal to investors regarding a firm's ability to control risks and maintain financial stability (Spence, 1973; Ross, 1977).

In the context of construction SOEs, where projects are capital-intensive and prone to cost overruns, maintaining cost efficiency becomes particularly crucial. Effective cost management across project stages helps reduce operational risk and supports sustainable performance. Empirical evidence also supports this relationship, as previous studies have

consistently found that higher cost efficiency is associated with improved firm value (Yonatan, 2025; Sandopart et al., 2023; Priatna et al., 2020; Ariyanto & Mawardi, 2022).

From a managerial standpoint, strengthening cost control systems—such as budgeting accuracy, procurement monitoring, and continuous project evaluation—is essential to maintain financial stability and enhance firm value over time.

**Effect of Capital Structure on Firm Value**

The results show that capital structure has a negative and significant effect on firm value, indicating that higher reliance on debt tends to reduce market valuation. This suggests that excessive leverage is perceived as an increase in financial risk, which weakens investor confidence.

This finding is in line with Trade-Off Theory, which states that debt contributes positively to firm value only up to an optimal level (Kraus & Litzenberger, 1973). Beyond that point, additional debt increases financial distress risk and reduces firm value (Brigham & Houston, 2019). The Pecking Order Theory also explains that heavy dependence on external financing may signal internal financial limitations, thereby negatively affecting market perception.

In construction SOEs, the negative impact of leverage is more pronounced due to the nature of long-term and capital-intensive projects. High debt levels increase financial pressure and expose firms to greater vulnerability during project disruptions and economic uncertainty. Prior studies support this conclusion, showing that excessive leverage is associated with declining firm value in similar sectors (Priatna & Sari, 2020; Rachmawati, 2021).

These findings highlight the importance of maintaining a balanced capital structure. Firms are encouraged to optimize financing strategies by improving internal funding capacity and managing debt more cautiously to sustain firm value.

**Effect of Dividend Policy on Firm Value**

Dividend policy is found to have a positive and significant influence on firm value, indicating that dividend distribution is interpreted by investors as a signal of strong financial performance and stable future prospects.

This result aligns with Signaling Theory, which suggests that dividend payments convey positive information about a firm's financial condition (Spence, 1973; Ross, 1977). Additionally, Bird-in-the-Hand Theory argues that investors tend to prefer certain dividend income over uncertain capital gains (Gordon, 1963), reinforcing the role of dividends in shaping investor perception.

In construction SOEs, where cash flows are often uncertain due to project-based operations, consistent dividend payments become an important indicator of financial resilience. Empirical studies also support this finding, showing that dividend policy contributes positively to firm value (Pratama & Kusuma, 2020; Wijaya & Hartono, 2022).

From a managerial perspective, firms should adopt a balanced dividend policy that considers both shareholder expectations and internal funding needs to maintain positive market perception and long-term sustainability.

Simultaneous Effect on Firm Value

When examined simultaneously, cost efficiency, capital structure, and dividend policy do not show a significant combined effect on firm value. This indicates that internal financial decisions alone are not sufficient to fully explain variations in firm value.

This finding is consistent with Contingency Theory, which emphasizes that the effectiveness of internal policies depends on external conditions (Donaldson, 2001). Firm Value Theory also suggests that market valuation is influenced not only by internal factors but also by external elements such as industry risk and economic conditions (Brigham & Houston, 2019).

In construction SOEs, external factors such as project risk, dependence on milestone-based payments, and macroeconomic fluctuations play a dominant role in shaping firm value. Previous studies also confirm that external pressures can weaken the influence of internal variables when analyzed simultaneously (Guo & Lin, 2020; Rahmawati & Abdullah, 2021).

Therefore, firms need to complement internal financial strategies with effective risk management and adaptability to external conditions. Strengthening project risk mitigation, improving liquidity management, and responding to economic dynamics are essential to support sustainable firm value creation.

## CONCLUSION

This study examines the influence of cost efficiency, capital structure, and dividend policy on the firm value of state-owned enterprises in the construction sector. The findings indicate that cost efficiency and dividend policy contribute positively to firm value, suggesting that effective cost management and consistent dividend distribution are perceived by investors as indicators of strong performance and financial stability. In contrast, capital structure shows a negative effect, indicating that excessive reliance on debt tends to increase financial risk and weaken market confidence in the firm.

However, when considered simultaneously, these internal financial factors do not show a significant combined influence on firm value. This finding implies that firm value in construction SOEs is not solely determined by internal managerial decisions but is also shaped by external conditions, including project-related risks and broader economic dynamics. The nature of project-based and capital-intensive operations makes firms more sensitive to external pressures, which may limit the overall impact of internal financial policies.

From a managerial perspective, companies are encouraged to strengthen cost efficiency practices, maintain a balanced and sustainable dividend policy, and manage capital structure more prudently to minimize financial risk. In addition, firms need to enhance their adaptability to external conditions through better risk management and financial planning. For future research, it is recommended to incorporate external variables and alternative analytical approaches in order to provide a more comprehensive understanding of the determinants of firm value.

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