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The Role of Profitability in Mediating the Effect of Dividend Policy on Firm Value in Industrial Sector Companies in the Automotive Sub-Sector and Its Components Listed on the Indonesia Stock Exchange for the 2019-2023 Period

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Abstract

This study investigates the mediating role of profitability in the relationship between dividend policy and firm value among automotive sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The research addresses the inconsistent findings in prior studies regarding the direct effect of dividend policy on firm value by proposing profitability as a potential mediating mechanism. Employing a quantitative approach with purposive sampling, the study selected 13 companies that met the specified criteria, resulting in 65 firm-year observations. Data analysis was conducted using Structural Equation Modeling through WarpPLS version 8.0. The findings reveal that dividend policy and capital structure do not significantly affect firm value directly. Conversely, liquidity demonstrates a significant negative effect on firm value, while dividend policy positively and significantly influences profitability. Furthermore, profitability exhibits a significant positive effect on firm value. Most importantly, the results confirm that profitability successfully mediates the relationship between dividend policy and firm value, providing empirical support for the Signaling Theory and Bird-in-the-Hand Theory. These findings contribute to the ongoing debate in corporate finance literature and offer practical implications for financial managers in formulating dividend policies that enhance shareholder wealth through improved profitability.

Keywords: *Dividend Policy, Profitability, Capital Structure, Liquidity, Company Size, Firm Value, Mediating Effect, Automotive Sector, Indonesia Stock Exchange*

Introduction

The automotive industry represents one of the most significant sectors in Indonesia's economy, contributing substantially to national gross domestic product (GDP), employment generation, and technological advancement. As a key pillar of the manufacturing sector, automotive companies play an essential role in driving economic growth through forward and backward linkages with other industries, including raw materials, components manufacturing, and after-sales services. The strategic importance of this sector has positioned it as a bellwether for overall economic health and investor confidence in the Indonesian capital market.

The period from 2019 to 2023 presented unprecedented challenges for the automotive sector globally, including Indonesia. The COVID-19 pandemic, which emerged in early 2020, disrupted global supply chains, reduced consumer demand, and created significant uncertainty in financial markets. These disruptions were particularly acute in the automotive industry, which relies heavily on integrated global supply chains and consumer discretionary spending. Consequently, automotive companies experienced fluctuating performance, necessitating strategic financial management to maintain firm value and investor confidence.

Firm value, as a central concept in corporate finance, reflects the market's assessment of a company's current performance and future prospects. Maximizing firm value remains the primary objective of financial management, as it directly correlates with shareholder wealth. Various internal factors influence firm value, including financial policies, operational efficiency, and corporate governance practices. Among these, dividend policy has attracted considerable scholarly attention due to its potential signaling effects and direct impact on shareholder returns.

Dividend policy represents one of the most debated topics in corporate finance, with seminal works by Miller and Modigliani (1961) proposing dividend irrelevance in perfect markets, while Gordon (1963) and Lintner (1956) argued for the significance of dividends in valuation through their Bird-in-the-Hand Theory. The theoretical controversy is mirrored in empirical findings, which have produced mixed results regarding the relationship between dividend policy and firm value. Some studies report significant positive relationships, others find negative associations, and several conclude that no significant relationship exists.

These inconsistent empirical findings suggest that the relationship between dividend policy and firm value may not be direct but rather operates through intervening mechanisms. This study proposes that profitability serves as such a mediating mechanism, bridging the gap between dividend policy decisions and their ultimate impact on firm value. The rationale for this proposition stems from the understanding that dividend policy signals management's confidence in the firm's profitability, which in turn affects investor perceptions and market valuation.

The primary objective of this research is to examine whether profitability mediates the relationship between dividend policy and firm value in the context of Indonesian automotive companies. Additionally, the study investigates the direct effects of dividend policy, capital structure, liquidity, and company size on firm value. By incorporating these control variables, the research provides a comprehensive analysis of the determinants of firm value in the automotive sector.

This study contributes to the existing literature in several ways. First, it addresses the research gap by investigating the mediating role of profitability, which has received limited attention in prior studies. Second, it focuses on the Indonesian automotive sector during a period of significant economic turbulence, providing insights relevant to emerging market contexts. Third, the findings offer practical implications for corporate financial managers in formulating dividend policies that optimize firm value through enhanced profitability.

Literature review

Signaling Theory

Signaling Theory, originally proposed by Spence (1973) in the context of labor markets, has been extensively applied in corporate finance to explain how firms communicate information to external stakeholders. In the context of dividend policy, signaling theory suggests that dividend announcements convey inside information about a firm's future prospects to outside investors (Ross, 1977). Managers, possessing superior information about the firm's financial condition and future cash flows, use dividend decisions as signals to reduce information asymmetry between insiders and outsiders.

According to this theory, a dividend increase signals management's confidence in the firm's ability to generate sustainable earnings, while a dividend decrease may indicate concerns about future profitability. The credibility of dividend signals stems from the cost associated with false signaling; firms that pay dividends without adequate profitability face financial distress, making it costly to mimic the signals of genuinely profitable firms. Consequently, investors interpret dividend announcements as credible signals of firm quality and future performance.

Bird-in-the-Hand Theory

The Bird-in-the-Hand Theory, advanced by Gordon (1963) and Lintner (1962), posits that investors prefer dividends over capital gains because dividends are more certain and less risky. The theory derives its name from the proverb "a bird in the hand is worth two in the bush," suggesting that investors value the certainty of current dividend payments over the uncertainty of future capital gains. This preference for dividends reflects investor risk aversion and the psychological comfort associated with receiving tangible returns.

According to Gordon's dividend growth model, the required rate of return on equity increases as the dividend payout ratio decreases, because retained earnings are perceived as riskier than dividends. Consequently, firms

that pay higher dividends are valued more highly by investors, as the certainty of dividend income reduces the perceived risk of the investment. This theory provides a foundation for understanding why dividend policy may positively influence firm value through its impact on investor expectations and valuation.

Trade-off Theory of Capital Structure

The Trade-off Theory, building on Modigliani and Miller's (1963) work on capital structure, suggests that firms balance the tax benefits of debt against the costs of financial distress to determine optimal capital structure. According to this theory, moderate levels of debt can enhance firm value through tax shield benefits, while excessive leverage increases bankruptcy risk and agency costs. The optimal capital structure occurs at the point where the marginal benefit of additional debt equals the marginal cost of financial distress.

Conceptual Framework

Firm Value

Firm value represents the market's assessment of a company's worth, reflecting both its current performance and future growth prospects. In financial literature, firm value is commonly measured using Tobin's Q, which compares the market value of a firm's assets to their replacement cost (Smithers & Wright, 2007). A Tobin's Q ratio greater than one indicates that the market values the firm above its book value, suggesting positive investor expectations regarding the firm's future profitability and growth potential. Alternative measures of firm value include Price-to-Book Value (PBV), Price-to-Earnings Ratio (PER), and Market-to-Book Ratio. This study employs Tobin's Q as the primary measure of firm value due to its comprehensive nature, incorporating both market-based and accounting-based information. The formula for Tobin's Q is: Q = (Market Value of Equity + Book Value of Debt) / Book Value of Total Assets.

Dividend Policy

Dividend policy refers to the corporate decision regarding the distribution of earnings between dividend payments to shareholders and retention for reinvestment (Brigham & Houston, 2016). The Dividend Payout Ratio (DPR), calculated as dividends per share divided by earnings per share, measures the proportion of earnings distributed to shareholders. Dividend policy decisions involve trade-offs between providing current income to shareholders and retaining funds for growth opportunities.

Profitability

Profitability measures a firm's ability to generate earnings relative to its resources, including assets, equity, and sales. Return on Assets (ROA), calculated as net income divided by total assets, indicates how efficiently a firm utilizes its assets to generate profits (Kasmir, 2016). Higher profitability signals operational efficiency and effective resource management, which positively influences investor perceptions and firm valuation.

Capital Structure

Capital structure refers to the mix of debt and equity financing used by a firm to fund its operations and growth. The Debt-to-Equity Ratio (DER), calculated as total liabilities divided by total equity, measures the proportion of debt relative to equity financing. The optimal capital structure balances the tax advantages of debt with the costs of financial distress and agency conflicts.

Liquidity

Liquidity refers to a firm's ability to meet short-term obligations using its most liquid assets. The Current Ratio (CR), calculated as current assets divided by current liabilities, is a widely used measure of liquidity. While adequate liquidity ensures operational continuity and financial stability, excessive liquidity may indicate underinvestment in productive assets, potentially reducing firm value.

Company Size

Company size, typically measured by the natural logarithm of total assets, reflects the scale of a firm's operations and resources. Larger firms often benefit from economies of scale, greater market power, enhanced access to capital markets, and diversification advantages. These benefits may translate into higher firm value through improved operational efficiency and reduced risk perception.

Hypothesis Development

Based on the theoretical framework and literature review, this study proposes the following hypotheses:

H1: Dividend policy has a positive and significant effect on firm value.

H2: Dividend policy has a positive and significant effect on profitability.

H3: Profitability has a positive and significant effect on firm value.

H4: Liquidity has a negative effect on firm value.

H5: Capital structure has a significant effect on firm value.

H6: Profitability mediates the effect of dividend policy on firm value.

Methods

Research Design

This study employs a quantitative research design using secondary data from financial statements and market data of publicly listed companies. The quantitative approach is appropriate for testing hypotheses regarding the relationships among variables and examining the mediating role of profitability in the dividend policy-firm value relationship. The research utilizes panel data, combining cross-sectional observations across multiple companies with time-series observations over the 2019-2023 period.

Population and Sample

The population of this study comprises all automotive sub-sector companies and their component manufacturers listed on the Indonesia Stock Exchange during the 2019-2023 period. The purposive sampling technique was employed to select companies meeting the following criteria: (1) consistently listed on IDX throughout the study period; (2) published complete annual financial reports; (3) reported positive earnings during the study period; (4) distributed dividends at least once during the period; and (5) had complete data for all research variables. Based on these criteria, 13 companies qualified for inclusion in the sample, yielding 65 firm-year observations over the five-year study period. This sample size is considered adequate for Structural Equation Modeling analysis using WarpPLS, which can accommodate smaller samples through its variance-based estimation approach.

Variable Operationalization

The research variables are operationalized as follows:

Table 1. Variable Operationalization

Variable	Indicator	Formula	Scale
Firm Value (Y)	Tobin's Q	(MVE + BVD) / BVA	Ratio

Dividend Policy (X1)	DPR	DPS / EPS	Ratio
Capital Structure (X2)	DER	Total Debt / Total Equity	Ratio
Liquidity (X3)	CR	Current Assets / Current Liabilities	Ratio
Company Size (X4)	SIZE	Ln (Total Assets)	Ratio
Profitability (M)	ROA	Net Income / Total Assets	Ratio

Source: Literature review compilation (2025)

Data Analysis Technique

This study employs Structural Equation Modeling (SEM) using WarpPLS version 8.0 software for data analysis. WarpPLS is a variance-based SEM technique that offers several advantages over covariance-based approaches, including the ability to handle smaller sample sizes, non-normal data distributions, and complex mediating relationships. The analysis proceeds through several stages including outer model evaluation, inner model evaluation, hypothesis testing, and mediation analysis using the Sobel test and bootstrapping procedures.

Results and Discussion

The descriptive statistics provide an overview of the sample characteristics and variable distributions. The automotive sub-sector companies in the sample exhibited varying levels of performance during the 2019-2023 period, reflecting the diverse impacts of economic conditions and firm-specific factors. The Tobin's Q values ranged from below 1.0 to above 2.0, indicating heterogeneity in market valuations relative to book values. Dividend payout ratios varied considerably, with some firms maintaining consistent dividend policies while others adjusted payouts in response to earnings fluctuations.

Hypothesis Testing Results

The hypothesis testing results are summarized in Table 2, presenting the path coefficients and significance levels for each hypothesized relationship.

Table 2. Summary of Hypothesis Testing Results

Hypothesis	Path Coefficient	P-Value	Conclusion
Dividend Policy → Firm Value	0.020	0.435	Not Significant
Dividend Policy → Profitability	0.565	<0.001	Significant
Profitability → Firm Value	0.355	<0.001	Significant
Liquidity → Firm Value	-0.396	<0.001	Significant
Capital Structure → Firm Value	0.109	0.182	Not Significant

Source: Data processed by the author (2025)

Mediation Analysis

The mediation analysis was conducted to test Hypothesis 6, which proposes that profitability mediates the relationship between dividend policy and firm value. The results indicate that: (1) the direct effect of dividend policy on firm value is not significant ($\beta = 0.020$, $p = 0.435$); (2) dividend policy significantly affects profitability ($\beta = 0.565$, $p < 0.001$); and (3) profitability significantly affects firm value ($\beta = 0.355$, $p < 0.001$). The indirect effect, calculated as the product of the dividend policy-profitability path and the profitability-firm value path ($0.565 \times 0.355 = 0.201$), was found to be statistically significant. Given that the direct effect is not significant while the indirect effect is significant, this pattern indicates full mediation. Profitability completely mediates the relationship between dividend policy and firm value, meaning that dividend policy influences firm value only through its effect on profitability. This finding supports Hypothesis 6 and provides empirical evidence for the mediating mechanism theorized in this study.

Discussion

The finding that dividend policy does not directly affect firm value challenges the predictions of the Bird-in-the-Hand Theory but is consistent with Miller and Modigliani's dividend irrelevance proposition. The significant positive relationship between dividend policy and profitability supports the Signaling Theory, suggesting that firms with higher dividend payout ratios tend to exhibit higher profitability. The significant positive effect of profitability on firm value is consistent with fundamental valuation principles. The significant negative relationship between liquidity and firm value suggests that excessive liquidity may be detrimental to firm valuation, as it represents an opportunity cost. The confirmation of profitability as a full mediator in the dividend policy-firm value relationship represents the central contribution of this study. This finding helps reconcile the mixed empirical evidence in prior studies by demonstrating that the effect of dividend policy on firm value operates through an indirect pathway. Dividend payments signal management's confidence in the firm's profitability and future prospects, and investors interpret these signals as credible indicators of firm quality.

Conclusion

This study investigated the mediating role of profitability in the relationship between dividend policy and firm value among automotive sub-sector companies listed on the Indonesia Stock Exchange during the 2019-2023 period. The findings reveal that: (1) dividend policy does not have a significant direct effect on firm value; (2) dividend policy has a significant positive effect on profitability; (3) profitability has a significant positive effect on firm value; (4) liquidity has a significant negative effect on firm value; (5) capital structure does not have a significant effect on firm value; and (6) profitability fully mediates the relationship between dividend policy and firm value.

The findings offer practical implications for corporate financial managers. Dividend policy should not be viewed in isolation but rather in conjunction with profitability management. The negative relationship between liquidity and firm value suggests that firms should optimize their cash holdings. The insignificant direct effect of dividend policy on firm value implies that sustained profitability is key to enhancing market value. This study has several limitations including the focus on the automotive sub-sector, the study period including the COVID-19 pandemic, and the relatively small sample size. Future research could extend the analysis to multiple sectors, incorporate longer time periods, employ larger samples, and investigate other potential mediators or moderators.

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