

THE EFFECT OF CASH HOLDING, DEBT MATURITY, AND FREE CASH FLOW ON FIRM VALUE WITH DIVIDEND POLICY AS A MEDIATING VARIABLE: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

This systematic literature review (SLR) examines the influence of cash holding, debt maturity, and free cash flow on firm value, with dividend policy serving as a mediating variable, particularly in the energy sector. The study adopts the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol to identify, screen, and synthesize 38 relevant empirical studies published between 2019 and 2024. The analysis reveals that free cash flow positively and significantly affects firm value by signaling financial strength to investors. Debt maturity, particularly long-term debt structure, reduces liquidity pressure and enhances financial stability, thereby improving market valuation. Cash holding at optimal levels provides flexibility and reduces financial distress risk. Dividend policy, grounded in signaling theory and agency theory, plays a significant mediating role by transmitting financial information derived from cash holding, free cash flow, and debt maturity to the capital market. The findings highlight persistent research gaps in the energy sector context, where high capital intensity and volatile cash flows amplify the importance of these financial policies. This review provides theoretical contributions to agency theory, signaling theory, and Bird-in-the-Hand Theory, while offering practical implications for corporate financial decision-making. Future research should conduct empirical panel data analyses specifically in the energy sector of the Indonesia Stock Exchange.

Keywords: cash holding, debt maturity, dividend policy, firm value, free cash flow

1. INTRODUCTION

The energy sector is one of the strategic pillars of the Indonesian economy, serving as the primary provider of national energy supply while supporting economic activity. Energy companies listed on the Indonesia Stock Exchange (IDX) are characterized by high capital

intensity, elevated uncertainty, and sensitivity to global commodity price fluctuations (Melisa et al., 2024). The period 2020–2024 was particularly dynamic, as the COVID-19 pandemic suppressed energy demand in 2020, followed by a commodity price surge during 2021–2022, and then a sector decline of -7.84% in 2023 as reflected in the IDX Energy Index (Bunga et al., 2025).

Firm value is a critical performance metric that reflects investor confidence in a company's financial health, operational performance, and growth prospects (Perdana & Riwayati, 2025). High firm value signals market trust and enhances shareholder wealth, whereas low firm value may trigger capital withdrawal. In the energy sector, firm value is particularly shaped by financial policies such as cash holding, free cash flow management, and debt maturity structure, all of which relate directly to agency conflict mechanisms and financial flexibility (Giovanni et al., 2021).

Despite a growing body of literature on firm value determinants, most studies focus on profitability, leverage, and firm size. Research simultaneously examining cash holding, debt maturity, and free cash flow with dividend policy as a mediating variable—specifically within the energy sector—remains limited. This gap motivates the present systematic literature review (SLR), which synthesizes existing empirical evidence to map the theoretical landscape, identify research inconsistencies, and propose directions for future empirical work.

This paper is structured as follows: Section 2 reviews the theoretical foundations; Section 3 describes the SLR methodology; Section 4 presents results and discussion synthesizing key findings; and Section 5 concludes with implications and future research directions.

2. LITERATURE REVIEW

2.1 Agency Theory

Agency theory, founded on three assumptions concerning human character, organizational structure, and information (Eisenhardt, 1989), explains the relationship between shareholders (principal) and managers (agent). Conflicts arise when managers, entrusted with managing corporate resources, do not always act in the best interests of shareholders (Sutisna et al., 2024). Free cash flow and cash holding create opportunities for managerial discretion over investments that may not add shareholder value, necessitating control mechanisms such as dividend policy (Permatasari et al., 2023). Debt maturity similarly influences agency conflicts by imposing financial discipline through short-term repayment pressures (Akasumbawa & Haryono, 2021).

2.2 Signaling Theory

Signaling theory, first introduced by Spence, posits that corporate financial decisions communicate information about future prospects to investors. In the presence of information asymmetry, stable or increasing dividend payments signal financial strength and positive cash flow expectations (Bunga et al., 2025). Free cash flow, optimal cash holding levels, and balanced debt maturity collectively signal financial stability and risk management capability to

the market (Septiana et al., 2025). Dividend policy thus serves as a visible signaling mechanism that links internal financial conditions to external market perceptions.

2.3 Bird-in-the-Hand Theory

Bird-in-the-Hand Theory argues that investors prefer current dividends over uncertain future capital gains, as dividends provide certainty of cash flows and lower perceived risk. Consistent dividend payments increase investor confidence in a company's ability to generate sustainable cash flows, thereby increasing stock demand, share price, and ultimately firm value (Brigham & Houston, 2020).

2.4 Firm Value

Firm value reflects market perceptions of a company's performance, risk, and long-term growth potential (Hartati et al., 2025). It is commonly proxied by Price-to-Book Value (PBV), which measures market valuation relative to book value. PBV is preferred because it remains applicable even when earnings are negative and facilitates cross-firm comparisons within the same industry (Imanullah & Syaichu, 2023). High PBV indicates that the market values the firm above its accounting worth, reflecting investor confidence in value creation capability.

2.5 Cash Holding

Cash holding represents the amount of cash and cash equivalents held by a company relative to total assets. It enables firms to finance investments internally and maintain operational continuity (Kurniawati & Setiawan, 2021). While adequate cash holding enhances financial flexibility, excessive cash holding may trigger agency problems as managers could allocate funds to non-productive investments (Hilmi, 2022). In the energy sector, optimal cash holding is particularly important given high capital requirements and volatile cash flow patterns.

2.6 Free Cash Flow

Free cash flow (FCF) measures cash available after meeting operational and capital expenditure needs. It reflects a firm's capacity to service dividends, repay debt, or fund expansion (Jensen, 1986). Agency theory warns that high FCF without effective distribution policies can lead to wasteful managerial spending, while signaling theory views high FCF as a positive indicator of financial strength (Erianti, 2020). Companies with stable FCF are perceived as having lower bankruptcy risk and stronger market confidence (Dwi et al., 2023).

2.7 Debt Maturity

Debt maturity refers to the proportion of long-term debt in a company's total debt structure. A higher share of long-term debt provides greater liquidity flexibility and reduces short-term repayment pressure, enabling more stable cash flow management and consistent dividend policy (Nurina & Marjono, 2025). In capital-intensive sectors like energy, appropriate debt maturity alignment with asset economic life enhances financial efficiency and reduces uncertainty (Marjohan et al., 2025). Eriawati et al. (2025) confirm that debt maturity significantly influences firm value and that dividend policy mediates this relationship.

2.8 Dividend Policy

Dividend policy determines the proportion of earnings distributed to shareholders versus retained for internal financing. It serves dual roles as an agency control mechanism and a signaling device (Eriawati et al., 2025). Consistent dividend payments reflect sustainable cash generation, reduce perceived financial risk, and enhance investor confidence (Ramadhan & Sitorus, 2024). As a mediating variable, dividend policy channels the effects of cash holding, free cash flow, and debt maturity on firm value through its information content to the capital market.

3. METHODS

This study employs a Systematic Literature Review (SLR) methodology following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol. The SLR approach enables systematic identification, screening, and synthesis of existing empirical literature to map research findings, identify inconsistencies, and highlight gaps (Liberati et al., 2009).

3.1 Search Strategy

A comprehensive database search was conducted across Scopus, Web of Science, and Google Scholar using keyword combinations including: "firm value AND dividend policy", "cash holding AND firm value", "free cash flow AND firm value", "debt maturity AND dividend policy", and "dividend policy mediating". The search was limited to studies published between 2019 and 2024 to capture recent empirical developments.

3.2 Inclusion and Exclusion Criteria

Studies were included if they: (1) were published in English or Indonesian peer-reviewed journals; (2) empirically examined at least one of the four focal variables (cash holding, free cash flow, debt maturity, firm value) with dividend policy; (3) used quantitative or mixed-method approaches; and (4) were available in full text. Studies were excluded if they were: review papers without original data, duplicates, or lacked clear variable operationalization.

3.3 Study Selection

The PRISMA selection process is summarized in Table 1 below.

Table 1. PRISMA Study Selection Process (10pt)

Stage	Description	Action	Records
Identification	Database search: Scopus, Web of Science, Google Scholar (2019–2024)	Identified	347
Screening	Duplicate removal and title/abstract screening	Screened	198
Eligibility	Full-text assessed for eligibility (English, empirical, relevant variables)	Assessed	74

Stage	Description	Action	Records
Inclusion	Final studies included meeting all criteria	Included	38

3.4 Data Extraction and Synthesis

Data extraction focused on: research objectives, sample, measurement proxies, analytical methods, and key findings for each focal variable. A narrative synthesis approach was adopted to integrate findings across studies, identify patterns of consistency or contradiction, and derive theoretical propositions.

4. RESULTS AND DISCUSSION

4.1 Variable Measurement Summary

Table 2 summarizes the measurement proxies identified from reviewed studies.

Table 2. Summary of Variable Measurement (10pt)

Variable	Proxy	Formula	Reference
<i>Cash Holding (X1)</i>	Cash & Equiv. / Total Assets	$CH = \text{Cash} / \text{TA}$	Kurniawati & Setiawan (2021)
<i>Free Cash Flow (X2)</i>	OCF – CAPEX / Total Assets	$FCF = (\text{OCF} - \text{CAPEX}) / \text{TA}$	Jensen (1986); Ibrahim & Amin (2023)
<i>Debt Maturity (X3)</i>	Long-term Debt / Total Debt	$DM = \text{LTD} / \text{TD}$	Nurina & Marjono (2025)
<i>Dividend Policy (Z)</i>	Dividend Payout Ratio	$DPR = \text{DPS} / \text{EPS}$	Eriawati et al. (2025)
<i>Firm Value (Y)</i>	Price to Book Value	$PBV = \text{Price} / \text{BV}$	Brigham & Houston (2020)

4.2 Effect of Free Cash Flow on Firm Value

The majority of reviewed studies confirm a positive and significant relationship between free cash flow and firm value. Ibrahim & Amin (2023) and Damayanti & Ulfah (2023) both report that higher FCF is associated with improved firm value, as it signals financial capacity and reduces reliance on costly external financing. Ermalini & Badera (2025) further confirm this with a moderating role of managerial ownership. From an agency theory perspective, FCF that is effectively managed and distributed reduces wasteful investments and strengthens market confidence (Jensen, 1986).

However, Rismanty (2022) found no significant relationship between FCF and firm value in the property and real estate sector, suggesting that sector-specific cash flow characteristics

moderate this relationship. In the energy sector, the high capital intensity and volatile earnings cycles may amplify the role of FCF as a value signal, making this an important area for future empirical investigation (Rangga & Agnes, 2025).

4.3 Effect of Debt Maturity on Firm Value

Studies by Eriawati et al. (2025), Nurina & Marjono (2025), and Onali & Ye (2025) consistently demonstrate that debt maturity positively affects firm value. Long-term debt structure reduces liquidity risk and provides stable cash flows, which investors interpret as lower financial distress probability. This aligns with signaling theory: a balanced debt maturity profile signals prudent financial management and sustainable operations (Eriawati et al., 2025).

Conversely, Kurniawati & Setiawan (2021) found a negative relationship, possibly due to higher long-term debt costs or sector-specific leverage effects. This inconsistency underscores the need for energy-sector-specific analyses, where asset maturity matching between debt and capital investments is particularly critical (Marjohan et al., 2025).

4.4 Effect of Cash Holding on Firm Value

Wijoyo & As'ari (2023) and Caesar et al. (2025) report that cash holding positively and significantly affects firm value, as adequate liquidity reserves enhance financial resilience and investor confidence. Mahanggi et al. (2025) also confirm this in the context of financial distress risk mitigation. Optimal cash holding in the energy sector is vital due to high operational costs and unpredictable commodity-driven revenues.

In contrast, Pratiwi & Ferdiansyah (2024) and Salma et al. (2024) found no significant effect, suggesting that excessive cash accumulation without productive deployment may generate negative investor perceptions, consistent with agency theory concerns about managerial discretion (Hilmi, 2022). This bifurcated finding highlights the importance of maintaining cash holdings within an optimal range.

4.5 Mediating Role of Dividend Policy

Dividend policy emerges as a crucial mediating mechanism in multiple reviewed studies. Nuryanti et al. (2021) demonstrate that dividend policy mediates the effect of free cash flow on firm value: high FCF enables greater dividend payments, which in turn enhance market valuation through positive signaling. Eriawati et al. (2025) confirm mediation for both debt maturity and cash holding, while Yudhyani et al. (2022) find similar results for cash holding. These findings are consistent with Bird-in-the-Hand Theory—investors value dividend certainty and interpret stable payouts as evidence of sustainable financial performance.

Nonetheless, Simamora & Hasyim (2025) found that dividend policy does not mediate the FCF–firm value relationship for manufacturing companies, arguing that investors in that context prioritize internal cash retention over distribution. This divergence suggests that the mediating effect of dividend policy may be modulated by sector characteristics, investor preferences, and economic conditions. In the energy sector specifically, which is characterized

by high payout volatility and large reinvestment needs, the mediating role of dividend policy warrants dedicated empirical testing.

4.6 Research Gap and Future Directions

The synthesis of 38 studies reveals several important research gaps. First, studies simultaneously examining all three independent variables—cash holding, free cash flow, and debt maturity—with dividend policy as a mediator are rare, particularly in the Indonesian energy sector. Second, panel data analyses covering the 2020–2024 period encompassing the COVID-19 shock and post-pandemic recovery are lacking. Third, the role of regulatory and macroeconomic factors unique to the energy sector (e.g., commodity price cycles, energy transition policies) as moderating influences has not been systematically examined. This review proposes that future empirical research address these gaps using panel data regression with EViews, incorporating the Sobel test for mediation significance assessment.

5. CONCLUSION AND LIMITATION

This systematic literature review synthesizes empirical evidence on the relationships between cash holding, free cash flow, debt maturity, dividend policy, and firm value. The review confirms that free cash flow positively influences firm value by signaling financial capacity; optimal cash holding enhances financial flexibility and investor confidence; and long-term debt maturity reduces liquidity risk and supports stable financial management. Dividend policy, grounded in signaling and agency theories, plays a significant mediating role by translating financial performance signals into capital market responses. These findings collectively affirm the theoretical relevance of agency theory, signaling theory, and Bird-in-the-Hand Theory in explaining value creation dynamics in the energy sector.

The primary limitation of this review is its reliance on published literature, which may be subject to publication bias toward statistically significant findings. The review is also constrained by heterogeneity across studies in terms of sample periods, sectors, and variable operationalization, limiting direct comparability. Furthermore, the SLR method does not allow for original empirical testing. Future research should address these limitations through rigorous panel data analysis of Indonesian energy sector companies listed on the IDX for the period 2020–2024.

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