

BOARD GENDER COMPOSITION, LEVERAGE, AND FIRM VALUE: DIVIDEND POLICY MEDIATION WITH AKHLAK VALUES MODERATION IN STATE-OWNED ENTERPRISES ON INDONESIA STOCK EXCHANGE (IDX)

Sunarji^{1*}, Lilis Ardini²

¹ Doctoral of Management, STIESIA, Surabaya, Indonesia

² Faculty of Economics, STIESIA, Surabaya, Indonesia

*Corresponding Author: sunarji1418@gmail.com

Abstract. Corporate governance dynamics in State-Owned Enterprises (SOEs) require a unique approach that balances commercial and social objectives. Board gender diversity and capital structure (leverage) are critical factors influencing firm value. However, the mechanisms of their influence, particularly through dividend policy and as moderated by specific corporate values remain underexplored. This is especially relevant in the context of Indonesian SOEs, which are guided by the AKHLAK values (Trustworthy, Competent, Harmonious, Loyal, Adaptive, and Collaborative). This study aims to analyze the direct effects of board gender composition and leverage on firm value, as well as the indirect effects mediated by dividend policy. Furthermore, it investigates the role of AKHLAK values implementation as a moderating variable in the relationship between gender composition, leverage, dividend policy, and firm value. The research population includes all SOEs listed on the Indonesia Stock Exchange (IDX) from 2015 to 2024. Data were collected from annual reports and sustainability reports. Hypothesis testing was conducted using Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach, a method reliable for analyzing complex models with mediation and moderation effects. The results show that board gender composition has a significant direct effect on firm value, whereas leverage has an insignificant direct effect. Dividend policy proved to act as a partial mediator in this relationship. Implementation of AKHLAK values significantly strengthens (moderates) the relationship by mitigating the potential negative impact of high leverage on firm value. However, the AKHLAK values did not strengthen (moderate) the effect of board gender diversity on firm value. This indicates that a strong ethical and cultural foundation enhances the benefits of sound governance and prudent financial management. This study provides crucial insights for SOE policymakers and management. It emphasizes that beyond structural policies, such as appointing female directors and managing debt, actively cultivating AKHLAK corporate values is essential for enhancing firm value. For investors, these findings highlight the importance of assessing a company's value system as a key indicator of its long-term sustainability and value creation potential.

Keywords: Board Gender Composition, Leverage, Firm Value, Dividend Policy, AKHLAK Values.

1. Introduction

State-Owned Enterprises (SOEs) in Indonesia operate at the intersection of commercial profitability and national development goals. Enhancing their firm value is paramount for attracting investment and fulfilling their public mandate. Within corporate governance, board gender diversity and capital structure decisions are pivotal determinants of a company's strategic direction and financial health (Graham et al., 2022; Gyapong et al., 2021). A diverse board brings varied perspectives, potentially leading to more robust decision-making, while leverage can be a double-edged sword, offering tax benefits but also increasing financial risk.

While prior research has established links between these variables and firm value, the underlying mechanisms, particularly in the unique context of SOEs, are not fully understood. Dividend policy often emerges as a key transmission channel, serving as a signal of financial health and a tool to manage agency costs (Kim et al., 2021; Abdullah et al., 2025). Furthermore, the corporate culture and value system within which these governance and financial decisions are made can significantly alter their outcomes. In Indonesia, SOEs are mandated to embody the AKHLAK values (Trustworthy, Competent, Harmonious, Loyal, Adaptive, and Collaborative), which form an ethical bedrock for their operations.

This study seeks to bridge this gap by developing an integrated model that examines the direct influence of board gender composition and leverage on the firm value of Indonesian SOEs, with dividend policy as a mediating variable. Crucially, it introduces the implementation of AKHLAK values as a moderating variable, testing whether this unique ethical framework amplifies the positive effects of good governance and mitigates the risks associated with financial decisions. Using the Structural Equation Modeling - Partial Least Squares (SEM-PLS) approach with WarpPLS software, this research provides a nuanced understanding of the complex interplay between governance, finance, ethics, and value creation in a state-owned context.

2. Literature Review

2.1. Board Gender Composition, Dividend Policy, and Firm Value

The Resource-Based View suggests that gender-diverse boards are a valuable intangible asset, bringing diverse skills, risk perceptions, and stakeholder insights (Gyapong et al., 2021). Studies in various contexts, including China and Australia, have found that female directors, particularly independent ones, positively influence dividend payouts, which in turn enhances firm value (Qurat Ul Ain et al., 2021; Gyapong et al., 2021). This is often explained by women's tendency towards greater risk aversion and a stronger focus on mitigating agency problems by committing to disburse excess cash. In Indonesia's dual-board system, the role of female commissioners (as supervisors) and directors (as executives) may have distinct impacts (Risfandy et al., 2021). Based on this, we hypothesize:

H1: Board gender composition has a positive and significant direct effect on firm value.

H2: Dividend policy mediates the relationship between board gender composition and firm value.

2.2. Leverage, Dividend Policy, and Firm Value

The relationship between leverage and firm value is complex and contingent. Trade-off theory posits an optimal level of debt, while agency theory suggests high debt can discipline managers but also lead to financial distress costs (Doorasamy, 2021; Kanoujiya et al., 2023). In emerging markets like Indonesia, high leverage often shows a negative or insignificant direct association with firm value (Jihadi et al., 2021). However, leverage can indirectly influence value through dividend policy. Firms with high debt might reduce dividends to preserve cash (Al-Fasfus, 2020), while others might use dividends as a signal of confidence in their ability to service debt (Kim et al., 2021). Thus, we propose:

H3: Leverage has a negative and significant direct effect on firm value.

H4: Dividend policy mediates the relationship between leverage and firm value.

2.3. The Moderating Role of AKHLAK Values

Corporate culture is a powerful informal institution that shapes organizational behavior and outcomes (Graham et al., 2022). The AKHLAK values—Trustworthy, Competent, Harmonious, Loyal, Adaptive, Collaborative—represent a formalized cultural system in Indonesian SOEs. A strong culture of trustworthiness and competence can enhance the credibility of signals sent by the board, such as dividend announcements. A harmonious and collaborative environment may lead to more consensus-driven, prudent financial decisions regarding leverage. Furthermore, a culture of loyalty and adaptability can help align managerial actions with long-term value creation rather than short-termism. Similar to how strong

corporate governance moderates the leverage-value relationship in Korea (Tulcanaza-Prieto et al., 2024), we posit that AKHLAK values act as a moderating force.

H5: The implementation of AKHLAK values strengthens (positively moderates) the positive effect of board gender composition on firm value.

H6: The implementation of AKHLAK values weakens (positively moderates) the negative effect of leverage on firm value.

The conceptual framework of this study is depicted in Figure 1 below.

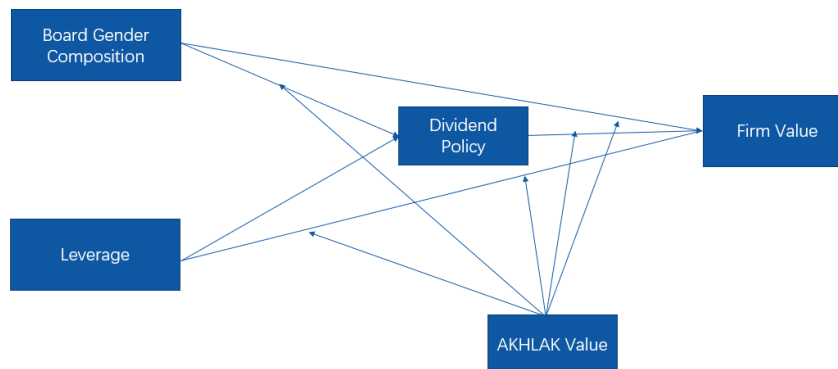


Figure 1. Research Conceptual Framework

3. Methods

3.1. Research Design and Sample

This study employs a quantitative approach with a causal research design. The population comprises all State-Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) from 2015 to 2024. The sampling technique used was purposive sampling with the following criteria: (1) SOEs consistently listed on the IDX during the 2015-2024 period, and (2) SOEs that published complete annual reports and sustainability reports during the observation period. This process yielded a final sample of 9 firms with 29 firm-year observations.

3.2. Data and Variable Measurement

Data was collected from secondary sources, namely the annual reports and sustainability reports of the sample companies. The variables were operationalized as follows:

- **Firm Value (Y):** Measured using Tobin's Q (Market Value of Equity + Book Value of Debt / Total Assets) as common proxy in previous studies (Park et al., 2021; Doorasamy, 2021).
- **Board Gender Composition (X1):** Measured by the percentage of women on the Board of Directors (Battisti et al., 2022; Risfandy et al., 2021).
- **Leverage (X2):** Measured by the Debt to Equity Ratio (Total Debt / Total Equity) (Jihadi et al., 2021; Kanoujiya et al., 2023).
- **Dividend Policy (M):** Measured by the Dividend Payout Ratio (Dividend per Share / Earnings per Share) (Kim et al., 2021; Abdullah et al., 2025).
- **AKHLAK Values (Z):** This moderating variable was measured using content analysis of annual and sustainability reports. A score was developed based on the disclosure

frequency and depth of initiatives related to the six AKHLAK pillars (Trustworthy, Competent, Harmonious, Loyal, Adaptive, Collaborative).

- **Control Variables:** Firm Size (log of total assets) and Profitability (Return on Assets - ROA) were included as control variables to account for their known influence on firm value (Endri & Fathony, 2020; Jihadi et al., 2021).

3.3. Data Analysis Technique

The data analysis and hypothesis testing were conducted using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach, operated through WarpPLS software version 6.0. WarpPLS is robust for complex models with mediation and moderation effects and does not require strict assumptions of normality (Kock, 2023). The analysis followed a two-step process: (1) evaluating the measurement model (outer model) for validity and reliability, and (2) evaluating the structural model (inner model) for hypothesis testing. The significance of path coefficients was assessed using bootstrapping procedures with 5000 resamples.

4. Results and Discussion

4.1. Descriptive Statistics and Measurement Model

The descriptive statistics show the characteristics of the sample. The evaluation of the measurement model confirms that it meets the required criteria. The Outer Loading for all indicators was > 0.7 , the Average Variance Extracted (AVE) for each construct was > 0.5 , and the Composite Reliability and Cronbach's Alpha values were > 0.7 , thus establishing convergent validity and reliability.

4.2. Structural Model (Hypothesis Testing)

The results of the structural model analysis and hypothesis testing are presented in Table 1 and Figure 2.

Table 1. Hypothesis Testing Results

Hyp	Relationship	Path Coeff.	p-value	Result
H1	BGC → FV	0.622	<0.001	Supported
H2	BGC → DP → FV	0.08 (Indirect)	0.012	Supported
H3	LEV → FV	-0.006	0.476	Not Supported
H4	LEV → DP → FV	-0.06 (Indirect)	0.028	Supported
H5	BGC*AKH → FV	0.037	0.363	Not Supported
H6	LEV*AKH → FV	0.275	0.003	Supported

Note: BGC=Board Gender Comp., LEV=Leverage, DP=Dividend Policy, FV=Firm Value, AKH=AKHLAK Values.

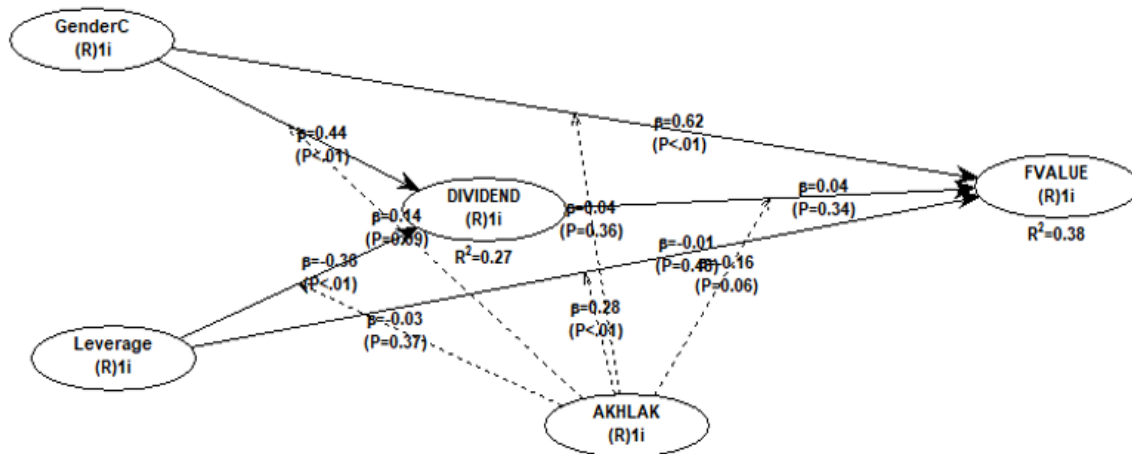


Figure 2. Structural Model Results from WarpPLS Analysis

4.3. Discussion

The Effect of Board Gender Composition and Dividend Policy Mediation (H1 & H2): The finding that board gender composition (BGC) has a positive direct effect on firm value (H1 supported) aligns with studies from China and other emerging markets (Qurat Ul Ain et al., 2021). It suggests that female directors in Indonesian SOEs contribute positively to strategic oversight and decision-making, which is valued by the market. Furthermore, the significant indirect effect (H2 supported) confirms that dividend policy acts as a partial mediator. This implies that part of the value created by a gender-diverse board is channeled through a more disciplined and credible dividend distribution strategy, reducing agency costs and signaling financial health, as per signaling theory.

The Effect of Leverage and Dividend Policy Mediation (H3 & H4): The insignificant direct effect of leverage on firm value (H3 not supported) is consistent with some findings in emerging markets (Almomani et al., 2022) and may reflect the unique position of SOEs. Investors might perceive SOE debt as less risky due to implicit government backing, negating the typical negative impact of leverage. However, the significant negative indirect effect (H4 supported) reveals a more nuanced story. High leverage leads to a lower dividend payout (likely to conserve cash for debt servicing), and this reduction in dividends negatively impacts firm value. This underscores the role of dividend policy as a critical signaling mechanism, even when the direct effect of leverage is muted.

The Moderating Role of AKHLAK Values (H5 & H6): The results show that AKHLAK values do not significantly moderate the BGC-FV relationship (H5 not supported). This suggests that the benefits of gender diversity on firm value are robust and not substantially amplified by the corporate value system in this context. Conversely, the finding that AKHLAK values significantly weaken the negative relationship between leverage and firm value (H6 supported) is profound. It indicates that in SOEs with a strong AKHLAK culture, the market views high leverage more favorably. The values of "Trustworthy" and "Competent" likely assure investors that debt will be managed prudently and ethically, mitigating fears of financial distress or agency problems. This aligns with the concept that strong corporate culture can act as a substitute for formal governance mechanisms (Graham et al., 2022).

5. Conclusion

5.1. Summary of Findings

This study demonstrates that in Indonesian SOEs, board gender diversity directly enhances firm value, partly through a more robust dividend policy. While leverage does not directly harm firm value, it exerts a negative indirect effect by constraining dividend payments. Most importantly, the research highlights the pivotal role of the AKHLAK corporate culture. A strong embodiment of these values serves as a strategic asset that mitigates the perceived risks of high leverage, thereby safeguarding and enhancing firm value.

5.2. Theoretical and Practical Implications

Theoretically, this study contributes by integrating corporate ethical values (AKHLAK) as a key moderating variable within a governance-finance-performance framework, particularly in the under-researched context of SOEs. It confirms the relevance of agency, signaling, and resource-based theories in this unique setting.

Practically, for SOE management and policymakers (e.g., the Ministry of SOEs), the findings emphasize a dual strategy: (1) Actively promote gender diversity on boards to improve decision-making and signal quality to the market, and (2) Intensively cultivate and implement the AKHLAK values across the organization. This cultural foundation is not just a compliance exercise but a tangible factor that can improve financial resilience and market valuation. For investors, the AKHLAK score can be a valuable non-financial indicator for investment decisions in Indonesian SOEs.

5.3. Limitations and Suggestions for Future Research

This study is limited to SOEs in Indonesia, which may affect the generalizability of the findings. The measurement of AKHLAK values, while systematic, is based on content analysis and could be complemented by survey methods in future research. Future studies could expand this model to include other governance mechanisms, explore the role of board gender in different types of ownership structures, or investigate the individual impact of each AKHLAK pillar.

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