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CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE: EXAMINING THE MEDIATION OF MARKET PERFORMANCE AND THE MODERATING OF WOMEN ON BOARD

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Abstract

This study examines the relationship between capital structure, market performance, and financial outcomes, while evaluating the moderating role of female board participation and the mediating role of market valuation. Using a quantitative approach with PLS-SEM on cross-sectional data from Kompas100-listed companies, the findings show that capital structure has no significant effect on financial performance or market valuation—contradicting traditional trade-off and signaling theories in an emerging market context. In contrast, market performance significantly influences financial outcomes, highlighting the importance of investor perception. Female board presence strengthens the impact of capital structure on market performance, supporting the upper echelon theory regarding leadership diversity. However, market performance does not mediate the link between capital structure and financial outcomes. These results suggest that financial decisions are shaped by external perceptions and firm context rather than following a linear pattern. Practically, firms are advised to adopt context-aware financing strategies, enhance transparency, and support inclusive governance for sustainable value creation.

INTRODUCTION

Capital structure represents a strategic component in financial management that determines the balance between debt and equity used to finance a firm's operations. Decisions regarding capital structure not only reflect management's risk preferences and policy directions, but also serve as a signal of the company's internal conditions to external investors. According to the Trade-Off Theory (Kraus & Litzenberger, 1973), there is an optimal level of debt usage that minimizes the cost of capital while maximizing firm value. Conversely, Signaling Theory (Spence, 1973; Ross, 1977) emphasizes that financing decisions can be utilized by managers to convey signals to the market regarding the company's future prospects.

Nonetheless, empirical studies have shown mixed findings regarding the impact of capital structure on financial performance. In emerging markets such as Indonesia, the relationship between capital structure and both financial and market performance remains inconsistent (Abor, 2005; Salim & Yadav, 2012). Variations in debt management practices, financial access, and market conditions contribute to these inconsistencies. Therefore, it

becomes necessary to explore more complex relationships, particularly by incorporating relevant mediating and moderating variables.

In this context, market performance is viewed as a potential mediating variable between capital structure and financial performance. Market perceptions of corporate financial decisions—as reflected by indicators such as stock price and the Price Earnings Ratio (PER)—play a crucial role in shaping firm value. When the market responds positively to a firm's capital structure policy, stock prices tend to rise, thereby enhancing financial performance through increased shareholder confidence and improved financing efficiency (Connelly et al., 2011; Zhu & Westphal, 2014). However, this mediation pathway has not been extensively explored, particularly in the context of publicly listed firms in Indonesia.

A real-world example can be observed among companies listed in the Kompas100 index, where the relationship between capital structure, market value, and financial performance does not appear to be linear. A striking case is PT Bukit Asam Tbk (PTBA), which experienced a significant drop in PER from 13.56 in 2020 to 3.19 in 2022, despite a substantial increase in total dividends from IDR 835 billion to IDR 7.9 trillion and a rise in leverage from 0.328 to 0.362 during the same period (PTBA, 2023). This suggests that rising debt and profit distribution are not automatically interpreted by the market as positive signals, and may not directly translate into improved financial performance. Similar patterns are observed in other companies such as ITMG, ADRO, and MEDC, where low PERs persist despite strong net income (Indonesia Stock Exchange, 2022).

Furthermore, the sharp increase in capital market investors in Indonesia—from 3.88 million in 2020 to 7.48 million by the end of 2021, reflecting a growth of 92.7%—indicates a growing demand for transparency and credibility of corporate disclosures (CNBC Indonesia, 2021). In this environment, financing decisions and market signaling become increasingly critical in building investor trust.

Beyond financial aspects, corporate governance characteristics are also crucial in moderating the relationship between capital structure and market perception. One governance issue receiving growing attention is the presence of women on corporate boards. Based on Upper Echelon Theory (Hambrick & Mason, 1984), the personal attributes of top executives can influence strategic decision-making processes and outcomes. Female representation on boards is believed to enhance oversight quality, broaden strategic perspectives, and strengthen firm credibility in the eyes of the market (Post & Byron, 2015; Terjesen et al., 2009). A study by Ben Saad & Belkacem (2022) even found that the presence of women directors may amplify the signaling effect of capital structure decisions.

However, empirical research that simultaneously examines the direct effect of capital structure on financial performance, with market performance as a mediator and female board representation as a moderator, remains limited in the Indonesian context. This study aims to address this gap by empirically investigating the direct impact of capital structure on financial and market performance, while also testing the mediating role of market performance and the moderating effect of women on boards.

This research adopts a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM), with a sample of firms included in the Kompas100 index over the 2018–2022 period. The findings are expected to contribute to the literature on finance and corporate governance, and offer practical implications for corporate decision-makers in formulating financing strategies that are effective, credible, and responsive to market dynamics and the increasing demand for leadership diversity.

HYPOTHESES DEVELOPMENT

Effect of Capital Structure on Financial Performance

Capital structure is a strategic decision that influences the balance between a firm's risk exposure and return generation. According to the Trade-Off Theory (Kraus & Litzenberger, 1973), firms seek to achieve an optimal mix of debt and equity to minimize the overall cost of capital while maximizing financial performance. The use of debt provides tax advantages (i.e., interest tax shields), but if not managed prudently, it can lead to increased financial risk and reduced profitability.

Financial performance reflects a company's ability to efficiently utilize its financial resources to generate profit. It is commonly measured using indicators such as Return on Assets (ROA) and Return on Equity (ROE), which represent the firm's efficiency in utilizing assets, returns to shareholders, and the capacity to derive earnings from operational revenues (Brigham & Houston, 2021).

Numerous empirical studies support the linkage between capital structure and financial outcomes. Abor (2005) and Hirdinis (2019) suggest that moderate leverage can enhance profitability by enabling business expansion without diluting ownership. However, other findings—such as those from Firmansyah et al. (2020) and Muzakir (2022)—highlight that in emerging economies like Indonesia, high debt levels may increase financial distress without producing proportional improvements in profitability.

Considering the theoretical background and empirical evidence, the following hypothesis is proposed:

H_1: Capital structure significantly influences a firm's financial performance.

Effect of Capital Structure on Market Performance

Beyond internal performance, capital structure plays a pivotal role in shaping external perceptions, particularly market responses. Based on Signaling Theory (Spence, 1973; Ross, 1977), managerial financing decisions—such as increasing leverage or asset expansion—can serve as signals to investors regarding the firm's future outlook. A well-structured and strategically managed capital structure is likely to enhance investor confidence in the firm's capacity for long-term value creation.

In this study, market performance is measured using Price to Book Value (PBV) and Tobin's Q—both widely recognized as indicators of investor perceptions regarding valuation and market efficiency (Li et al., 2014; Martani et al., 2009). Properly managed leverage may reflect the firm's willingness to take calculated risks for expansion, while firm size often signals operational stability and resource capacity, which can enhance market credibility.

Previous studies have found a positive association between capital structure and market perception. For example, Campbell and Mínguez-Vera (2008) and Hirdinis (2019) note that firms with strong capital structures and larger sizes tend to achieve higher market valuations. However, these effects may be context-dependent and influenced by the level of information transparency and market efficiency (Chen et al., 2015).

Based on this theoretical and empirical grounding, the second hypothesis is formulated as follows:

H_2: Capital structure (leverage and firm size) positively influences market performance.

Effect of Market Performance on Financial Performance

Market performance not only reflects investor sentiment but may also serve as a catalyst for enhanced financial performance. In line with Signaling Theory (Spence, 1973; Ross, 1977), market indicators such as stock price or valuation ratios signal a firm's internal conditions to external stakeholders. Positive signals—evident through high PBV or Tobin's Q values—indicate strong investor expectations for profitability and future growth.

A favorable market perception can lead to easier access to external financing at lower capital costs (Li et al., 2014), strengthen bargaining positions with stakeholders, and enhance long-term stakeholder confidence (Connelly et al., 2011). This, in turn, facilitates operational expansion, strategic investment, and managerial efficiency—ultimately improving financial indicators such as ROA and ROE

Empirical support for this linkage includes findings from Martani et al. (2009), who demonstrate that valuation metrics like PBV and stock returns are closely correlated with financial performance. Similarly, Abor (2005) argues that strong market perceptions regarding financial management reinforce firm value and financial efficiency.

Accordingly, the third hypothesis is presented:

H_3: Market performance (PBV and Tobin's Q) positively influences financial performance (ROA and ROE).

Moderating Role of Female Board Representation in the Relationship Between Capital Structure and Market Performance

Leadership characteristics—particularly female representation on corporate boards—may act as a contextual factor that strengthens the relationship between capital structure and market perception. Drawing on Upper Echelon Theory (Hambrick & Mason, 1984), organizational outcomes are shaped by the cognitive frameworks and values of top executives. In this regard, the inclusion of women on boards is believed to enrich strategic decision-making, including in financial structure management.

Women tend to exhibit more participative and risk-averse leadership styles compared to men (Campbell & Mínguez-Vera, 2008), which may promote prudent and long-term financial decisions. These characteristics can enhance investor confidence in the firm's stability and credibility. Studies by Post and Byron (2015) and Terjesen et al. (2009) further confirm that gender-diverse boards contribute to stronger oversight and strategic communication, reinforcing the alignment between financial decisions and market responses.

Therefore, female board representation is posited to moderate the influence of capital structure on market performance. This leads to the formulation of the fourth hypothesis:

H_4: Female representation on the board of directors moderates the relationship between capital structure and market performance, strengthening the effect.

Mediating Role of Market Performance in the Relationship Between Capital Structure and Financial Performance

Finally, this study examines the mediating role of market performance in the relationship between capital structure and financial performance. The causal mediation approach proposed by Baron and Kenny (1986), later refined by Zhao et al. (2010), outlines that mediation occurs when the independent variable (capital structure) affects the mediating variable (market performance), which subsequently influences the dependent variable (financial performance). In essence, capital structure may exert both direct and indirect effects on financial performance through market perceptions.

An optimal capital structure—e.g., appropriate leverage levels and large firm size—may send positive signals to investors about a company's long-term prospects (Spence, 1973; Ross, 1977). These signals are reflected in enhanced market performance, measured through PBV and Tobin's Q, which subsequently lead to improved access to capital and better financial outcomes. This aligns with signaling theory, which posits that financial decisions convey key information to the market, shaping investor expectations (Connelly et al., 2011).

Nevertheless, the strength of this mediation depends significantly on market efficiency and corporate transparency. In inefficient markets or where information disclosure is limited, capital

structure signals may be misunderstood or disregarded, weakening the mediating effect (Abeysekera, 2010; Chen et al., 2015).
Thus, the fifth hypothesis is articulated as follows:
H_5: Market performance mediates the relationship between capital structure and financial performance.

RESEARCH METHOD

Research Design and Sampling Technique

This study adopts an explanatory research design, aiming to examine the causal relationships between capital structure as the independent variable and market and financial performance as dependent variables. The explanatory approach is appropriate, as this research does not merely describe or explore phenomena but empirically tests inter-variable effects based on established theoretical frameworks, including Signaling Theory and Upper Echelon Theory.

The unit of analysis is publicly listed firms included in the Kompas100 Index on the Indonesia Stock Exchange (IDX) during the 2018–2022 period. A purposive sampling technique was employed using the following inclusion criteria: (1) firms consistently listed in the Kompas100 Index for five consecutive years; (2) availability of complete annual financial reports; and (3) disclosure of information related to dividend policy, capital structure, board composition, CEO background, and total assets. Based on these criteria, a sample of 35 companies was selected, resulting in a panel dataset of 175 firm-year observations (35 companies × 5 years).

Operational Definitions and Variable Measurements

This study investigates four key variables: capital structure, market performance, financial performance, and woman on board (WOB) as a moderating variable.
The capital structure variable is measured using two formative indicators: leverage (LEV) and firm size (SIZE). Leverage reflects the proportion of debt relative to total assets, indicating the firm's financial risk, while firm size is represented by the natural logarithm of total assets, indicating the operational scale of the firm (Hirdinis, 2019; Nafiah & Sopi, 2020). These two indicators jointly capture the firm's financing capacity and strategy.

Market performance is assessed using the dividend payout ratio (DPR) and the price-to-earnings ratio (PER). DPR reflects the firm's profit distribution policy to shareholders, signaling the sustainability of earnings (Setyorini & Sulhan, 2023), while PER represents investor valuation of the firm relative to its earnings per share, serving as a proxy for market response to financial performance (Pushpa Bhatt & Sumangala, 2012).
Financial performance, the main endogenous variable, is constructed from return on assets (ROA) and return on equity (ROE). ROA indicates asset utilization efficiency, and ROE reflects the firm's ability to generate shareholder returns (Brigham & Houston, 2021; Weston & Copeland, 1992). These indicators provide a comprehensive view of financial effectiveness from both managerial and shareholder perspectives.

The moderating variable, woman on board (WOB), is measured by the percentage of women on the board of directors relative to total board members (Fitroni & Feliana, 2022). WOB is used to test whether gender diversity at the strategic leadership level strengthens the relationship between capital structure and market performance, in line with Upper Echelon Theory (Hambrick & Mason, 1984), which asserts that executive demographic characteristics influence organizational policy and external perceptions.
This study adopts a formative measurement model, wherein constructs are formed by their respective indicators (Diamantopoulos & Winklhofer, 2001). When relevant, higher-order

constructs are measured using a reflective–formative second-order approach. Variable measurements are as follows:

1. **Firm Value** – Measured by the Price to Earnings Ratio (PER):
   PER = Stock Price / Earnings per Share (EPS)
   This metric captures investor expectations of the firm's future profitability (Damodaran, 2012).
2. **Dividend Policy** – Measured by the Dividend Payout Ratio (DPR):
   DPR = Dividends per Share / Earnings per Share
   This formative indicator reflects the firm's preference for distributing earnings (Baker & Powell, 2000).
3. **Debt Policy** – Measured by the leverage ratio:
   Leverage = Total Liabilities / Total Assets
   This ratio indicates the portion of assets financed by debt and reflects the firm's funding structure (Myers, 2001).
4. **Woman on Board (WOB)** – Measured by the proportion of female board members:
   WOB = (Number of Female Directors / Total Board Members) × 100%
5. **Firm Size** – Measured as the natural logarithm of total assets:
   Firm Size = Ln(Total Assets)
   Larger firms typically enjoy easier access to external financing, lower bankruptcy risk, and greater transparency, leading to more stable capital structures (Rajan & Zingales, 1995; Frank & Goyal, 2009).

Data Analysis Technique

A quantitative approach is applied using Partial Least Squares Structural Equation Modeling (PLS-SEM), with SmartPLS 4 as the analytical software. PLS-SEM is selected for its robustness in handling non-normal data distributions, moderate sample sizes, and complex models involving moderation and mediation effects (Hair et al., 2021). Furthermore, it is well-suited for formative measurement models, where indicators define constructs rather than reflect them. In formative models, changes in a single indicator may alter the meaning of the entire construct, and indicators are not required to be correlated (Diamantopoulos & Winklhofer, 2001). Hence, construct validity is assessed based on indicator significance and multicollinearity, rather than internal consistency measures such as Cronbach's Alpha.

The use of formative indicators in this study aims to accurately capture multifaceted constructs such as capital structure, market performance, and financial performance, each comprising heterogeneous, non-substitutable dimensions. This modeling approach allows for a more realistic and context-sensitive interpretation of each indicator's contribution to the respective constructs.

PLS-SEM Analysis Procedures

1. Measurement Model Assessment (Formative Constructs):
   a) Variance Inflation Factor (VIF): To ensure no high multicollinearity exists among indicators (VIF < 5).
   b) Indicator Significance: Evaluated through outer weights and p-values to determine the contribution of each indicator to the construct.
   c) Content Validity: Justified through theoretical rationale and empirical references.
2. Structural Model Assessment:
   a) R^2 (Coefficient of Determination): Measures the explanatory power of endogenous constructs.
   b) Q^2 (Predictive Relevance): Assessed via blindfolding procedures to evaluate the model's predictive capability.

c) Path Coefficients: Estimated using bootstrapping with 5,000 resamples to test the significance of relationships.
d) f^2 (Effect Size): Assesses the strength of each predictor variable's effect on the dependent variable.

3. Hypothesis Testing:
   a) Hypotheses are tested based on t-statistics and p-values, with a significance threshold of $p < 0.05$.
   b) Moderation effects (interaction between WOB and capital structure) and mediation effects are examined using the bootstrapping procedure for indirect effects (Preacher & Hayes, 2008)

RESEARCH RESULTS AND DISCUSSION

Descriptive Statistics

Before testing the hypotheses, descriptive statistics are presented to provide an overview of the characteristics of the data used in this study, as shown in Table 1.

Table 1
Descriptive Statistics

Variable	Median	Observed min	Observed max	Excess kurtosis	Skewness	Cramér-von Mises test statistic
Women on Board	-0,191	-0,831	2,383	-0,193	0,976	2,153
Capital Structure	-0,129	-2,688	2,332	0,267	-0,131	0,385
Financial Performance	-0,312	-3,628	5,003	7,210	2,025	2,945
Market Performance	-0,066	-1,630	4,207	1,358	0,994	0,500

Source: Output of SmartPLS 4, 2025

Descriptive Analysis Results

The descriptive analysis of the latent constructs in this study reveals that most variables exhibit acceptable data distribution for the PLS-SEM approach. The *Women on Board* variable shows a slightly right-skewed distribution (skewness = 0.976), yet with near-zero kurtosis (–0.193), indicating a relatively normal distribution shape. *Capital Structure* appears to have the most balanced distribution, with skewness close to zero (–0.131) and low kurtosis (0.267), suggesting evenly spread values with minimal presence of outliers.

In contrast, *Market Performance* shows a mild deviation toward a right-skewed distribution (skewness = 0.994) and a slightly peaked shape (kurtosis = 1.358), but still within acceptable limits. The variable showing the most significant deviation from normality is *Financial Performance*, which has a high skewness (2.025) and excessive kurtosis (7.210), indicating a predominance of low values alongside a few extreme high values (outliers). This distribution is further evidenced by the wide range of values, from –3.628 to 5.003, and the highest Cramér–von Mises statistic among the constructs, confirming its departure from normal distribution.

Nevertheless, since PLS-SEM does not require the assumption of normality (Hair et al., 2022), these findings do not compromise the validity of model estimation. However, the presence of outliers, particularly in the *Financial Performance* variable, should be taken into account when interpreting the results and formulating conclusions. Future studies employing parametric methods or assuming normality may require additional treatments such as data transformation or outlier trimming to ensure more robust and representative findings.

Measurement Model Assessment

Outer Weight Results

To evaluate the validity and contribution of indicators in the formative constructs, an *outer weight* analysis was conducted as part of the measurement model assessment. Outer weight values indicate the relative contribution of each indicator to its corresponding formative construct. In the context of formative modeling, a significant outer weight implies that the indicator contributes statistically to the formation of the latent construct. The results of the outer weight analysis are presented in Table 2.

Table 2
Outer Weight Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
DPR -> Market Performance	1,012	1,005	0,047	21,694	0,000
PER -> Market Performance	-0,250	-0,212	0,143	1,749	0,080
LEV -> Capital Structure	0,676	0,470	0,559	1,210	0,226
SIZE -> Capital Structure	1,008	0,725	0,406	2,479	0,013
ROA -> Financial Performance	0,672	0,714	0,313	2,144	0,032
ROE -> Financial Performance	0,478	0,359	0,406	1,176	0,240

Source: Output of SmartPLS 4, 2025

Outer Weight Results

The analysis results indicate that within the Market Performance construct, the *Dividend* Payout Ratio (DPR) contributes significantly, with an outer weight of 1.012, a t-statistic of 21.694, and a p-value of 0.000. This confirms DPR as the primary indicator shaping Market Performance. Conversely, the Price Earning Ratio (PER) has a negative weight of –0.250 and a p-value of 0.080, indicating it is statistically insignificant at the 5% level. Nevertheless, in formative measurement models, non-significant indicators may still be retained if they have strong theoretical justification and exhibit substantial practical relevance (Hair et al., 2017).

For the Capital Structure *construct*, Firm Size (SIZE) shows a statistically significant contribution (weight = 1.008; p = 0.013), while Leverage (LEV) does not (weight = 0.676; p = 0.226). This suggests that firm size plays a more dominant role in defining capital structure within the current model. This finding is consistent with previous empirical studies which argue that larger firms tend to have more stable capital structures and better access to external financing (Rajan & Zingales, 1995). Similarly, in the Financial Performance *construct*, Return on Assets (ROA) *demonstrates a significant contribution (weight = 0.672; p = 0.032), whereas* Return on Equity (ROE) is not statistically significant (weight = 0.478; p = 0.240). These results indicate that operational profitability, as measured by ROA, better represents financial performance in this model than ROE.

In formative measurement frameworks, statistical insignificance alone does not necessarily warrant the removal of an indicator. If an indicator is conceptually important and supported by theoretical or empirical evidence, it may still be considered relevant (Diamantopoulos & Siguaw, 2006). Therefore, the decision to retain or exclude an indicator should consider both statistical results and theoretical justification.

Outer Loading Results

To evaluate the convergent validity of reflectively measured constructs in the model, an outer loading analysis was conducted. Outer loading values represent the degree of association between each indicator and its related latent variable. An indicator is generally regarded as having satisfactory convergent validity when its loading exceeds 0.70, indicating that over half of its variance is captured by the latent construct (Hair et al., 2021). Nonetheless, indicators with loading values between 0.40 and 0.70 can still be retained if their presence contributes meaningfully to the construct's overall reliability and validity. The outer loading results for each reflective indicator in the model are presented in Table 3 below.

Table 3
Outer Loadings

Indicators	Capital Structure	Financial Performance	Market Performance
DPR			0,969
PER			-0,075
LEV	0,327		
SIZE	0,773		
ROA		0,910	
ROE		0,813	

Source: Output of SmartPLS 4, 2025

The outer loading analysis for the formative constructs shows that the indicator Firm Size (SIZE) has a strong contribution to the Capital Structure construct (loading = 0.773), while Leverage (LEV) has a weaker contribution (loading = 0.327). This indicates that firm size more accurately represents the capital structure in this model. For the Financial Performance construct, both Return on Assets (ROA) and Return on Equity (ROE) have high loading values (0.910 and 0.813, respectively), reinforcing the validity of this construct in reflecting corporate profitability.

In contrast, within the Market Performance construct, only the Dividend Payout Ratio (DPR) demonstrates a very strong contribution (loading = 0.969), while the Price Earning Ratio (PER) shows a very low and negative value (–0.075), suggesting that this indicator is not empirically relevant for forming the construct. In formative measurement models, indicators with low loading values such as LEV and PER should not be automatically removed; instead, their theoretical contribution and potential for multicollinearity should be carefully assessed (Diamantopoulos and Winklhofer, 2001; Hair et al., 2017).

Collinearity Assessment

Prior to analyzing the structural model, a multicollinearity check was performed to confirm that the independent constructs were not highly correlated. This assessment utilized the Variance Inflation Factor (VIF) to detect any potential multicollinearity problems. VIF values that surpass specific cutoff points may suggest problematic levels of multicollinearity requiring further attention. The detailed results of the VIF analysis are shown in Table 4.

Table 4
Collinearity (Inner Model)

	VIF
WOB-> Market Performance	1,019
WOB x Capital Structure -> Market Performance	1,001
Capital Structure -> Financial Performance	1,001
Capital Structure -> Market Performance	1,018
Market Performance -> Financial Performance	1,001

Source: Output of SmartPLS 4, 2025

Collinearity Test Results

The multicollinearity test results between formative constructs and interaction terms indicate that all VIF values are well below the critical threshold of 3.3, suggesting no multicollinearity issues that could compromise model estimation. The highest VIF value recorded is only 1.019 (in the path from Board Capital to Market Performance), while most others are close to 1, including the interaction construct (Board Capital × Capital Structure) and the path from Market Performance to Financial Performance. These findings suggest that each construct contributes uniquely and independently to the structural model, and that the formative model satisfies the statistical requirement for discriminant validity at the indicator level (Diamantopoulos & Siguaw, 2006; Hair et al., 2017).

Structural Model Assessment

Predictive Relevance and Explanatory Power of the Model

After confirming that the formative measurement model meets the criteria for validity, the next step is to assess the structural model in order to test the relationships between constructs. This assessment involves evaluating the R^2 values, the significance of path coefficients based on bootstrapping results, and the Q^2_predict values to determine the model's predictive ability for endogenous constructs.

Table 5
Q^2_predict, RMSE, MAE, and R Square

	Q^2predict	RMSE	MAE	R-square
Financial Performance	0,015	1,247	0,676	0,168
Market Performance	0,037	1,020	0,776	0,094

Source: Output of SmartPLS 4, 2025

Predictive Relevance and Explanatory Power

Based on the evaluation of the model's predictive ability using PLS Predict, the Q^2_predict value for the *Financial Performance* construct is 0.015, while for *Market Performance* it is 0.037. The Q^2_predict for Financial Performance falls below the minimum threshold of 0.02, indicating that the model lacks sufficient predictive relevance for this construct. In contrast, the Q^2_predict for Market Performance slightly exceeds the minimum threshold, suggesting low but acceptable predictive power (Hair et al., 2022).

The RMSE (Root Mean Square Error) and MAE (Mean Absolute Error) values for both constructs indicate relatively high levels of prediction error. For Financial Performance, the RMSE is 1.247 and MAE is 0.676, while for Market Performance, RMSE is 1.020 and MAE is 0.776. These values suggest that although the model shows limited predictive capability, its accuracy remains suboptimal and requires improvement.

From an explanatory perspective, the R^2 value for Financial Performance is 0.168, meaning that 16.8% of the variance in this construct is explained by the predictor variables in the model. According to Hair et al. (2022), an R^2 value of 0.19 or higher is considered weak; thus, a value of 0.168 falls into the category of very low explanatory power. Meanwhile, Market Performance has an R^2 of 0.094, indicating that only 9.4% of its variation is accounted for by the model—suggesting a very weak explanatory capacity. Overall, the model demonstrates slightly stronger explanatory power for Financial Performance than for Market Performance, though both constructs exhibit limited predictive ability, highlighting the need for further model refinement in terms of both predictor constructs and indicator validity.

Hypothesis Testing Results

Following the evaluation of the formative model—through multicollinearity assessment (VIF) and the significance of outer weights—the next step is to conduct hypothesis testing within the structural model. This analysis aims to assess the strength and direction of the

relationships between latent constructs, both exogenous and endogenous. Hypothesis testing was performed by analyzing the path coefficients, t-statistics, and their associated p-values, derived from PLS algorithm estimation and bootstrapping. The results are summarized in Table 6.

Figure 1 presents the estimation output of the structural model using the formative approach via PLS-SEM. Arrows between constructs illustrate the direction of causal relationships, while the numerical values along the paths represent the estimated coefficients, indicating the magnitude of influence between constructs. The model also illustrates the formative indicator structure and the relative contributions of each indicator to its corresponding construct

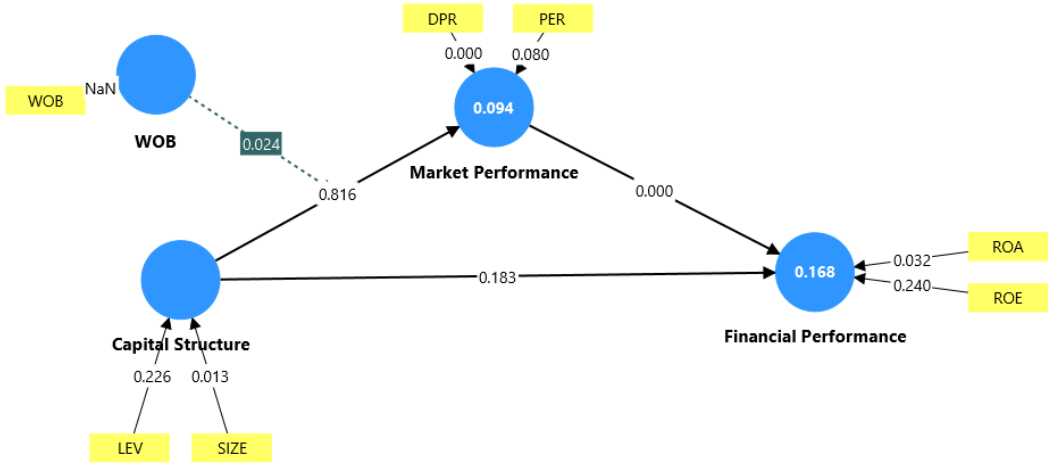

Figure 1
Structural Model Estimation Results (PLS-SEM)

Table 6
Hypothesis Testing Results – Mean, Standard Deviation (STDEV), T-values, and P-values

	Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Conclusion
H_1	Capital Structure -> Financial Performance	0,137	0,141	0,103	1,332	0,183	Rejected
H_2	Capital Structure -> Market Performance	-0,022	-0,014	0,096	0,232	0,816	Rejected
H_3	Market Performance -> Financial Performance	0,389	0,408	0,093	4,168	0,000	Accepted
H_4	WOB x Capital Structure -> Market Performance	0,310	0,243	0,137	2,260	0,024	Accepted
H5	Capital Structure -> Market Performance -> Financial Performance	-0,009	-0,006	0,041	0,215	0,830	Rejected

Source: Output of SmartPLS 4, 2025

H_1 tested the impact of capital structure on financial performance. The results reveal a statistically insignificant relationship ($\beta = 0.137$; $t = 1.332$; $p = 0.183$), leading to the rejection of H_1. This finding suggests that capital structure does not directly influence financial performance within the observed sample.

H_2 examined the influence of capital structure on market performance. The analysis revealed a very weak and non-significant relationship ($\beta = -0.022$; $t = 0.232$; $p = 0.816$), thus H_2 is also rejected. This implies that the market does not perceive capital structure policy as a major determinant of firm value.

H_3 posited that market performance positively affects financial performance. The results support this hypothesis ($\beta = 0.389$; $t = 4.168$; $p < 0.001$), indicating a significant relationship. This aligns with signaling theory, where favorable market perceptions are reflected in improved financial outcomes.

H_4 assessed the moderating role of women on boards (WOB) in the relationship between capital structure and market performance. The interaction effect was found to be significant ($\beta = 0.310$; $t = 2.260$; $p = 0.024$), thereby supporting H_4. This suggests that gender diversity in the boardroom enhances the influence of capital structure on market perceptions.

H_5 evaluated the mediating role of market performance in the relationship between capital structure and financial performance. The results indicate a non-significant mediation effect ($\beta = -0.009$; $t = 0.215$; $p = 0.830$), leading to the rejection of H_5. Hence, market performance does not serve as an effective mediator in this context.

Discussion

The Effect of Capital Structure on Financial Performance

The findings reveal that capital structure does not exert a significant impact on financial performance. This outcome contradicts the Trade-Off Theory (Kraus & Litzenberger, 1973), which posits an optimal debt-equity ratio to minimize the cost of capital and maximize profitability. The absence of a significant link may be attributed to conservative debt usage or suboptimal strategic capital structure decisions among firms in the sample.

Previous studies (e.g., Muzakir, 2022; Firmansyah et al., 2020) have similarly found that in emerging markets, high debt levels may increase financial risk without enhancing firm performance. Other factors such as operational efficiency, managerial quality, or competitive advantage may play a more dominant role in shaping financial outcomes (Myers, 2001; Abor, 2005).

The implication is that firms should develop context-specific and risk-sensitive capital structure strategies. Financing decisions should take into account earnings stability, debt-servicing ability, and asset utilization effectiveness to meaningfully contribute to financial performance.

The Effect of Capital Structure on Market Performance

The analysis indicates that capital structure has no significant effect on market performance. This implies that investors do not view capital structure (debt vs. equity) as a primary signal in assessing a firm's market value. Although signaling theory (Spence, 1973; Ross, 1977) suggests financial decisions convey firm conditions, capital structure information may be too generic or lacking in credibility to influence investor perception.

Consistent with Chen and Strange (2005) and Indriyani (2024), investors in emerging markets tend to rely more on earnings, revenue growth, or management quality rather than financing structure. Moreover, financing-related information might already be anticipated by the market or not adequately disclosed, thus limiting its influence on share prices.

The practical implication is that firms cannot rely solely on capital structure decisions to shape market perceptions. Transparent financial communication strategies, especially regarding financing risks and prospects, are essential.

The Effect of Market Performance on Financial Performance

The analysis shows a significant and positive relationship between market performance and financial performance, in line with signaling theory. Positive market sentiment—reflected

through metrics such as stock price appreciation or stable price-to-earnings ratios—serves as a signal of managerial effectiveness and enhances stakeholder confidence (Connelly et al., 2011; Li et al., 2014).

Firms receiving favorable market evaluations often enjoy easier and cheaper access to capital, enabling investment, expansion, and improved operational efficiency, all of which contribute to profitability. Empirical studies (e.g., Abor, 2005; Martani et al., 2009) also support this connection between market indicators and financial outcomes.

Strategically, this suggests that maintaining a positive market reputation through transparency, sound governance, and strategic communication can enhance financial performance.

The Moderating Role of Women on Boards

The study finds that female representation on boards significantly moderates the relationship between capital structure and market performance. Within the capital structure construct, firm size (SIZE) emerged as the key driver, while leverage (LEV) was statistically insignificant.

This finding supports Upper Echelon Theory (Hambrick & Mason, 1984), which highlights how demographic characteristics, such as gender, shape strategic decisions. The presence of women in leadership positions may promote greater risk sensitivity and cautious, transparent decision-making (Post & Byron, 2015; Terjesen et al., 2009), which in turn builds investor trust.

Practically, this underscores the strategic importance of board diversity—not merely as a matter of compliance or social equality, but as a factor enhancing market response to financial decisions. Firms should thus view female representation as a strategic governance asset.

Market Performance as a Mediator

The analysis indicates that market performance does not mediate the relationship between capital structure and financial performance. Although H3 confirms a direct influence of market performance on financial outcomes, the indirect path via capital structure was not supported.

Following mediation logic (Baron & Kenny, 1986; Zhao et al., 2010), a significant path from the independent variable to the mediator is necessary. As H2 was rejected, no sufficient mediation path exists. In relatively inefficient markets like Indonesia, capital structure information may not carry enough weight to impact investor decisions (Abeysekera, 2010).

The implication is that firms cannot rely on market reactions as a conduit for translating financing strategies into improved financial performance. Instead, efforts should focus on internal efficiency, innovation, and risk management to drive profitability.

CONCLUSION

This study investigates the interplay between capital structure, market perception, and leadership diversity in shaping firm financial performance. Overall, the results suggest that capital structure does not directly influence either financial performance or market perception, indicating that debt-equity mix alone is not a decisive factor in financial success or investor sentiment.

However, a noteworthy finding is the significant positive influence of market performance on financial outcomes. When firms are well-regarded by the market—reflected in favorable stock performance or valuation ratios—it appears to provide tangible support for financial achievement. This reflects the idea that market reputation serves as a strategic advantage rather than a symbolic asset.

Another significant result is the moderating effect of women on boards, which enhances the impact of capital structure on market performance. Gender diversity in leadership thus proves to be more than symbolic—it contributes added value by shaping investor responses to

financial strategy. This supports the notion that diverse perspectives result in decisions that are more credible and appreciated by the market.

On the other hand, market performance does not mediate the relationship between capital structure and financial performance. This suggests that, despite its role, the pathway from capital structure to financial outcomes does not necessarily flow through external perceptions. Internal factors such as operational efficiency, business strategy, and managerial capability may have stronger effects.

The study has several limitations. First, it is restricted to Kompas100 firms using cross-sectional data, limiting generalizability. Second, several formative indicators showed low or non-significant outer weights, indicating limited representation of latent constructs. Third, predictive power was weak, especially for financial performance ($Q^2 = 0.015$), with high RMSE and MAE values. Moreover, R^2 values for both endogenous constructs were low, indicating limited explanatory capacity.

Future research should expand to multiple sectors, adopt panel data, and include variables such as governance, sustainability, and disclosure quality to enhance model robustness.

Practically, these findings suggest that firms should not solely focus on capital structure but prioritize building market trust through consistent and transparent financial communication. Furthermore, leadership diversity should be viewed as a strategic asset rather than a compliance requirement.

From a theoretical perspective, this research enriches the understanding that relationships among financial constructs are not linear and are influenced by organizational context and external perceptions.

Technically, attention must be given to the distribution of financial performance data, which in this study showed skewness and extreme values. Although PLS-SEM does not require normal distribution, future studies using parametric methods should consider data transformation or outlier treatment for more stable and reliable results.

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