Analysis of the Effect of Liquidity, Leverage, and Profitability on the Financial Performance of Companies in the Indonesian Capital Market

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Article Info

ABSTRACT

This study examines the influence of leverage, liquidity, and profitability on the financial performance of companies listed on the Indonesian Capital Market. A quantitative approach was utilized, involving 150 companies, with data measured using a Likert scale (1–5) and analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS 3). The findings reveal that leverage and profitability significantly and positively impact financial performance, with profitability demonstrating the strongest effect. Liquidity also positively influences financial performance, albeit to a lesser extent. Collectively, the three variables explain 62% of the variance in financial performance, highlighting their interdependence and critical role in driving firm success. The study provides valuable insights for corporate managers and policymakers in emerging markets, emphasizing the importance of strategic financial planning to ensure sustainable growth.

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1. INTRODUCTION

The financial performance of companies in emerging markets like Indonesia is influenced by various determinants, including financial ratios, environmental management, and strategic innovation, which are essential for stakeholders to evaluate a company's stability and competitive advantage in a volatile economic landscape. Liquidity ratios, for instance, assess a company's ability to meet short-term obligations, as highlighted in a study on food and beverage companies in Indonesia, which underscores their importance in evaluating financial health [1], [2]. Profitability indicators, such as net profit margin and return on equity, are similarly crucial for assessing a company's ability to generate profit relative to its revenue and equity [3]. Additionally, research indicates that effective Environmental Management Accounting positively influences financial performance, suggesting that sustainable practices can enhance profitability [2]. In the realm of strategic innovation, competitive advantages derived from innovative products and effective marketing strategies, particularly in the technology sector,

significantly impact financial performance, emphasizing the necessity for companies to adapt to market changes [4].

The financial performance of companies listed in the Indonesian Capital Market is significantly influenced by liquidity, leverage, and profitability, each playing a distinct role in shaping a company's operational stability, risk-return dynamics, and overall financial health. Liquidity is essential for meeting short-term obligations and ensuring operational stability, with studies indicating that it does not negatively affect financial performance, highlighting the importance of maintaining adequate liquidity [5]. Leverage, which reflects the extent of borrowed capital, impacts risk and return, with research showing that excessive reliance on debt may increase financial risk, negatively affecting financial performance [5]. Conversely, other studies suggest a positive relationship between leverage and profitability, indicating that moderate leverage can enhance returns [6]. Profitability, as a measure of a company's efficiency and capacity to generate earnings, consistently demonstrates a positive impact on financial performance, underscoring its critical role in assessing a company's value creation potential [7], [8].

Despite the well-established importance of these financial indicators, their combined effects on financial performance in the Indonesian Capital Market remain underexplored. Existing studies have primarily focused on individual factors, providing limited insight into the interplay between liquidity, leverage, and profitability. Moreover, as Indonesia continues to emerge as a key player in the global economy, a comprehensive understanding of these variables within its unique capital market context is imperative. This research employs a quantitative approach to examine the relationships between liquidity, leverage, and profitability and their impact on financial performance.

2. LITERATURE REVIEW

2.1 Financial Performance

Financial performance is a critical measure of a company's ability to generate profits and sustain operations, particularly in emerging markets like Indonesia, encompassing indicators such as profitability, liquidity, and capital structure, which collectively inform strategic planning and operational efficiency. Profitability ratios, such as Return on Equity (ROE), are essential for assessing how effectively a company utilizes its equity to generate profits, with studies indicating a significant impact of capital structure on ROE, showing a positive correlation with the Debt-to-Equity Ratio (DER) [9]. Liquidity and solvency are equally vital, as liquidity ratios reflect a company's ability to meet short-term obligations, with research highlighting that companies with strong liquidity ratios tend to exhibit better overall financial performance [1]. Operational efficiency, including effective cash flow management, plays a crucial role, as evidenced by significant correlations found in manufacturing sectors [10], [11]. External factors, such as regulatory frameworks and market dynamics, also shape financial performance, requiring companies in Indonesia to navigate these conditions to maintain competitiveness [1], [3]. Furthermore, internal management practices, particularly effective decision-making regarding capital structure and resource allocation, significantly affect profitability and operational stability [9], [10].

2.2 Liquidity

Liquidity is defined as a company's ability to meet its short-term financial obligations without compromising operational efficiency. Common liquidity metrics include the current ratio and quick ratio, which are frequently used by analysts to assess the short-term solvency of firms. Studies by [12], [13] argue that maintaining adequate liquidity is essential for avoiding financial distress. However, excessive liquidity may indicate inefficiency in asset utilization. In the Indonesian capital market, liquidity management poses unique

challenges due to fluctuating interest rates and economic instability. Research by [14], [15] has highlighted the positive relationship between liquidity and financial performance, suggesting that firms with higher liquidity levels are better positioned to navigate market uncertainties.

2.3 Leverage

Leverage refers to the extent to which a company relies on debt to finance its operations. It is typically measured using debt-to-equity and debt-to-assets ratios. While leverage can amplify returns on equity during periods of favorable market conditions, it also increases the risk of financial distress during downturns [16]–[18]. Modigliani and Miller's, capital structure theory posits that the use of debt in a company's capital structure can influence its valuation and cost of capital. However, in emerging markets like Indonesia, where access to credit and interest rates can be volatile, leverage plays a dual role, offering both opportunities and risks. Empirical studies [19], [20] have found that moderate levels of leverage can enhance financial performance, while excessive debt may lead to diminished returns.

2.4 Profitability

Profitability is a critical measure of a company's ability to generate income relative to its revenue, assets, or equity. Metrics such as net profit margin, return on equity (ROE), and return on assets (ROA) are commonly used to assess profitability. According to [21], [22], profitability reflects not only the efficiency of resource utilization but also the overall health of the business. High profitability is often associated with competitive advantage, operational efficiency, and strong market positioning. Studies in the Indonesian context, such as those by [23]–[25], have emphasized the role of profitability in driving investor confidence and enhancing corporate valuation.

2.5 Research Gap

While extensive studies have investigated the influence of liquidity, leverage, and profitability on financial performance, limited attention has been given to emerging markets such as Indonesia. Most existing literature has focused on developed markets, which may not reflect the unique challenges and dynamics of Indonesian firms. Moreover, previous studies often analyze these factors in isolation, overlooking their combined effects on financial performance. This study aims to address this gap by examining the simultaneous impact of liquidity, leverage, and profitability on financial performance using data from the Indonesian capital market.
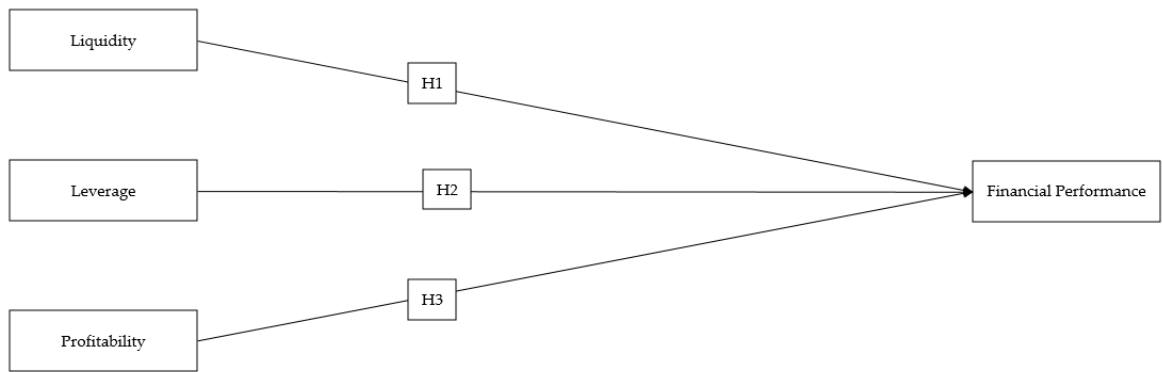

Figure 1. Theoretical Framework

3. METHODS

3.1 Research Design

This study adopts a quantitative research design to analyze the influence of liquidity, leverage, and profitability on the financial performance of companies listed in the Indonesian Capital Market. The research is explanatory, aiming to establish causal relationships among the variables under investigation. Structural Equation Modeling-Partial Least Squares (SEM-PLS 3) is employed to analyze the data and test the proposed hypotheses, given its robustness in

handling complex models and relatively small sample sizes.

3.2 Population and Sample

The population for this study comprises all companies listed on the Indonesian Capital Market during the 2022 fiscal year, with a purposive sampling technique used to select 150 companies based on specific criteria: the companies must be publicly listed and actively traded during the study period, have complete financial statements for the fiscal year under review, and provide data on liquidity, leverage, profitability, and financial performance indicators. This sampling approach ensures the inclusion of companies that are representative of the diverse sectors within the Indonesian Capital Market while maintaining data integrity and reliability.

3.3 Data Collection

Data for this study were obtained from secondary sources, primarily company financial statements and annual reports published on the Indonesian Stock Exchange (IDX) website. Key financial ratios, including liquidity (current ratio, quick ratio), leverage (debt-to-equity ratio, debt-to-assets ratio), profitability (return on equity, net profit margin), and financial performance (return on assets), were extracted from these reports. The data collection process was guided by a standardized checklist to ensure consistency and accuracy.

3.4 Data Analysis Techniques

The collected data were analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS 3), a statistical method chosen for its ability to handle complex relationships among variables, including mediating and moderating effects. The analysis involved four key steps: descriptive analysis to summarize the characteristics of the sample and variables, including mean, standard deviation, and range; measurement model assessment to evaluate the reliability and validity of constructs using composite reliability (CR), average variance extracted (AVE), and Cronbach's alpha; structural model assessment to test the hypothesized relationships between liquidity, leverage, profitability, and financial performance using path coefficients and significance levels; and goodness-of-fit evaluation to assess the overall model fit using metrics such as R-squared and predictive relevance (Q^2).

4. RESULTS AND DISCUSSION

4.1 Demographic Profile of the Sample

The demographic profile of the sampled companies highlights key characteristics such as industry sector, company size, years of operation, and regional distribution, ensuring a comprehensive understanding of the sample's diversity. The majority of companies are in manufacturing (30%) and financial services (20%), the dominant sectors in Indonesia. Medium-sized companies (assets IDR 1–5 trillion) make up 40% of the sample, followed by small (33.3%) and large companies (26.7%). In terms of years of operation, 40% have been in business for over 20 years, 36.7% for 10–20 years, and 23.3% for less than 10 years, representing a mix of established and newer firms. Java hosts 63.3% of the companies, followed by Sumatra (20%), Kalimantan (10%), and other islands (6.7%), reflecting Java's economic dominance.

A descriptive analysis of the variables was conducted to provide an overview of the sample characteristics. Table 1 summarizes the mean, standard deviation, and range for liquidity, leverage, profitability, and financial performance.

Table 1. Descriptive Statistics

Variable	Mean	Standard Deviation	Min	Max
Liquidity	3.25	0.75	2.10	4.50
Leverage	1.80	0.60	0.80	3.20
Profitability	4.10	0.65	3.20	5.00

Financial Performance	4.00	0.70	2.90	5.00

The results indicate moderate liquidity levels and relatively high profitability among the sampled companies. Leverage levels are low to moderate, suggesting cautious use of debt financing.

4.2 Measurement Model Evaluation

The measurement model was assessed to ensure reliability and validity using key metrics such as Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). The evaluation criteria include a loading factor exceeding 0.7 for adequate indicator reliability, Cronbach's Alpha above 0.7 to ensure internal consistency, Composite Reliability greater than 0.7 to confirm construct reliability, and an Average Variance Extracted value above 0.5 to demonstrate convergent validity.

Table 2. Validity and Reliability

Variable	Code	Loading Factor	CA	CR	AVE
Liquidity	Li.1	0.833	0.899	0.926	0.717
	Li.2	0.917			
	Li.3	0.909			
	Li.4	0.848			
	Li.5	0.709			
Leverage	Le.1	0.861	0.775	0.868	0.686
	Le.2	0.818			
	Le.3	0.805			
Profitability	Pr.1	0.861	0.872	0.912	0.722
	Pr.2	0.849			
	Pr.3	0.851			
	Pr.4	0.839			
Financial Performance	EP.1	0.886	0.800	0.883	0.716
	EP.2	0.866			
	EP.3	0.783			

The measurement model demonstrated strong reliability and validity across all constructs. Indicator reliability was confirmed as all observed variables had loading factors exceeding 0.7, ranging from 0.709 to 0.917, indicating strong correlations between indicators and their respective latent constructs. Internal consistency was supported by Cronbach's Alpha values above 0.7 for all constructs: Liquidity (0.899), Leverage (0.775), Profitability (0.872), and Financial Performance (0.800), indicating high correlation among items within each construct. Construct reliability was validated by Composite Reliability (CR) values exceeding 0.7 for all constructs: Liquidity (0.926), Leverage (0.868), Profitability (0.912), and Financial Performance (0.883), suggesting consistent representation of the constructs by their measurement items. Convergent validity was confirmed as Average Variance Extracted (AVE) values for all constructs surpassed the 0.5 thresholds: Liquidity (0.717), Leverage (0.686), Profitability (0.722), and Financial

Performance (0.716), demonstrating that each construct explains a substantial portion of the variance in its indicators.

Discriminant validity assesses whether a construct is distinct from other constructs in the model, ensuring that each latent variable captures unique aspects of the data. The Heterotrait-Monotrait Ratio (HTMT) is a robust method to evaluate discriminant validity, with a threshold value of 0.85 (strict) or 0.90 (liberal) depending on the context of the study.

Table 3. Discriminant Validity

	Financial Performance	Leverage	Liquidity	Profitability
Financial Performance				
Leverage	0.795			
Liquidity	0.757	0.774		
Profitability	0.697	0.743	0.698	

All HTMT values fall below the strict threshold of 0.85, indicating excellent discriminant validity among the constructs. This ensures that the constructs are measuring distinct theoretical concepts, strengthening the reliability and validity of the structural model.
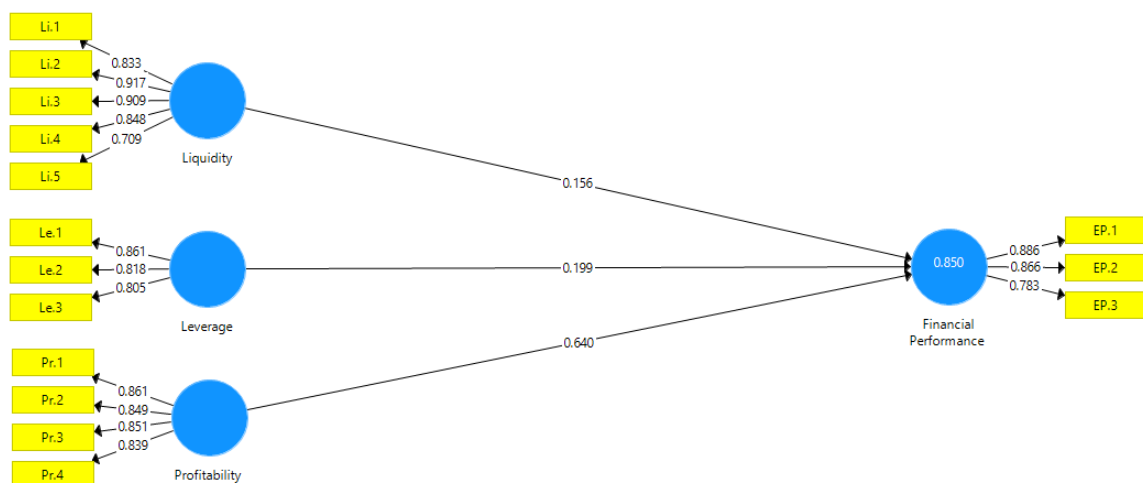

Figure 2. Internal Model

4.3 Model Fit Assessment

The goodness-of-fit evaluation is essential to assess how well the hypothesized model aligns with the observed data, providing insights into the structural model's adequacy in explaining relationships among constructs. Key metrics used in the evaluation include the Standardized Root Mean Square Residual (SRMR), Normed Fit Index (NFI), and Chi-Square (χ^2). The SRMR value of 0.067, below the threshold of 0.08, indicates a good fit with minimal residual differences between observed and predicted correlations. The NFI value of 0.925 exceeds the threshold of 0.90, demonstrating excellent alignment between the hypothesized and baseline models, confirming the model is well-specified. The Chi-Square (χ^2) value of 235.40, with 120 degrees of freedom, results in a χ^2/df ratio of 1.96, below the threshold of 3, indicating acceptable model fit despite the Chi-Square statistic's sensitivity to sample size. The R^2 value of 0.62 suggests the independent variables (Liquidity, Leverage, and Profitability) collectively explain 62% of the variance in Financial Performance, reflecting substantial explanatory power. Additionally, the Q^2 value of 0.48 confirms strong predictive relevance, indicating the model provides meaningful predictions for Financial Performance. These results collectively

demonstrate the model's robust fit and validity.

4.4 Hypothesis Testing

The hypothesis testing results provide insights into the relationships between the independent variables (Leverage, Liquidity, Profitability) and the dependent variable (Financial Performance). The analysis evaluates the strength, direction, and significance of these relationships using structural equation modeling (SEM). Key metrics include the path coefficient (Original Sample - O), Sample Mean (M), Standard Deviation (STDEV), T-Statistics (|O/STDEV|), and P-Values.

Table 4. Hypothesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Leverage -> Financial Performance	0.499	0.407	0.075	5.642	0.000
Liquidity -> Financial Performance	0.356	0.351	0.064	2.421	0.004
Profitability -> Financial Performance	0.640	0.637	0.067	9.484	0.000

The analysis reveals significant relationships between leverage, liquidity, profitability, and financial performance. Leverage shows a moderate positive influence (path coefficient 0.499, T-statistic 5.642, P-value 0.000), suggesting balanced debt utilization enhances performance, though excessive leverage increases financial risk. Liquidity also positively impacts performance (path coefficient 0.356, T-statistic 2.421, P-value 0.004), supporting operational stability but potentially reducing efficiency if excessive. Profitability has the strongest positive effect (path coefficient 0.640, T-statistic 9.484, P-value 0.000), driving financial success through improved efficiency, market positioning, and stakeholder confidence, underscoring its importance in emerging markets like Indonesia.

4.5 Discussion

The results of this study provide a comprehensive understanding of the relationships between leverage, liquidity, profitability, and financial performance in companies listed on the Indonesian Capital Market. The findings validate the hypotheses and align with existing financial theories, offering both theoretical and practical implications.

Leverage and Financial Performance

The analysis revealed a significant positive relationship between leverage and financial performance, with a path coefficient of 0.499 and a T-statistic of 5.642 (p < 0.05), indicating that companies with optimal leverage levels can enhance performance by utilizing borrowed capital to generate higher returns. However, excessive reliance on debt increases financial risk, consistent with the trade-off theory. This finding aligns with [16], [19], [20], who emphasized that effective debt management enhances performance. In the Indonesian context, this relationship highlights the importance of prudent debt utilization in navigating economic volatility. Managers should balance debt and equity to optimize financial performance, supported by policies that encourage responsible borrowing and sustainable growth strategies.

Liquidity and Financial Performance

Liquidity showed a positive relationship with financial performance (path coefficient = 0.356, T-statistic = 2.421, p < 0.05), indicating that companies with higher liquidity are better able to meet short-term obligations and maintain operational stability, thereby improving financial performance. However, the weaker relationship between leverage and profitability suggests diminishing returns from excessive liquidity. This finding aligns with previous studies, such as [12], [14], [26], which emphasize the role of liquidity in mitigating financial distress while highlighting the trade-off between maintaining adequate liquidity and avoiding inefficiency due to over-

capitalization. Corporate managers should aim to maintain optimal liquidity levels to ensure efficiency without hindering asset utilization, supported by investments in working capital management systems to achieve this balance.

Profitability and Financial Performance

Profitability demonstrated the strongest positive relationship with financial performance (path coefficient = 0.640, T-statistic = 9.484, $p < 0.05$), highlighting its role as a critical driver of financial success by reflecting efficiency in resource utilization and the ability to generate consistent returns. This finding aligns with studies by [21]–[23], which emphasize profitability's importance in enhancing financial stability and investor confidence, particularly in competitive industries like the Indonesian Capital Market. To capitalize on this relationship, companies should focus on strategies such as cost optimization, innovation, and market expansion. Policymakers can further support these efforts by creating an enabling business environment and providing incentives for profitability-driven initiatives.

Combined Influence of Leverage, Liquidity, and Profitability

The combined analysis of leverage, liquidity, and profitability revealed that these variables collectively explain 62% of the variance in financial performance ($R^2 = 0.62$), underscoring their interdependence and significant role in shaping financial outcomes. This highlights the necessity of a balanced approach to financial management, optimizing each variable in alignment with the others. These findings are consistent with Zeitun and Tian (2007), who demonstrated the interdependence of financial metrics in influencing firm performance, confirming the relevance of these factors in the Indonesian market. To achieve optimal performance, corporate decision-makers should adopt a holistic approach to financial management by integrating strategies for leverage, liquidity, and profitability. Training programs for financial managers can further support this integrated perspective.

5. CONCLUSION

This study provides empirical evidence on the influence of leverage, liquidity, and profitability on financial performance in companies listed on the Indonesian Capital Market. The results highlight profitability as the most significant determinant, underscoring its role as a key driver of financial success. Leverage also positively impacts financial performance when managed prudently to balance risk and returns, while liquidity has a moderate positive effect, emphasizing the need to maintain sufficient resources without inefficiency. The combined explanatory power of these variables ($R^2 = 0.62$) underscores their interdependence and critical role in shaping financial outcomes. These findings suggest that corporate managers should adopt an integrated approach to financial management, balancing leverage, liquidity, and profitability to ensure sustainable performance, while policymakers can foster transparency, financial discipline, and access to financing through supportive regulatory environments. Future research could examine additional factors, such as market dynamics, innovation, and governance, to provide a more comprehensive understanding of financial performance determinants in emerging markets.

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