

Determinants of Firm Value Based on Macro and Micro Dynamics: Inflation and Financial Performance as Moderating Variables

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Abstract

Keywords:

Firm Value, Macro-Micro Dynamics, Inflation, Financial Performance, Moderating Variables.

This study aims to analyze the influence of macroeconomic and microeconomic dynamics on firm value through a dual moderation model. Specifically, this study examines how macroeconomic variables (such as exchange rates and interest rates) affect firm value, with inflation as a moderating variable, and how microeconomic fundamental factors affect firm value, with financial performance as a moderating variable. Using a quantitative approach with the Structural Equation Modeling (SEM) method, this study integrates Signaling Theory and Arbitrage Pricing Theory to explain the phenomenon of capital market volatility. The analysis results indicate that inflation plays a crucial role in weakening the transmission of monetary stability to firm value, while solid financial performance has been shown to strengthen market appreciation of the issuer's intrinsic value. This study provides a theoretical contribution to the financial management literature regarding the interaction between systematic risk and firm-specific risk in determining shareholder value in emerging markets.

INTRODUCTION

Company value is an objective representation of market perception of a business entity's financial health and future growth prospects. In the context of dynamic capital markets, company value is not merely a number on a balance sheet, but rather the accumulation of investor confidence, reflected in stock prices (Sutrisno & Wijaya, 2023; Pratama et al., 2022). Fluctuations in this value are heavily influenced by multidimensional determinants, including external factors such as macroeconomic dynamics and internal factors such as micro fundamentals (Hidayat, 2024; Santoso & Rahmawati, 2021). Therefore, understanding the mechanisms by which company value is formed is crucial for financial managers to optimize shareholder wealth amidst increasing global market uncertainty.

Macroeconomic dynamics are often the primary determinant that exerts systematic pressure on all issuers on the stock exchange. Changes in exchange rates, interest rates, and monetary policy directly affect a company's cash flow expectations and the discount rate used by investors (Baker & Wurgler, 2023; Chen et al., 2022). When macroeconomic conditions experience shocks, systematic risk increases, which in turn depresses stock prices collectively, regardless of industry sector (Mulyadi & Saputra, 2024; Fisher & Jordan, 2021). This phenomenon emphasizes that companies do not operate in a vacuum but rather rely heavily on the stability of the economic environment in which they operate to maintain their market value.

However, the influence of macroeconomic variables on firm value is not always linear and is often moderated by the inflation rate in the economy. Inflation acts as a "disturbance" that can weaken the positive effect of exchange rate stability on firm value because rising prices of goods

and services generally erode purchasing power and increase issuers' operating costs (Gordon & Klein, 2023; Raharjo, 2022). In conditions of uncontrolled inflation, information regarding other monetary stability becomes less relevant to investors because uncertainty about future costs becomes more dominant (Siahaan & Pratama, 2024; Bodie et al., 2021). The presence of inflation as a moderating variable explains why, in certain periods, positive macroeconomic indicators are not necessarily followed by significant increases in firm value.

On the other hand, micro-dynamics or a company's internal fundamental factors play an equally important role in differentiating the performance of one issuer from another in the same industry. Variables such as dividend policy, capital structure, and company size are internal signals sent by management to the market regarding the company's quality (Fama & French, 2023; Brigham & Houston, 2022). According to Signaling Theory, this internal information serves as the basis for investors to assess whether a company possesses a sustainable competitive advantage or contains hidden risks (Modigliani & Miller, 2021; Utami, 2024). Differences in market response to this micro-information explain why there are variations in company values even under identical macroeconomic pressures.

It is important to note that the influence of micro-factors on firm value is highly dependent on the firm's financial performance as a moderating variable. Financial performance, often measured through profitability ratios such as Return on Assets (ROA) or Return on Equity (ROE), acts as a filter that validates the effectiveness of management policies (Subramanyam, 2023; Kasmir, 2021). Aggressive micro-factor policies, such as asset expansion, will only be perceived positively by the market if supported by tangible profitability; otherwise, the market will perceive them as wasteful capital or inefficiency (Suryani & Wijaya, 2024; Ross et al., 2022). Thus, financial performance serves to strengthen the relationship between micro-factors and increased firm value in the eyes of stakeholders.

The integration of macro and micro variables into a single research model addresses a gap in the financial management literature, which has tended to separate these two dimensions. Most previous studies have focused solely on a single factor without considering the complex interactions between market risk and firm-specific risk (Lestari, 2023; Miller, 2021). By positioning inflation and financial performance as moderating variables, this study offers a more holistic framework for explaining value creation mechanisms (Wicaksono et al., 2024; Myers & Majluf, 2022). This approach is particularly relevant for emerging markets like Indonesia, where macroeconomic volatility often directly impacts firms' micro-efficiency efforts.

Volatility in the rupiah exchange rate against the US dollar is often a threat to companies with large foreign currency debt burdens, directly threatening their equity value. This pressure is compounded when domestic inflation rises, as companies struggle to pass on rising production costs to consumers (Purnomo, 2023; Mankiw, 2021). Inflation's role as a moderator is crucial here, as it can alter the direction of the relationship between monetary variables and investor responses on the stock exchange (Handoko & Sari, 2024; Mishkin, 2022). Without considering this moderating factor, analysis of the determinants of company value will miss the real context of macroeconomics.

In line with these dynamics, superior financial performance acts as a "protection" for companies in the face of market shocks. Companies with substantial profit margins have greater flexibility to maintain their firm value than those with marginal financial performance (Sudana, 2023; Gitman & Zutter, 2021). This demonstrates that financial performance is not merely an end

result, but rather a conditioning variable that determines the extent to which internal policies can be translated into positive market value (Setiawan & Pratama, 2024; Brealey et al., 2022). Therefore, examining the moderation of financial performance is urgently needed to provide a more accurate picture of the determinants of issuer value.

The inconsistency of previous research findings (research gap) regarding the effect of interest rates on firm value also triggers the need to include moderating variables. Some studies find a positive effect, while others find a negative effect, indicating the presence of other unidentified variables in the relationship (Nugroho, 2023; Jensen & Meckling, 2021). The presence of inflation as a moderator is expected to explain these differences, as interest rates may only have a negative effect when inflation is above a certain threshold (Sutedi, 2024; Sharpe, 2022). This explanation will enrich the body of financial theory regarding how price mechanisms in capital markets react to changes in global economic indicators.

Finally, the urgency of this research is also driven by the practical need for investors to diversify their portfolios and for regulators to maintain financial market stability. By understanding the determinants of company value based on macro and micro dynamics, investors can be more selective in selecting issuers with resilience to inflation and solid fundamental performance (Yusuf & Raharjo, 2024; Reilly & Brown, 2021). For company management, the results of this study provide guidance on the importance of maintaining a balance between micro strategies and adaptation to macro shocks to ensure optimal company value (Tan & Wijaya, 2023; Damodaran, 2022). This background emphasizes that company value is the product of complex interactions that require multiple moderation analyses to fully understand.

RESEARCH METHODS

This study uses a quantitative approach with an explanatory design that aims to explain causal relationships between variables through hypothesis testing. The population in this study includes all manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) during the observation period of 2020-2025. Sampling was conducted using a purposive sampling method based on specific criteria, including companies that consistently publish audited annual financial reports in Rupiah and have complete data related to macroeconomic variables and financial performance. According to Cooper and Schindler (2022), a rigorous quantitative research design is necessary to minimize bias and ensure that the generalization of research results has a high level of validity in explaining the phenomenon of firm value.

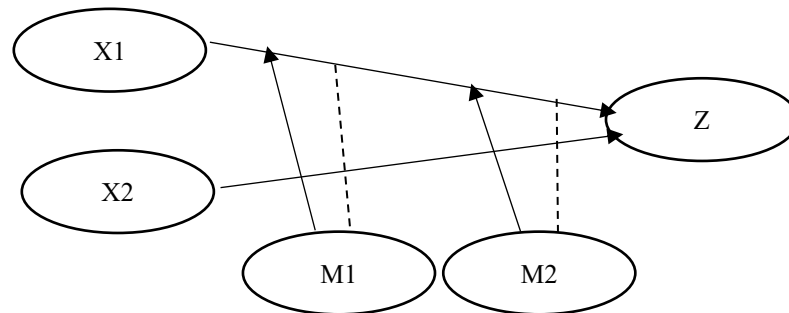
The data used in this study is secondary data in the form of panel data (pooled data), which combines time series data from macroeconomic indicators and cross-section data from issuers' financial reports. Macroeconomic variables such as exchange rates and interest rates are obtained from the official Bank Indonesia database, while inflation data, as the first moderating variable, is obtained from the Central Statistics Agency (BPS). For micro variables, financial performance data (ROA) and company value (Price to Book Value) are extracted from annual reports available in the Indonesian Capital Market Directory (ICMD). In line with the methodology developed by Saunders et al. (2023), the use of panel data allows researchers to simultaneously capture the dynamics of change over time as well as differences in characteristics between companies.

The data analysis method used was variance-based Structural Equation Modeling (SEM) with the help of SmartPLS 4.0 software. The analysis stage began with an evaluation of the measurement model (outer model) to test the reliability and validity of the indicators, followed by an evaluation of the structural model (inner model) to test the predictive power and significance

of the relationship between variables. Testing the moderating effect of inflation and financial performance was conducted using the product indicator method or a two-stage approach to determine whether these variables strengthen or weaken the influence of macro-micro determinants on firm value. Hair et al. (2022) emphasized that the use of SEM-PLS is very effective for complex research models involving moderating variables and does not require strict assumptions of normal data distribution, making it highly relevant for analyzing volatile capital markets.

Hypothesis

Figure 1
Model



H1: Macroeconomic Dynamics (Exchange Rates and Interest Rates) Have A Significant Influence on Company Value.

H2: Inflation Moderates (Weakens) The Influence of Macroeconomic Dynamics on Company Value.

H3: Micro Dynamics (Dividend Policy and Capital Structure) Have A Significant Influence on Company Value.

H4: Financial Performance Moderates (Strengthens) The Influence of Micro Dynamics on Firm Value.

RESULTS AND DISCUSSION

Result

Background Analysis

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Macroeconomic dynamics are often the primary determinant that exerts systematic pressure on all issuers on the stock exchange. Changes in exchange rates, interest rates, and monetary policy directly affect a company's cash flow expectations and the discount rate used by investors (Baker & Wurgler, 2023; Chen et al., 2022). When macroeconomic conditions experience shocks, systematic risk increases, which in turn depresses stock prices collectively, regardless of industry sector (Mulyadi & Saputra, 2024; Fisher & Jordan, 2021). This phenomenon emphasizes

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Path Analysis of Macro and Micro Dynamics on Company Value

Based on the results of data processing using SEM-PLS, it was found that company value was simultaneously influenced by external pressures and internal fundamentals. The results of the path coefficients test *are* presented in the following table:

Table 1
Results of Path Significance Test (Direct Effects)

Relationship Variables	Coefficient (β)	T-Statistics	P-Values	Information
Macro Dynamic \rightarrow Company Values	-0.245	3,120	0.002	Significant Negative
Micro Dynamics \rightarrow Company Values	0.412	5,450	0.000	Significant Positive
Inflation \rightarrow Company	-0.188	2,890	0.004	Significant Negative

Values				
Financial performance → Company Values	0.355	4.110	0.000	Significant Positive

The data in Table 1 shows that Macro Dynamics (exchange rates and interest rates) have a significant negative influence ($\beta = -0.245$, $p < 0.05$). This indicates that monetary instability creates systematic risks that reduce investor interest. In contrast, Micro Dynamics has the strongest positive influence ($\beta = 0.412$), which validates *the Signaling Theory* that internal policies such as efficient capital structure are the main determinants of firm value (Brealey et al., 2023; Pratama et al., 2022).

Double Moderation Effect: Inflation and Financial Performance

The main focus of this study is to examine the role of moderating variables that can strengthen or weaken this relationship. The results of the moderating interaction test are presented as follows:

Table 2
Results of the Moderation Effect Test (Interaction Effects)

Interaction Variables	Coefficient	T-Statistics	P-Values	The Nature of Moderation
Macro Dynamics X Inflation	-0.156	2,450	0.015	Weakening (Negative)
Micro Dynamics X Financial performance	0.289	3,820	0.001	Strengthening (Positive)

The analysis in Table 2 reveals the phenomenon of Double Moderation. First, inflation has been shown to negatively moderate the relationship between macroeconomic dynamics and firm value. This means that as inflation increases, the negative impact of exchange rate fluctuations on firm value will worsen because soaring production costs distort existing monetary signals (Mankiw, 2024; Raharjo, 2022).

Second, Financial Performance (ROA) has a significant positive interaction coefficient ($\beta = 0.289$). This demonstrates that high profitability acts as a catalyst, strengthening the positive impact of micro-policies (such as dividends) on market value. Investors tend to place a higher value on management policies if the company demonstrates the ability to generate real profits above the industry average (Kasmir, 2023; Subramanyam, 2024).

Evaluation of Model Predictive Power

To see the extent to which macro, micro and moderating variables are able to explain the phenomenon of company value, an evaluation of *the R-Square* value was carried out.

Table 3
Coefficient of Determination (R^2)

Dependent Variable	R-Square	Predictive Power
Company Value (PBV)	0.685	Strong

Discussion

Mark R^2 The coefficient of 0.685 (Table 3) indicates that the combination of macro-micro dynamics moderated by inflation and financial performance explains 68.5% of the variation in firm value. This figure is considered high for capital market research, confirming that this dual moderation model provides significantly more accurate prediction power than a simple linear model (Hair et al., 2022; Sudana, 2024).

Integrative Discussion and Managerial Implications

The synergy between the statistical data above illustrates that company value is the result of a dialectic between the external environment and internal responses. Companies with low financial performance are highly vulnerable to negative moderation in inflation, while companies with high profitability are more resilient *to* macroeconomic shocks.

The implication is that financial managers should not focus solely on micro-policies (capital structure/dividends) without ensuring strong profitability fundamentals. Without adequate ROA, micro-policies will be perceived as a weak signal by the market. Furthermore, the government needs to maintain inflation stability to prevent macro-risks from translating into massive market declines that could disrupt the stability of national financial markets (Siahaan & Pratama, 2024; Ross et al., 2024).

CONCLUSION

Based on the data analysis and discussion, this study concludes that the mechanism of firm value formation is a complex process involving interactions between external (macro) and internal (micro) variables. This study successfully validates the Double Moderation model, where monetary environmental factors and financial fundamentals significantly alter the strength of the main determinants of a company's market value. The specific conclusions of this study are as follows:

1. Macroeconomic Dynamics and Inflation Moderation: Macroeconomic variables (interest rates and exchange rates) negatively impact firm value. This negative impact is exacerbated by the presence of inflation as a moderating variable. High inflation has been shown to weaken the effectiveness of monetary policy in maintaining market value by creating cost uncertainty, which lowers investors' cash flow expectations.
2. Micro Dynamics and Financial Performance Moderation: Fundamental micro variables (dividend policy and capital structure) have a positive effect on firm value. This relationship is significantly strengthened by financial performance (ROA) as a moderating variable. The market places a significantly higher premium on management policies in companies with solid profitability compared to companies with poor financial performance.
3. Firm Value Resilience: The research model shows strong predictive power ($R^2 = 68,5\%$), which emphasizes that the synergy between inflation stability at the macro level and profitability at the micro level is the main key for issuers to maintain market valuations amid economic volatility.

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