

Macroeconomic Sensitivity and Capital Structure Effects on Defensive Stock Valuation: Evidence from PT HM Sampoerna Tbk (2013–2024)

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Abstract

This study investigates the macroeconomic sensitivity and capital structure effect on stock valuation within a defensive industry context. Using annual time-series data from 2013–2024, this research examines the influence of inflation and the Debt-to-Equity Ratio (DER) on the stock price of PT HM Sampoerna Tbk. Employing multiple linear regression with classical assumption diagnostics, the findings reveal that inflation exerts a positive and statistically significant effect on stock price ($\beta = 10,553.368$; $p < 0.05$), while DER shows no significant influence. The model explains 31.9% of stock price variation (Adjusted $R^2 = 0.319$). The results suggest that in industries characterized by inelastic demand and strong pricing power, inflation may function as a value-supporting factor rather than a risk signal. This study extends capital structure and macro-finance literature by demonstrating context-dependent inflation effects in emerging defensive markets.

Keywords: Inflation; Debt to Equity Ratio; Stock Price; PT HM Sampoerna Tbk.

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Introduction

The dynamic landscape of the financial market represents a complex interaction of interconnected variables, in which stock prices are not merely reflections of a firm's internal performance but also outcomes of broader macroeconomic and industry-specific forces. Investors continuously analyze these factors to make informed decisions, particularly by evaluating how external economic conditions, such as inflation, and internal financial indicators, such as the Debt-to-Equity Ratio (DER), shape firm valuation. This interaction constitutes a central theme in financial research, especially in developing economies like Indonesia, where capital markets tend to be more sensitive to macroeconomic shocks and policy changes. The Indonesian stock market, represented by the Indonesia Stock Exchange, therefore provides a compelling empirical setting due to its exposure to global economic fluctuations and its distinctive domestic regulatory environment.

Empirical studies in Indonesia have documented that firm-level financial indicators play an important role in explaining stock price movements, although the results remain inconclusive. Saputra (2021) finds that DER does not significantly affect stock prices, while earnings-based indicators exert a stronger influence, suggesting that leverage may not always be a primary valuation signal. Similarly, Agustin and Octovian (2025) report that profitability indicators significantly drive stock prices, yet their analysis excludes leverage and macroeconomic variables. From an agency and signaling perspective, Zelpani and Budi (2025) demonstrate that DER affects firm profitability but does not directly translate into market valuation, indicating that leverage may function more as a stability signal than a pricing determinant. These findings imply that the effect of capital structure on stock prices is highly context-dependent and warrants further investigation.

At the macroeconomic level, inflation has consistently been identified as a key determinant of stock market performance in Indonesia, though its impact varies across studies and sectors. Maharani and Wahyuningsih (2023) and Apriyani et al. (2023) document that inflation significantly influences the Indonesia Composite Index (IHSG), highlighting the sensitivity of the market to macroeconomic conditions. Likewise, Purnamasari et al. (2025) report a positive and significant relationship between inflation and the Jakarta Composite Index, while Suharyanto (2021) finds a negative effect of inflation on stock returns. These contrasting results underscore the dual nature of inflation's impact on stock prices. Sectoral evidence further supports this heterogeneity: Hardjanti et al. (2025) show that inflation significantly affects banking sector stocks, whereas Fitriyanur (2025) finds that exchange rates play a more dominant role than inflation in the mining sector.

Importantly, several studies emphasize the absence of firm-specific and defensive-sector

analyses. Martalena (2023) reveals that the effect of inflation differs across sectors among LQ45 firms, yet does not explicitly examine defensive industries characterized by inelastic demand. This omission is critical, as industries with stable consumption patterns may respond differently to inflationary pressures. The tobacco industry, therefore, represents a unique empirical context due to its resilient consumer base, strong pricing power, and strict regulatory environment. Despite its economic significance, empirical studies that jointly examine inflation and capital structure at the firm level within this industry remain limited.

Given the inconsistent findings of prior research and the lack of firm-specific evidence in defensive industries, a clear research gap emerges. Addressing this gap, the present study investigates the influence of inflation and the Debt-to-Equity Ratio on the stock price of PT HM Sampoerna Tbk over the 2013–2024 period. By integrating macroeconomic and firm-level perspectives within a time-series framework, this study not only tests the statistical relationships between the variables but also explains why these relationships may behave differently in a defensive industry characterized by inelastic demand. Consequently, this research contributes to the literature on stock price determinants in emerging markets and provides practical insights for investors, analysts, and corporate management.

Literature Review

Inflation and Stock Price

The relationship between inflation and stock price has long been debated in financial economics. Classical theory often assumes a negative association between inflation and equity valuation; however, several theoretical perspectives suggest that the direction of the relationship is conditional upon economic structure and firm characteristics.

According to the Fisher Effect (Fisher, 1930), nominal returns incorporate expected inflation to preserve real returns. In an environment of predictable inflation, investors adjust required returns upward, and firms capable of passing inflationary costs to consumers may maintain or even increase nominal earnings. Consequently, stock prices may rise alongside inflation if firms successfully adjust pricing strategies.

Furthermore, Fama's (1981) Proxy Hypothesis argues that the negative relationship often observed between inflation and stock returns is not direct, but rather mediated by real economic activity. Inflation may act as a proxy for macroeconomic conditions. In periods where moderate inflation reflects economic expansion and strong demand, corporate revenues may improve, thereby supporting stock prices.

From the perspective of Inflation Hedging Theory, equities may serve as partial hedges against inflation, particularly when firms possess real assets and pricing flexibility. Companies with strong brand positioning and market dominance can protect profit margins by transferring cost increases to consumers.

This mechanism becomes especially relevant under Industry Pricing Power Theory, which emphasizes the role of demand elasticity. In defensive industries characterized by inelastic demand, such as tobacco, utilities, or consumer staples, consumption levels tend to remain relatively stable despite price increases. Firms operating in such sectors often possess pricing power that enables them to maintain revenue stability during inflationary periods.

Empirical evidence in the Indonesian context shows mixed results regarding the inflation–stock price relationship. Studies by Apriyani et al. (2023), Maharani and Wahyuningsih (2023), Hardjanti et al. (2025), and Purnamasari et al. (2025) demonstrate that macroeconomic variables, including inflation, significantly influence stock market indices. Meanwhile, Suharyanto (2021) and Martalena (2023) report sectoral variations in inflation effects, indicating that the impact depends on industry characteristics. Fitriyanur (2025) further confirms that macroeconomic sensitivity differs across sectors. These findings suggest that inflation does not exert a uniform effect across industries, reinforcing the importance of examining defensive sectors specifically.

In defensive industries with inelastic demand, inflation may increase nominal revenues without proportionally reducing sales volume. Therefore, inflation may positively influence stock price. Rather than functioning purely as a risk signal, inflation may operate as a nominal growth driver for firms with strong market positioning.

Based on the theoretical and empirical synthesis above, the following hypothesis is proposed:

H1: Inflation positively affects stock price in defensive industries.

Debt-to-Equity Ratio (DER) and Stock Price

The relationship between capital structure and stock price is grounded in several foundational financial theories, including the Trade-Off Theory, Signaling Theory, and Pecking Order Theory. These perspectives provide complementary explanations regarding how leverage may influence firm valuation in capital markets.

According to the Trade-Off Theory (Modigliani & Miller, 1963), firms determine their optimal capital structure by balancing the tax advantages of debt against the costs of financial distress. Debt generates tax shields that may enhance firm value; however, excessive leverage increases bankruptcy risk and agency costs. From this perspective, stock price reflects the market's assessment of whether a firm's Debt-to-Equity Ratio (DER) is near its optimal level. A moderate increase in leverage may positively influence valuation if investors perceive it as value-enhancing, while excessive debt may trigger negative price adjustments due to heightened financial risk.

From the standpoint of Signaling Theory (Ross, 1977), capital structure decisions convey information to the market. An increase in debt may signal managerial confidence in future cash flows, since managers are unlikely to assume higher financial obligations without strong expectations of repayment capacity. Consequently, leverage can function as a positive signal, potentially increasing investor confidence and stock price. However, if leverage exceeds sustainable levels, the signal may reverse and be interpreted as financial vulnerability.

Meanwhile, the Pecking Order Theory (Myers & Majluf, 1984) suggests that firms prioritize internal financing, followed by debt, and issue equity as a last resort. Under this framework, changes in DER reflect financing constraints rather than optimal structure considerations. Investors may interpret increasing leverage as a sign of limited internal funds, potentially influencing stock valuation depending on market perception.

Importantly, the relevance of leverage signals may vary across firm life-cycle stages. In mature firms with stable cash flows, leverage may lose marginal signaling relevance. When firms have established earnings stability, strong market share, and predictable dividend policies, investors may focus more on profitability and growth prospects than on capital structure composition. In such cases, moderate changes in DER may not significantly alter valuation unless leverage reaches extreme levels.

Empirical studies in Indonesia provide varied evidence regarding the effect of DER on stock price. Saputra (2021) finds that DER influences stock prices in certain firms, while Priantono et al. (2021) demonstrate that DER significantly affects tobacco sector stock prices alongside EPS and PER. Similarly, Sari and Budhiarjo (2025) report that DER contributes to stock valuation in food industry firms. Zelpani and Budi (2025) further highlight the role of leverage within signaling and agency perspectives. In contrast, Agustin and Octovian (2025) suggest that profitability indicators may exert stronger influence than leverage in determining stock prices. These mixed findings reinforce the argument that capital structure effects are context-dependent and influenced by firm maturity, industry stability, and investor perception.

Thus, the impact of DER on stock price is theoretically ambiguous and context-dependent. In capital-intensive or growth-oriented firms, leverage adjustments may strongly influence stock valuation. However, in mature defensive firms with stable cash flows, the marginal informational content of DER may diminish.

Based on the theoretical and empirical synthesis above, the following hypothesis is proposed:

H2: Debt-to-Equity Ratio (DER) significantly affects stock price.

Conceptual Model Framework

To clarify the theoretical structure of this study, the research model integrates two primary valuation channels: the macroeconomic pricing channel and the capital structure channel. The model examines how external macroeconomic conditions and internal financial leverage jointly influence stock valuation within a defensive industry context.

Macroeconomic Channel

Inflation (X1)

|

|



Stock Price (Y)



|

|

Capital Structure Channel

Debt-to-Equity Ratio (X2)

Figure 1 Research Model Framework

Model Explanation

This research model is constructed to examine two theoretical transmission mechanisms affecting stock price: the macroeconomic pricing channel and the capital structure channel. These two channels represent external and internal determinants of equity valuation, respectively, and together form an integrated framework for analyzing stock price behavior within a defensive industry context.

The macroeconomic pricing channel positions inflation (X1) as an external macroeconomic variable that may influence stock valuation through pricing power, nominal revenue adjustments, and investor expectations. In conventional asset pricing theory, inflation is often perceived as a risk factor that increases discount rates and compresses firm value. However, in defensive industries characterized by inelastic demand and strong market positioning, inflation may function not merely as a cost pressure but as a nominal growth driver. Firms operating in such sectors often possess the ability to transfer rising input costs to consumers without significantly reducing sales volume. Under these conditions, inflation can enhance nominal revenues, stabilize cash flows, and support expected returns, thereby positively influencing stock price. This perspective highlights the context-dependent nature of macroeconomic sensitivity in equity markets.

The capital structure channel treats the Debt-to-Equity Ratio (X2) as an internal firm-level determinant of stock valuation. Drawing upon Trade-Off Theory, leverage may increase firm value through tax shield benefits while simultaneously elevating financial distress risk. From a Signaling Theory perspective, changes in leverage may convey managerial confidence regarding future cash flows. Meanwhile, Pecking Order Theory suggests that financing choices reflect informational asymmetries and internal funding capacity. Through these mechanisms, DER may influence investor perception and consequently affect stock price. However, in mature firms with stable cash flows, leverage may lose marginal signaling relevance. When earnings stability and dividend consistency are already established, investors may place less emphasis on incremental changes in

capital structure unless leverage approaches excessive levels. Therefore, the valuation impact of DER becomes conditional upon firm maturity and industry characteristics.

Model Objective

The proposed model simultaneously examines the macroeconomic sensitivity hypothesis and the capital structure relevance hypothesis in explaining variations in stock price within a defensive industry framework. By incorporating both external macroeconomic influence and internal financial structure considerations, the model captures two fundamental valuation channels that shape equity pricing dynamics.

Through the macroeconomic sensitivity hypothesis, the study evaluates whether inflation operates primarily as a valuation risk factor or as a nominal earnings enhancer in industries with inelastic demand. Through the capital structure relevance hypothesis, the model assesses whether leverage retains explanatory power in determining stock price movements in mature, financially stable firms.

By integrating these two channels into a unified analytical framework, the study provides a more comprehensive explanation of stock price dynamics in defensive industries. Rather than analyzing macroeconomic and firm-level factors in isolation, the model recognizes their interactive and context-dependent role in shaping investor expectations and market valuation. This unified valuation framework contributes to a more refined understanding of equity pricing behavior in emerging markets, particularly within sectors that demonstrate structural resilience to macroeconomic fluctuations.

Research Methods

This study adopts a quantitative research design, consistent with the explanatory research approach commonly used in business and financial studies (Sekaran & Bougie, 2017). The research aims to analyze the relationship and influence between the independent variables—Inflation (X_1) and Debt-to-Equity Ratio (X_2)—and the dependent variable, Stock Price (Y), of PT HM Sampoerna Tbk for the period 2013–2024.

The study employs an annual firm-level time-series design consisting of 12 observations. The selection of a time-series approach is theoretically justified because the objective of this research is to examine dynamic macroeconomic sensitivity and capital structure relevance within a single defensive firm context rather than to conduct inter-firm comparisons. A firm-specific time-series framework allows for a more focused analysis of how macroeconomic and internal financial variables interact over time within a stable industry structure and regulatory environment. By concentrating on one mature firm operating in a defensive sector, the study aims to capture contextual valuation mechanisms that may not be observable in cross-sectional or panel data settings.

Panel data techniques were not employed because the research design intentionally focuses on a single firm case. The objective is not comparative analysis across multiple firms but rather an in-depth examination of valuation transmission channels within PT HM Sampoerna Tbk. Therefore, panel regression would not align with the conceptual and theoretical framework underlying this study.

The research was conducted using secondary data collected through three main methods: (1) Library Research to construct the conceptual framework and review prior literature; (2) Documentation Study to gather financial data from the company's annual financial statements and reports; and (3) Online Research to obtain macroeconomic data, specifically annual Indonesian inflation statistics based on the Consumer Price Index (CPI), from credible public sources.

The research methodology follows standard quantitative procedures involving hypothesis testing and regression analysis, as outlined by Sugiyono (2018, 2023). The data were compiled and analyzed using statistical techniques including descriptive statistics to summarize data characteristics and classical assumption tests—normality, multicollinearity, heteroscedasticity, and autocorrelation—to ensure the validity of the regression model. Autocorrelation was specifically examined using the Durbin–Watson statistic. The obtained Durbin–Watson value indicates no serious autocorrelation problem, supporting the reliability of the time-series estimation.

Multiple linear regression analysis was employed to determine the influence of Inflation (X_1) and DER (X_2) on Stock Price (Y). The econometric model is specified as follows:

$$Y_t = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \varepsilon_t$$

where:

Y = Stock Price

X_1 = Inflation

X_2 = Debt-to-Equity Ratio

α = Constant

β_1, β_2 = Regression coefficients

ε = Error term

Hypothesis testing was conducted using the coefficient of determination (Adjusted R^2), partial significance test (t-test), and simultaneous significance test (F-test). All statistical computations were performed using SPSS Version 25. Statistical data analysis followed multivariate procedures commonly applied in quantitative financial research (Ghozali, 2021). The use of this systematic and structured approach enhances the reliability and internal validity of the empirical findings.

Operationalization of Research Variables

Table 1 Operationalization of Research Variables

Variable	Concept	Indicator	Scale
Stock Price (Y)	Market value of a company's shares reflected through annual trading performance	Annual closing stock price of PT HM Sampoerna Tbk on the Indonesia Stock Exchange (IDX), measured in Rupiah	Ratio
Inflation (X₁)	General and continuous increase in the price level of goods and services in the economy	Inflation rate calculated based on the Consumer Price Index (CPI): $(CPI_t - CPI_{t-1}) / CPI_{t-1} \times 100$	Ratio
Debt to Equity Ratio (X₂)	Financial leverage ratio that measures the proportion of debt relative to equity	$DER = (\text{Total Debt} / \text{Total Equity}) \times 100\%$	Ratio

Methodological Limitation and Robustness Consideration

This study acknowledges several limitations inherent in annual firm-level time-series research. Given the small sample size inherent in annual time-series firm-level studies, interpretation emphasizes directional consistency rather than predictive generalization. The empirical results are therefore interpreted in an explanatory rather than forecasting framework.

Additionally, the inclusion of only two independent variables may introduce potential omitted variable bias, as stock price dynamics are influenced by multiple macroeconomic and firm-specific

factors such as interest rates, exchange rates, earnings performance, and dividend policy. Future research may incorporate additional control variables or employ extended econometric techniques to enhance robustness.

Despite these limitations, the methodological design remains appropriate for achieving the study’s objective, namely, examining the relative strength of macroeconomic and capital structure channels in explaining stock price movements within a mature defensive industry context.

Results and Discussions

Results

The statistical results are interpreted following standard multivariate analysis procedures as outlined by Ghozali (2021), ensuring consistency in regression-based inference.

Descriptive Statistics

This table summarizes the basic characteristics of the research data, including the Mean, Minimum, Maximum, and Std. Deviation for each variable. This provides an initial overview of the data's properties

Table 2 Descriptive Statistics Analysis Results

Descriptive Statistics					
Variable	N	Minimum	Maximum	Mean	Std. Deviation
Inflation (%)	12	1.57	8.38	3.8175	2.36952
Debt to Equity Ratio (%)	12	18.72	110.26	63.7642	33.01229
Stock Price (IDR)	12	635	94,000	20,355.00	33,751.757
Valid N (listwise)	12				

Table 2 presents the descriptive statistics of the research variables over the 2013–2024 period. The average inflation rate was 3.8175%, with a minimum of 1.57% and a maximum of 8.38%. The standard deviation of 2.36952 indicates moderate macroeconomic fluctuation during the study period.

The Debt-to-Equity Ratio (DER), expressed in percentage terms, shows a mean value of 63.7642%, with a minimum of 18.72% and a maximum of 110.26%. The relatively large standard deviation (33.01229) suggests noticeable variation in leverage levels over time. The

maximum value above 100% indicates that, in certain years, total debt exceeded total equity, reflecting a relatively aggressive capital structure stance during earlier periods before gradually stabilizing.

Meanwhile, the stock price variable exhibits substantial dispersion, ranging from 635 to 94,000, with an average value of 20,355.00. The high standard deviation (33,751.757) indicates significant variability in market valuation across the observation period. This volatility confirms that stock price movements are influenced by dynamic macroeconomic conditions and firm-level financial factors.

Overall, the descriptive statistics suggest that while inflation fluctuated within moderate levels, leverage experienced broader variation, and stock prices displayed high volatility. This pattern supports the relevance of regression analysis to examine the explanatory contribution of macroeconomic and capital structure variables to stock price behavior.

Classical Assumption Test

Normality of residuals was tested using the Kolmogorov–Smirnov (K–S) test.

Table 3 Normality Test Results (Kolmogorov-Smirnov)

One-Sample Kolmogorov-Smirnov Test

Statistic	Value
N	12
Test Statistic (K–S)	0.201
Asymp. Sig. (2-tailed)	0.193

Since the Asymp. Sig. (2-tailed) value of 0.193 is greater than the 0.05 significance level, the residuals are normally distributed. Therefore, the normality assumption required for linear regression analysis is satisfied.

Multicollinearity was tested using the Variance Inflation Factor (VIF) and Tolerance values.

Table 4 Multicollinearity Test Results

Variable	Tolerance	VIF
Inflation	> 0.10	< 10
DER	> 0.10	< 10

The Tolerance values exceed 0.10 and VIF values are below 10, indicating that there is no multicollinearity problem between the independent variables. Thus, inflation and DER do not exhibit strong linear correlation that would distort the regression estimates.

Heteroscedasticity was examined using the Glejser test.

Table 5 Heteroscedasticity Test (Glejser Test)

Variable	Sig.
Inflation	> 0.05
DER	> 0.05

Since all significance values exceed 0.05, there is no indication of heteroscedasticity. The residual variance can therefore be considered constant (homoscedastic).

In addition to testing normality, multicollinearity, and heteroscedasticity, this study also examines the presence of autocorrelation in the regression model. Autocorrelation refers to the correlation between residuals across time periods, which is particularly relevant in time-series data. The presence of autocorrelation may bias standard error estimates and weaken the reliability of hypothesis testing results. Therefore, it is essential to ensure that the regression residuals are independent.

To detect first-order autocorrelation, the Durbin–Watson (DW) test was employed. The Durbin–Watson statistic evaluates whether there is serial correlation among the residuals of the regression model. The test results are presented in Table 6 below.

Table 6 Autocorrelation Test Results (Durbin–Watson)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	0.665	0.443	0.319	27,851.942	1.783

Based on Table 6, the Durbin–Watson (DW) value obtained from the regression model is 1.783. To determine whether autocorrelation is present, this value is compared with the critical values from the Durbin–Watson table at a 5% significance level ($\alpha = 0.05$), with the number of observations ($n = 12$) and the number of independent variables ($k = 2$). From the Durbin–Watson table, the lower bound (dl) is 0.8122 and the upper bound (du) is 1.5794, while the calculated values of $4 - du$ and $4 - dl$ are 2.4206 and 3.1878, respectively. According to the Durbin–Watson decision criteria, if DW is less than dl, the model indicates positive autocorrelation; if DW lies between dl and du, the result is inconclusive; if DW lies between du and $4 - du$, there is no autocorrelation; if DW lies between $4 - du$ and $4 - dl$, the result is inconclusive; and if DW exceeds $4 - dl$, negative autocorrelation is indicated. Since the obtained Durbin–Watson value of 1.783 falls between du and $4 - du$ ($1.5794 < 1.783 < 2.4206$), it can be concluded that the regression model does not suffer from either positive or negative autocorrelation. Therefore, the regression model satisfies the independence assumption of residuals, and the estimated coefficients can be considered reliable for hypothesis testing.

To evaluate the explanatory power of the regression model, the coefficient of determination (R^2) was examined. The coefficient of determination measures the proportion of variation in the dependent variable

that can be explained by the independent variables included in the model. In addition to R Square, the Adjusted R Square is also considered, as it provides a more accurate estimate by adjusting for the number of predictors and sample size. The results of the coefficient of determination analysis are presented in Table 4.X below.

**Table 7 Coefficient of Determination Test Results (R²)
Model Summary**

Model	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.665	0.443	27,851.942

a. Predictors: (Constant), Debt To Equity Ratio, Inflasi

This table shows the proportion of the variation in the dependent variable (stock price) that can be explained by the independent variables (inflation and DER). The Adjusted R Square value of 0.319 means that 31.9% of the variation in stock prices is explained by the model's variables, while the remaining 68.1% is influenced by other factors outside the model.

**Table 8 T-Test Results
Coefficients^a**

Model	Variable	B (Unstandardized)	Std. Error	Beta (Standardized)	t	Sig.
1	(Constant)	-770.691	19,443.141	—	-0.040	0.969
	Inflation	10,553.368	3,950.689	0.741	2.671	0.026
	Debt to Equity Ratio	-300.510	283.569	-0.294	-1.060	0.317

a. Dependent Variable: Harga Saham

This table is used to examine the partial (individual) effect of each independent variable on the dependent variable. Based on the results of the t-test, inflation shows a statistically significant effect on stock prices. The t-count value for inflation (2.671) exceeds the t-table value (2.262), and the corresponding significance level (0.026) is lower than the 0.05 threshold. These findings indicate that inflation has a positive and significant influence on the stock price.

In contrast, the Debt-to-Equity Ratio (DER) does not exhibit a statistically significant effect on stock prices. The t-count value for DER (-1.060) is lower than the t-table value (2.262), and the significance value (0.317) exceeds the 0.05 significance level. This result suggests that variations in DER do not significantly affect the stock price during the observation period.

**Table 8 F-Test Results
ANOVA^a**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5,549,415,905.404	2	2,774,707,952.702	3.577	0.072
Residual	6,981,576,294.596	9	775,730,699.400		
Total	12,530,992,200.000	11			

- a. Dependent Variable: Harga Saham
- b. Predictors: (Constant), Debt To Equity Ratio, Inflasi

This table is used to test the simultaneous (combined) effect of the independent variables on the dependent variable. The F-count value (3.577) is less than the F-table value (4.256), and the significance value (0.072) is greater than 0.05. This indicates that, collectively, inflation and DER do not have a significant effect on the stock price.

Discussion

The discussion section provides a comprehensive interpretation of the research findings by analyzing the relationships between inflation, Debt-to-Equity Ratio (DER), and stock price in the context of PT HM Sampoerna Tbk during the 2013–2024 period. Consistent with quantitative explanatory research principles (Sekaran & Bougie, 2017), this section goes beyond reporting statistical outputs and instead situates the findings within established financial theories, empirical evidence across markets, and the structural characteristics of the tobacco industry. The statistical analysis conducted using IBM SPSS (Ghozali, 2021) provides the empirical foundation for deeper theoretical and contextual interpretation.

The discussion is structured into three analytical layers, (1) theoretical interpretation, (2) empirical comparison, and (3) industry-specific explanation, followed by an assessment of the simultaneous effect of the independent variables. This approach enables a holistic and multidimensional understanding of valuation dynamics within a defensive industry framework.

The Effect of Inflation on Stock Price

Theoretical Perspective

The t-test results indicate that inflation has a positive and statistically significant effect on the stock price of PT HM Sampoerna Tbk ($t = 2.671$; $sig. = 0.026$). This finding challenges the conventional assumption that inflation uniformly erodes equity value.

From a theoretical standpoint, this result aligns with the Fisher Effect (Fisher, 1930), which posits that nominal returns adjust to expected inflation to preserve real returns. When inflation is moderate and predictable, firms capable of adjusting prices can maintain or even increase nominal earnings, resulting in higher stock valuations. Moreover, Fama's (1981) Proxy Hypothesis suggests

that inflation may reflect broader macroeconomic activity rather than directly depressing stock returns.

In defensive industries characterized by inelastic demand, inflation may act as a nominal revenue transmission channel. Firms can pass increased costs, whether from production inputs or excise taxes, onto consumers without significantly reducing sales volume. Therefore, inflation may enhance revenue sustainability rather than compress profit margins.

Empirical Evidence (Emerging vs. Developed Markets)

Empirical findings across emerging markets show mixed results regarding the inflation–stock price relationship. Studies such as Apriyani et al. (2023), Martalena (2023), and Purnamasari et al. (2025) report that macroeconomic variables, including inflation, significantly influence stock indices in Indonesia. Similarly, Hardjanti et al. (2025) and Fitriyanur (2025) find that inflation can significantly affect stock prices in specific sectors.

However, Suharyanto (2021) and Maharani & Wahyuningsih (2023) show that the direction and magnitude of inflation effects depend on sectoral characteristics and macroeconomic conditions. In developed markets, inflation tends to negatively affect equities during high-volatility periods, yet moderate and stable inflation often produces neutral or sector-dependent effects.

The present findings contribute to this empirical debate by demonstrating that within an emerging defensive sector, inflation may positively influence stock prices when firm-level pricing power and demand resilience mitigate macroeconomic pressures.

Industry-Specific Context (Tobacco Sector)

The tobacco industry possesses structural characteristics that help explain the positive relationship observed. First, tobacco demand is widely recognized as relatively inelastic. Consumers tend to maintain consumption levels despite price increases, enabling firms to pass inflationary costs and excise taxes to end users.

Second, although regulatory risk, such as excise tax increases and public health restrictions, remains persistent, dominant firms with strong brand loyalty can absorb regulatory shocks. Research by Priantono et al. (2021) shows that financial performance indicators significantly influence tobacco stock prices, highlighting the relevance of firm-level resilience within this sector.

Third, dividend stability strengthens investor confidence. Mature tobacco firms typically maintain consistent dividend payouts, reducing valuation volatility and enhancing attractiveness during inflationary periods.

The findings indicate that inflation does not universally erode equity value; rather, its effect

depends on firm-level pricing power and demand elasticity. This challenges the traditional negative inflation-stock paradigm in emerging defensive sectors.

The Effect of Debt-to-Equity Ratio (DER) on Stock Price

DER does not have a statistically significant effect on stock price ($t = -1.060$; $\text{sig.} = 0.317$), consistent with findings by Sari & Budhiarjo (2025), although contrasting with Saputra (2021) and Zelpani & Budi (2025), who report significant leverage effects under certain conditions.

From a theoretical perspective, Trade-Off Theory suggests leverage can enhance firm value through tax benefits, but in mature firms, it may already be perceived as optimal. Similarly, while Signaling Theory views debt as a signal of managerial confidence, its relevance diminishes in firms with stable cash flows, where investors prioritize profitability over capital structure (Agustin & Octovian, 2025).

Furthermore, Pecking Order Theory implies that in financially stable firms, changes in DER carry limited informational value, explaining its insignificant impact on stock price.

The Simultaneous Effect of Inflation and DER

The F-test results ($F = 3.577$; $\text{sig.} = 0.072$) indicate that inflation and DER do not have a statistically significant simultaneous effect on stock price. Although inflation individually exerts a significant positive impact, the combined explanatory power of the model remains moderate (Adjusted $R^2 = 0.319$).

This outcome suggests possible omitted variable bias or nonlinear interaction effects. As noted in macroeconomic studies (Apriyani et al., 2023; Purnamasari et al., 2025), stock price determination is influenced by multiple interacting variables, including exchange rates, interest rates, GDP growth, and profitability indicators.

The moderate explanatory power confirms that while inflation and DER contribute meaningfully to valuation, they do not fully capture stock price dynamics. The relationships between macroeconomic variables, financial structure, and stock price are highly context-dependent. In the Indonesian tobacco industry, structural demand inelasticity and strong pricing power appear to mediate the inflation–valuation relationship, while capital structure variations play a less dominant role.

Conclusions

This study examines the effects of inflation and the Debt-to-Equity Ratio (DER) on the stock

price of PT HM Sampoerna Tbk (2013–2024). The results show that inflation has a significant positive effect, indicating that in a defensive industry with inelastic demand, firms can benefit from inflation through pricing power. In contrast, DER does not significantly influence stock price, suggesting that investors in mature firms prioritize stability and profitability over capital structure. Simultaneously, inflation and DER do not significantly affect stock price, reflecting the complex and multifactor nature of market valuation.

This study is limited by its focus on a single firm and two variables, which may restrict generalizability. Future research is recommended to incorporate additional macroeconomic and firm-specific variables, broader samples, longer time periods, and complementary qualitative approaches to better capture investor behavior and market dynamics across industries.

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References

- Agustin, R. T., & Octovian, R. (2025). *The significance of financial performance indicators on stock price: Evidence from PT Selamat Sempurna Tbk*. Indonesian Financial Review, 5(1), 271–295.
- Apriyani, R., Suharti, T., & Yudhawati, D. (2023). *The effect of inflation, exchange rates, and interest rates on the composite stock price index (IHSG)*. Jurnal Ilmiah Swara Manajemen, 3(4), 768–777.
- Fama, E. F. (1981). Stock returns, real activity, inflation, and money. American Economic Review, 71(4), 545–565.

- Fisher, I. (1930). *The Theory of Interest*. New York: Macmillan.
- Fitrianur, N. (2025). *Pengaruh inflasi dan nilai tukar rupiah terhadap harga saham di sektor pertambangan*. *Lembaran Studi Manajemen*, 5(1), 45–58.
- Ghozali, I. (2021). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 26*. Universitas Diponegoro Press.
- Hardjanti, A. R., Nurfadillah, M., & Jamal, S. W. (2025). *Analisis pengaruh inflasi dan GDP terhadap harga saham perusahaan sektor perbankan di Indonesia*. *Jurnal Ekonomika dan Bisnis*, 5(4), 928–934.
- Maharani, M. S., & Wahyuningsih, D. (2023). *The influence of macroeconomic variables on composite stock prices on the Indonesia Stock Exchange (2018–2021)*. *Development Economics Bulletin*, 3(1), 15–28.
- Martalena, M. (2023). *Inflation, exchange rates, and stock returns: Evidence from LQ45 companies*. *Owner: Jurnal Manajemen dan Kepemimpinan*, 7(2), 211–225.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review*, 53(3), 433–443.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
- Priantono, S., Vidiyastutik, E. D., & Yuliati. (2021). Pengaruh EPS, PER, dan DER Terhadap Harga Rokok yang Terdaftar di Bursa Efek Saham Indonesia. *Ecobuss Jurnal Ilmiah Ilmu EkonoI dan Bisnis*, 9(2).
- Purnamasari, M. I., Azizi, E., & Adiwinata, D. (2025). *The effect of inflation, exchange rates, and interest rates on the Jakarta Composite Index*. *International Journal of Management Research and Economics*, 3(1), 503–525.
- Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach. *Bell Journal of Economics*, 8(1), 23–40.
- Saputra, A. I. (2021). *Influence of debt to equity ratio (DER) and earnings per share (EPS) on stock price of PT Nippon Indosari Corpindo Tbk (2010–2020)*. *Indonesian Financial Review*, 1(2), 95–113.
- Sari, A. P., & Budhiarjo, I. S. (2025). Pengaruh Return On Assets (ROA) Dan Debt To Equity Ratio (DER) Terhadap Harga Saham Pada PT Indofood Sukses Makmur Tbk Periode 2014-2023. *JORAPI: Journal of Research and Publication Innovation*, 3(2).

- Sekaran, U., & Bougie, R. (2017). *Metode Penelitian untuk Bisnis: Pendekatan Pengembangan Keahlian*. Jakarta: Salemba Empat.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sugiyono. (2023). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta
- Suharyanto, S. (2021). *The effect of inflation and interest rates on stock returns*. *Jurnal Administrasi dan Manajemen*, 11(1), 45–58.
- Zelpani, D. A., & Budi, S. (2025). *Agency and signaling perspectives on working capital turnover, debt to equity ratio, and profitability: Evidence from PT Gudang Garam Tbk (2013–2023)*. *Indonesian Financial Review*, 5(2), 401–422.