

FACTORS INFLUENCING STOCK PRICE VOLATILITY ON THE IDX (CASE STUDY OF FOOD AND BEVERAGE SUB-SECTOR COMPANIES, 2021–2025)

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Abstract

Stock price volatility is an important factor that reflects investment risk and market uncertainty. Understanding the factors affecting stock price volatility is essential for investors and companies in making investment decisions. This study aims to analyze the effect of asset growth, inflation, firm size, and exchange rate on stock price volatility in food and beverage companies listed on the Indonesia Stock Exchange during the 2021–2025 period. This study uses a quantitative approach with secondary data obtained from company financial reports and relevant economic data. The sample was selected using the purposive sampling method, resulting in 43 companies with a total of 215 observations. Data analysis was performed using multiple linear regression analysis. The results indicate that asset growth, inflation, firm size, and exchange rate have a significant effect on stock price volatility. These findings demonstrate that stock price volatility is influenced by both internal company factors and external macroeconomic conditions. This study provides insights for investors and companies to consider financial performance indicators and economic conditions when evaluating investment risks and managing stock market uncertainty.

Keywords: Asset Growth, Inflation, Firm Size, Exchange Rate, Stock Price Volatility.

A. INTRODUCTION

The capital market is one of the important instruments in an economic system because it functions as a medium for companies to obtain funding as well as an alternative investment instrument for the public. In capital market activities, stock prices are one of the main indicators reflecting investors' perceptions of a company's condition and prospects. Changes in stock prices that occur rapidly indicate market dynamics caused by investors' responses to various available

information. Significant increases or decreases in stock prices are known as stock price volatility. Volatility is an important aspect because it reflects the level of risk and uncertainty that investors must consider when making investment decisions (Jogiyanto, 2017).

Stock price volatility is influenced by various factors originating from internal company conditions and external economic factors. Information regarding financial performance, asset structure, firm size, and macroeconomic conditions can affect investors' expectations regarding company value. When the information received by investors is considered positive, stock demand may increase, causing stock prices to rise. Conversely, negative information may encourage investors to sell their shares, resulting in a decline in stock prices (Hidayati & Sukmaningrum, 2021). Therefore, identifying the factors affecting stock price volatility is important to understand market behavior and minimize investment risks.

One of the internal factors that may affect stock price volatility is asset growth. Asset growth reflects the development of a company's ability to increase its economic resources in order to support operational activities and business expansion. Companies with good asset growth can provide positive signals to investors regarding their future prospects. Such information may increase investor confidence and influence market responses toward company stock prices (Ardiansyah & Isbanah, 2017). Rosyida et al. (2020) also explained that asset growth is one of the factors associated with stock price volatility because it reflects the development and fundamental condition of a company.

In addition to internal factors, macroeconomic conditions also play an important role in influencing stock price volatility. One of the macroeconomic indicators frequently considered by investors is inflation. An increase in inflation may lead to higher production costs, reduced purchasing power, and pressure on company profitability. These conditions may affect investors' assessments of company performance and potentially increase stock price fluctuations. Azura et al. (2018) found that inflation is one of the factors that can influence stock price volatility because changes in inflation rates may affect capital market conditions.

The *food and beverage* sector is one of the interesting sectors to examine because its business characteristics are directly related to public consumption needs. Although this sector tends to have relatively stable demand, companies still face various challenges, such as fluctuations in raw material prices, production cost pressures, changes in purchasing power, and global economic uncertainty. These conditions may lead to changes in investor perceptions regarding company performance and affect stock price movements. General market conditions can also be reflected through movements in the Composite Stock Price Index, which are influenced by various economic factors and investor sentiment (Banurea et al., 2022).

Firm size is also considered one of the factors that may influence stock price volatility. Firm size represents the scale of a company based on the economic resources it owns. Larger companies generally have higher operational stability and better access to financing. However, large companies also receive greater attention from investors, meaning that any changes in company-related information may influence stock price movements. Research conducted by Safrani and Kusumawati (2022) shows that firm size is one of the variables associated with stock price volatility.

Another external factor that may affect stock price volatility is the exchange rate. Changes in the rupiah exchange rate against foreign currencies may affect companies, particularly those involved in imported raw materials or export activities. A depreciation of the exchange rate may increase production costs and reduce profitability, especially for companies that depend on imported components. These conditions may influence investors' decisions when assessing company prospects. Fitriani and Desmiza (2024) explained that exchange rates are among the economic factors that may influence stock price volatility through changes in company fundamentals.

Previous studies regarding factors affecting stock price volatility have been widely conducted; however, the findings remain inconsistent. Ardiansyah and Isbanah (2017) found that company fundamental factors, such as asset growth and firm size, are associated with stock price volatility. Meanwhile, Wati and Puspitaningtyas (2023) showed that macroeconomic variables,

such as inflation and exchange rates, are also related to stock price volatility. These differences in previous findings indicate that the influence of internal and external factors on stock price volatility requires further investigation, particularly within different industrial sector characteristics.

Based on these phenomena, this study aims to analyze the effects of asset growth, inflation, firm size, and exchange rates on stock price volatility in *food and beverage* companies listed on the Indonesia Stock Exchange during the 2021–2025 period. This research is expected to contribute academically to the development of studies related to stock price volatility and provide practical information for investors and companies in understanding the factors influencing stock price movements.

B. METHOD

This study employs a quantitative approach to analyze the effect of asset growth, inflation, firm size, and exchange rates on stock price volatility in *food and beverage* companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2025 period. The quantitative approach was selected because this study examines the relationship between variables through numerical measurements and statistical analysis. The data used in this study are secondary data obtained from companies' annual reports, financial statements, and relevant official sources related to macroeconomic information during the research period.

The population in this study consists of all *food and beverage* companies listed on the Indonesia Stock Exchange during the 2021–2025 period. The sample selection was conducted using the purposive sampling method, which involves selecting samples based on specific criteria aligned with the objectives of the study. Based on these criteria, 43 companies were selected as research samples. With an observation period of five years, this study obtained a total of 215 observations.

The dependent variable in this study is stock price volatility, while the independent variables consist of asset growth, inflation, firm size, and exchange rate. Asset growth is used to measure changes in company assets from the previous period as an indicator of company

development. Inflation is used as a macroeconomic indicator representing changes in the general price level. Firm size is measured based on the total assets owned by the company, while the exchange rate represents changes in the value of the Indonesian Rupiah against foreign currencies. All variables were measured using secondary data obtained from relevant sources and adjusted according to the research requirements.

The data analysis technique in this study was conducted using multiple linear regression analysis with the assistance of statistical software. Before conducting hypothesis testing, classical assumption tests were performed, including normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test, to ensure that the regression model met the required assumptions. Furthermore, hypothesis testing was conducted using the partial test (*t-test*) to determine the effect of each independent variable on the dependent variable, while the coefficient of determination (R^2) was used to measure the ability of independent variables to explain variations in stock price volatility.

C. RESULTS AND DISCUSSIONS

1. Descriptive Statistics Analysis

This study analyzes the effect of asset growth, inflation, firm size, and exchange rate on stock price volatility in *food and beverage* companies listed on the Indonesia Stock Exchange during the 2021–2025 period. Based on the purposive sampling method, 43 companies were selected, resulting in 215 observations. The descriptive statistics of the research variables are presented in Table 1.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Asset Growth	215	-0.882	4.406	0.11974	0.488607
Inflation	215	0.11	15.64	1.3506	1.47257
Firm Size	215	6.7901	29.4344	16.763334	6.1436987
Exchange Rate	215	14,312	16,863	15,657.6000	865.94849
Stock Price Volatility	215	0.0070	0.4636	0.151627	0.0861615

Source: Processed data (2026).

Table 1 shows the descriptive characteristics of the variables used in this study. The stock price volatility variable has an average value of 0.151627, indicating that the stock prices of *food and beverage* companies experienced fluctuations during the research period. The asset growth variable has an average value of 0.11974, showing that companies generally experienced positive asset development. Meanwhile, the exchange rate variable has an average value of 15,657.60, reflecting fluctuations in the Rupiah exchange rate during the observation period.

2. Regression Model and Hypothesis Testing Results

The regression analysis was conducted using the Common Effect Model (CEM). Based on the comparison of regression models, the CEM was selected as the most appropriate model for this study.

Table 2. R Square Test

Statistical Test	Value
R	0.829
R Square	0.687
Adjusted R Square	0.671
F-statistic	24.997
Sig. F	0.000

Source: Processed data (2026).

Table 3. Multiple Linear Regression Results

Variable	Coefficient (B)	t-value	Sig.
Constant	2.662	2.409	0.018
Asset Growth	0.050	2.258	0.033
Inflation	0.176	3.991	0.000
Firm Size	0.074	2.386	0.021
Exchange Rate	0.101	2.521	0.012

Source: Processed data (2026).

Table 2 indicates that the regression model has an Adjusted R Square value of 0.671. This means that asset growth, inflation, firm size, and exchange rate are able to explain 67.1% of the variation in stock price volatility, while the remaining 32.9% is explained by other factors outside the research model. The F-test value shows a significance level of 0.000, indicating that all independent variables simultaneously affect stock price volatility.

3. The Effect of Asset Growth on Stock Price Volatility

The hypothesis testing results show that asset growth has a positive and significant effect on stock price volatility. Asset growth has a regression coefficient of 0.050 with a significance value of 0.033. This indicates that an increase in asset growth tends to increase stock price volatility.

Asset growth reflects the company's ability to expand its resources and support future business development. Higher asset growth may provide positive information regarding company prospects; however, rapid changes in asset growth may also create uncertainty regarding future performance. This uncertainty may influence investor reactions and cause fluctuations in stock prices.

The result is consistent with Ardiansyah and Isbanah (2017), who stated that asset growth is one of the fundamental factors associated with stock price volatility. Similar findings were also reported by Rosyida et al. (2020), which explained that asset growth represents company development and may influence investor responses in the capital market.

4. The Effect of Inflation on Stock Price Volatility

The results indicate that inflation has a positive and significant effect on stock price volatility. Inflation has a regression coefficient of 0.176 with a significance value of 0.000.

Inflation affects stock price volatility because changes in inflation levels may influence production costs, purchasing power, and company profitability. Higher inflation can increase operational expenses and create uncertainty regarding future earnings. This condition may affect investor decisions and lead to greater fluctuations in stock prices.

This finding supports Azura et al. (2018), who stated that inflation is one of the macroeconomic variables affecting stock price volatility. Changes in inflation conditions may influence investor perceptions of market conditions and company performance.

5. The Effect of Firm Size on Stock Price Volatility

Firm size has a positive and significant effect on stock price volatility, with a regression coefficient of 0.074 and a significance value of 0.021.

Firm size represents the scale of company operations and resources. Large companies generally have better financial capabilities and stronger market positions. However, large companies also receive greater attention from investors, causing information related to company performance to generate stronger market reactions.

The finding is consistent with Safrani and Kusumawati (2022), who found that firm size is related to stock price volatility. Therefore, company size does not always reduce volatility because larger companies may experience greater investor responses to changes in information.

6. The Effect of Exchange Rate on Stock Price Volatility

The exchange rate variable has a positive and significant effect on stock price volatility, with a regression coefficient of 0.101 and a significance value of 0.012.

Exchange rate fluctuations influence stock price volatility because changes in currency values can affect company costs, especially for companies involved in import activities or international transactions. A depreciation of the Rupiah may increase production costs and influence investors' expectations regarding company profitability.

This result is consistent with Fitriani and Desmiza (2024), who explained that exchange rates influence stock price volatility through changes in company fundamentals and investor assessments.

7. Overall Discussion

The findings demonstrate that stock price volatility in *food and beverage* companies listed on the Indonesia Stock Exchange is influenced by both internal company factors and external economic conditions. Asset growth and firm size represent company-specific characteristics, while inflation and exchange rate represent macroeconomic factors.

The significant influence of all independent variables indicates that investors should consider not only financial information from companies but also broader economic conditions when evaluating investment risks. The results also confirm that stock price volatility is a complex phenomenon influenced by various factors, both from company performance and market conditions.

D. CONCLUSIONS

This study aims to examine the effect of asset growth, inflation, firm size, and exchange rate on stock price volatility in *food and beverage* companies listed on the Indonesia Stock Exchange during the 2021–2025 period. Based on the research findings, it can be concluded that internal company factors and macroeconomic factors play an important role in influencing stock price volatility.

The results show that asset growth has a significant effect on stock price volatility. This indicates that changes in company asset development can influence investor perceptions regarding future company prospects, which may affect stock price movements. Inflation also has a significant effect on stock price volatility, indicating that changes in macroeconomic conditions can influence investor decisions through their impact on production costs, purchasing power, and company performance expectations.

Furthermore, firm size has a significant effect on stock price volatility. This finding indicates that company scale and the amount of resources owned may influence market responses because larger companies generally receive greater attention from investors. The exchange rate also has a significant effect on stock price volatility, showing that changes in currency conditions may affect investor assessments, particularly for companies affected by international transactions and operational costs.

Overall, this study confirms that stock price volatility is influenced by a combination of company-specific factors and external economic conditions. Therefore, investors need to consider both fundamental company information and macroeconomic developments when evaluating investment risks. The findings of this study are expected to provide additional insight into the factors affecting stock price volatility, particularly in the *food and beverage* sector listed on the Indonesia Stock Exchange.

E. SUGGESTIONS

Based on the research findings, several suggestions can be provided. For investors, it is recommended to consider both internal company factors and external economic conditions when making investment decisions. Investors should not only evaluate company fundamentals, such as asset growth and firm size, but also pay attention to macroeconomic indicators, including inflation and exchange rate movements, as these factors may influence stock price volatility and investment risk.

For companies, particularly *food and beverage* companies listed on the Indonesia Stock Exchange, it is recommended to improve financial management and maintain company performance stability. Companies should consider the impact of changes in economic conditions and provide transparent information regarding company performance to reduce uncertainty among investors and maintain market confidence.

For future researchers, it is suggested to expand the scope of research by including other variables that may influence stock price volatility, such as dividend policy, trading volume, leverage, profitability, interest rates, or other macroeconomic indicators. Future studies may also extend the observation period or examine other industrial sectors to obtain broader findings regarding the factors affecting stock price volatility.

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