



RESEARCH ARTICLE

The Moderating Effect of Inflation on the Relationship Between Return on Assets (ROA) and Stock Prices

Chandra Firmansyah¹ | Acep Komara^{2*}

^{1,2} Management Study Program, The Faculty of Economics and Business, Universitas Swadaya Gunung Jati, Cirebon City, West Java Province, Indonesia.

Correspondence

¹ Management Study Program, The Faculty of Economics and Business, Universitas Swadaya Gunung Jati, Cirebon City, West Java Province, Indonesia.

Email: acep.komara@ugj.ac.id

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Universitas Swadaya Gunung Jati.

Abstract

This paper aims to examine the influence of Return on Assets on stock prices and furthermore assess the role of inflation as a moderating variable in food and beverage sector companies listed on the Indonesia Stock Exchange from 2022 to 2024. The study applies a quantitative approach using secondary data from yearly corporate financial disclosures, closing stock prices, along with official inflation data from Statistics Indonesia and Bank Indonesia. The research demographic consists of 98 companies. After applying purposive sampling, 42 companies chosen to serve as the research specimen, obtaining 126 data points. The data analysis was conducted using Stata 17 through pooled data analysis and Moderated Regression Analysis. The model selection process involved certain diagnostic tests (the Chow, Hausman, and Lagrange Multiplier tests), while the final model was analyzed using a Random Effects approach. The results show that Return on Assets has a positive and significant effect on stock prices. This finding indicates that asset efficiency remains a financial signal evaluated by investors when assessing a company's prospects. However, inflation does not moderate the relationship between Return on Assets and stock prices at the 5 % significance threshold. This low R-squared value indicates that stock prices are not only influenced by profitability and inflation, but also by other factors such as capital structure, firm size, interest rates, stock liquidity, and market sentiment.

Keywords

Return on Assets; Stock Prices; Inflation; Moderation; Food and Beverage.

1 | INTRODUCTION

Stock prices are influenced by things that happen inside a company and things that happen in the economy as a whole. Return on Assets is a deal when it comes to figuring out if a company is making money because it shows how well the company is using its assets. When a company makes a lot of money people are more likely to want to invest in it. This does not always make stock prices go up. Inflation can change how people think about how a company is doing. When inflation goes up it costs more to make things and people have money to spend which means they think companies will make less money in the future. Inflation can also make interest rates go fluctuate and make the market uncertain so investors are more careful about what they invest in. This means that the link connecting Return on Assets with stock prices might vary depending on how high inflation's This study looks at how inflation affects the correlation involving Return on Assets and stock prices within food and beverage companies that are registered with the Indonesia Stock Market from 2022 to 2024. The study wants to know how the market thinks about how companies are using their assets when the economy is changing which can aid us to understand better how company performance and things that happen in the economy affect stock prices within the food and beverage industry.

The capital market is really important for the economy. Stock prices can tell us how well a company is doing and what is happening with the economy. Lots of things can affect stock prices like how a company uses its assets, which is called Return on Assets and inflation. Inflation is a deal because it affects how much money can buy, how much it costs to make things and what investors think will happen (Muhammad *et al.*, 2024). We can see that stock prices go up and down in parts of the manufacturing business like textiles, garments and food and beverage. From 2022 to 2024 inflation in Indonesia was between 2.50% and 4.21%, which's according to the BPS. This made it more expensive to get materials, energy and to transport goods. These conditions can make it harder for companies to make money, which can lower their Return on Assets and change how people think about stocks. The capital market and stock prices are connected to how assets are doing and this connection can change depending on inflation. So it is really important to understand how inflation operates, for the food and beverage sector to know what is happening in the market. The capital market and the food and beverage industry are affected by inflation. This financial market is important for the economy and stock prices can tell us a lot, about the food and beverage industry.

This research is about the fluctuations of stock prices of food and beverage companies on the Indonesia Stock Market from 2022 through 2024. During this particular period prices of materials, energy and distribution went up because of inflation. This made it harder for companies to make a profit, which is shown in their Return on Assets or ROA. Researchers like Harlan Wijaya in 2022 and Makmur and others in 2024 have talked about this (Harlan Wijaya, 2022; Makmur *et al.*, 2024). The big question is how inflation affects the link connecting ROA and stock prices. Inflation can either make the correlation stronger or weaker depending on how investors feel about risk. When inflation goes up investors get nervous. Stock prices can go down if the companys ROA is low (Lasar, 2024). On the hand when inflation is not a problem a high ROA can make investors feel good about a company because it shows the company can make money efficiently. This is what researchers like Lasar in 2024 Adrian and Dewi Arismaya in 2025 and Yang and Lee, in 2025 have found out about food and beverage companies and their stock prices (Adrian & Dewi Arismaya, 2025; Yang & Lee, 2025b).

The data from Statistics Indonesia shows that Indonesias inflation was 4.21% in 2022. It went down to 3.61% in 2023. It was 2.50% in 2024 based on the data we have up to October. This means that inflation is going down. It is still higher than what Bank Indonesia wants. In 2023 the textile and garment sector was a part of the national Gross Domestic Product, around 1.5%. The value of what we exported was around USD 13.2 billion. This sector had some problems. The cost of materials that we imported, like cotton and energy was going up. Statistics Indonesia said this in 2024. When inflation is high it can affect the Return on Assets of textile and garment companies. This can then affect the stock prices. I am looking at what Signalling Theory says. It says that stock returns are impacted by risks, including inflation. Inflation is a factor that affects what we expect to get back (Marjohan *et al.*, 2023). The Return on Assets demonstrates how well an enterprise is doing internally. Inflation can make this relationship stronger or weaker. When companies show their Return on Asset they are sending a signal to investors about how they're doing. Inflation can make this signal stronger or weaker. This can affect the stock prices. Harlan Wijaya said this in 2022. The textile and garment sector is important. Inflation affects the textile and garment companies. It affects the stock prices of these Indonesia companies. The Return, on Assets of these companies is a deal. It shows how well they are doing. It affects the stock prices (Harlan Wijaya, 2022).

The way stock prices move is interesting. Inflation affects stock prices in two distinct manners. It increases production costs. Reduces the power of money. Inflation also changes how people think about the link connecting a companys Return on Assets and its stock price (Yang & Lee, 2025). When inflation is high companies with return on assets have a hard time keeping their stock prices up. Investors get nervous about the economy. Think that companies might not be able to keep making money (Muhammad *et al.*, 2024). On the hand when inflation is under control companies with high return on assets are seen as good at managing their money. This makes investors think that these firms can keep making money so they. Stock prices go up (Harlan, 2022; Yang & Lee, 2025). A theory called the Arbitrage Pricing Theory states that inflation is a hazard element that affects how people value companies. So it is useful to look at how inflation affects the correlation involving a companys ROA and its stock price. This helps us understand how a companys

performance and the economy interact to influence investment decisions within the food and beverage industry. Stock prices and return on assets are important to consider. Inflation has a big impact, on both stock prices and return on assets.

The research gap is that not many studies look at inflation as a factor that affects how ROA and stock prices are related for food and beverage companies listed on the Indonesia Stock Exchange from 2022 through 2024. Most previous studies have looked at how inflation affects stock returns or how profitability affects stock prices without considering how the market responds when inflation is high. For example (Muhammad *et al.* 2024 and Yang & Lee 2025) studied this. Did not look at how inflation changes the link connecting ROA and stock prices. Diverse studies have looked at the manufacturing sector. Not specifically at the food and beverage industry, which depends heavily on how much money people have to spend (Harlan Wijaya, 2022). This gap is important to study because a high ROA does not always mean a market responds favorably, particularly when inflation is high and production costs increase and people spend less. This study looks at inflation to function as a moderating factor to better understand how the connection between ROA and stock prices changes. The food and beverage industry is crucial to study because it depends heavily on purchasing power. By looking at inflation as a moderating variable we can gain a precise comprehension of changes in the strength of the relationship between ROA and stock prices in the food and beverage sector. The relationship between ROA and stock prices is affected by inflation. ROA constitutes a vital element in determining stock prices. Inflation affects the correlation connecting ROA and stock prices. It stands as essential to consider inflation when studying this relationship.

Research has given us answers about how inflation affects the connection between a company's financial performance and its stock prices. Some studies have found that inflation hurts stock returns but not many have looked at how it changes the relationship between these things. Kurniasari *et al.* (2018) discovered the fact that inflation exerts a notable influence on stock returns when you consider the return on assets but they did not look at how inflation changes this relationship. Lasar and Jonnaedi (2024) found that inflation can make the connection between a company's liquidity and capital structure in manufacturing companies, which suggests that something similar might happen with the return on assets. Marjohan *et al.* (2023) reported that the risk of investing does not affect stock returns in the textile industry even though other information suggests that inflation can actually strengthen the connection between liquidity and stock returns stronger. Other research like the studies by Samosir (2022) and Simatupang *et al.* (2023) demonstrated that inflation does not have an impact on the relationship between return on assets, current ratio, debt to equity ratio, and stock prices within manufacturing and mining sectors. Rasyad (2020) found that inflation only changes the relationship between debt to asset ratio and stock returns within the consumer goods sector. Adrian and Arismaya (2025) said that inflation fails to change the link connecting return on assets and stock returns within the Jakarta Islamic Index 30. All these different findings show that we need to do research on how inflation affects the relationship between return on assets and stock prices especially in the food and beverage sector. This investigation will help us understand how the market reacts to how a company is doing financially when the economy is changing. The food and beverage industry is important to observe because inflation can exert an impact on this sector. By studying the food and beverage sector we can learn more about how inflation affects the correlation connecting return on assets and stock prices..

2 | BACKGROUND THEORY

2.1 Return on Assets (ROA)

The independent variable in this investigation is Return on Assets (ROA), which functions as a metric for the efficiency of a firm's asset utilization. ROA acts as a beacon for financiers regarding the enterprise's capacity for generate profit from its available assets, in line with Signalling Theory. This theory explains that companies communicate their internal performance through credible indicators. Therefore, an elevated ROA signifies operational efficiency and profitability that holds the potential to influence market perception. Investors evaluate this signal when making investment decisions, especially when information between management and the market is asymmetric. Yang and Lee (2025) show that ROA can increase stock prices through the gambling channel, where investors interpret efficiency as an opportunity for higher returns. In addition to internal factors, the ROA signal is also influenced by macroeconomic variables such as inflation, which can strengthen or weaken investors' interpretation of company performance. This approach is relevant to the textile and garment subsector, where efficient asset management becomes a key determinant of competitiveness amid global economic volatility.

2.2 Stock Prices

The dependent variable in this study is stock prices, which relate to market values that reflect investors' assessment of a corporation's performance and future prospects. Signalling Theory is utilized to explain that financial information, including Return on Assets (ROA), can serve as a signal for investors in evaluating a firm's **efficiency** and profitability. A credible signal helps reduce information asymmetry between management and the market, allowing investors to make investment decisions based on relevant financial information. Companies with strong financial performance tend to receive a more positive market response, as reflected in stock price movements.

Muhammad *et al.* (2024) state that stock prices are also influenced by macroeconomic risks, including inflation, because rising inflation can increase investment uncertainty. This theory is relevant for explaining the correlation connecting ROA and stock prices in food and beverage sector companies, particularly because this sector is sensitive to changes in production costs, public purchasing power, and global economic pressure.

2.3 Inflation

The moderating variable in this study is inflation, which functions in the capacity of a macroeconomic factor that influences the correlation involving ROA and stock prices. Based upon Signalling Theory, investors assess corporate profitability through signals sent by performance indicators such as ROA. A high ROA usually indicates operational efficiency and the capacity to generate returns. However, inflationary pressure can weaken this signal because production, energy, and distribution costs increase, while public purchasing power declines. H. Lasar and Jonnardi (2024) show that inflation can weaken the relationship between liquidity and capital structure, indicating that a similar mechanism may occur in the interaction between ROA and stock prices. The 2022 to 2024 timeframe created additional pressure due to global economic fluctuations, making the examination of inflation in the role of a moderating factor relevant for the food and beverage industry. This industry is highly sensitive to changes in input prices and consumption patterns. Therefore, investors' responses to corporate profitability may change along with the level of inflation, affecting stock price volatility and decision-making strategies in the capital market.

2.4 Research Hypotheses

The hypotheses in this research are formulated to examine the effect of Return on Assets (ROA) on stock prices and furthermore evaluate the function of inflation as a moderating variable in this relationship. The first hypothesis (H1) states that ROA has a positive effect on stock prices in food and beverage subsector companies listed on the Indonesia Stock Exchange during the 2022 through 2024 timeframe. This means that the higher the company's efficiency and capability to utilize its assets to generate profit, the greater the possibility that its stock price will increase, because investors interpret ROA as an indicator of profitability and company performance. The second hypothesis (H2) asserts that inflation moderates the relationship between ROA and stock prices in the same sector. Inflation is considered capable of strengthening or weakening the effect of ROA on stock prices, depending on how investors assess macroeconomic risk and its implications for corporate earnings. By testing these two hypotheses, this paper intends to understand the interaction between internal company performance and macroeconomic pressure that drives stock price movements in the Indonesian financial market.

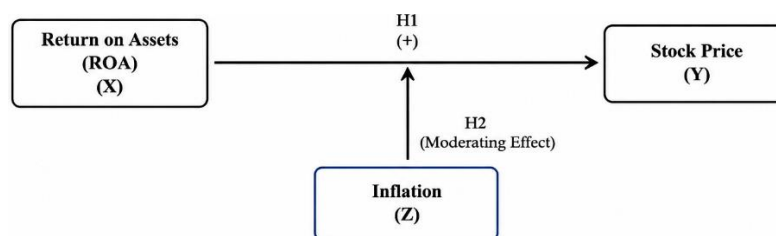


Figure 1. Conceptual Framework

3 | METHOD

This investigation adopts a quantitative methodology employing an explanatory research design to examine the causal relationships among independent, dependent, and moderating variables. This approach was selected because the study focuses on evaluating hypotheses derived from established theories and prior empirical evidence through statistical analysis (Harlan Wijaya, 2022; H. Lasar & Jonnardi, 2024). The research highlights the function of inflation in the role of a moderating factor that may influence the connection between Return on Assets (ROA) and stock prices in food and beverage firms registered on the Indonesia Stock Exchange during the 2022–2024 period. The analysis employs Moderated Regression Analysis (MRA), a method previously applied in studies by Adrian and Dewi Arismaya (2025), Lasar and Jonnardi (2024), and Simatupang *et al.* (2023). In this model, ROA serves as the independent variable, stock price functions as the dependent variable, and inflation acts in the capacity of the moderating factor to assess the extent to which macroeconomic conditions influence the impact of asset efficiency on stock price movements within the capital market.

The demographic of this study consists of all food and beverage companies listed on the Indonesia Stock Exchange from 2022 through 2024, with an aggregate total of 98 firms. The selection of the sample was executed using purposive sampling because the study requires data that align with the variables under investigation, namely ROA, stock price, and inflation (Harlan Wijaya, 2022). The sampling criteria included companies that were continuously listed throughout the

observation period, published complete annual and financial reports, provided closing stock price data, and did not experience delisting. Based on the selection process, 39 companies were excluded due to incomplete financial and annual reports. A further 17 companies were removed because the required data were not sufficiently available. Consequently, the final sample consisted of 42 companies. Since the observation period covered three years, the study utilized a total of 126 observations.

This inquiry depends on secondary information obtained via administrative and trustworthy channels to examine how corporate financial standing connects with stock prices and macroeconomic conditions. Data on Return on Assets (ROA) were collected from the annual financial statements of food and beverage companies registered on the Indonesia Stock Exchange via the official IDX portal. Stock price details, specifically closing prices, were extracted from the Indonesia Stock Exchange as well as capital market information providers. Meanwhile, annual inflation data were gathered from Statistics Indonesia (BPS) and Bank Indonesia. This approach enables a comprehensive evaluation regarding the impacts of internal profitability and macroeconomic elements on stock prices while assessing how inflation moderates this relationship. The use of secondary data is consistent with the methodology applied by Makmur *et al.* (2024), which demonstrated the effectiveness of historical corporate and economic data in evaluating the relationship between financial performance and market responses, thereby providing a strong empirical foundation for this study.

The data gathering protocol employed in this investigation is documentation. This procedure involves collecting, recording, verifying, and processing secondary data pertinent to the research goals. These data consist of corporate financial statements, stock prices, and inflation rates published by official institutions. Financial statements were obtained from food and beverage companies registered on the Indonesia Stock Exchange during the 2022–2024 period. Stock prices were calculated utilizing closing prices because they reflect the final trading position within a specific period. Inflation data were obtained from Statistics Indonesia (BPS) and Bank Indonesia. Documentation is considered an appropriate technique for capital market research because it provides historical data that are measurable, verifiable, and suitable for statistical testing (Lasar & Jonnardi, 2024; Marjohan *et al.*, 2023). Return on Assets serves as the independent variable, measuring the company's ability to generate profit from its total assets. Stock price functions in the role of the dependent variable, reflecting investors' assessment of corporate performance and risk. Inflation acts as the moderating variable because rising prices may reduce purchasing power, increase production costs, and alter profit expectations. ROA is calculated as net earnings divided by total assets. Stock price is evaluated using the closing price, while inflation is measured using Indonesia's annual inflation rate expressed as a percentage based on official data (Muhammad *et al.*, 2024).

Data analysis was conducted using Stata 17 through pooled data regression and Moderated Regression Analysis (MRA). The initial stage involved descriptive statistics to examine the mean, standard deviation, maximum value, and minimum value for each variable. Model selection was then performed by comparing the Common Effect Model, Fixed Effect Model, and Random Effect Model. The Chow Test, Hausman Test, and Lagrange Multiplier Test were utilized to identify the most appropriate approach according to the specific characteristics of the data. Diagnostic checks included multicollinearity, heteroscedasticity, and normality assessments. These procedures were conducted carefully because model specification errors may affect the validity of the conclusions. Hypothesis testing was carried out using the determination coefficient, partial tests, and simultaneous tests. The determination coefficient evaluated the model's capacity to explain variations in stock prices. The partial test examined the impact of ROA on stock prices, while the simultaneous test assessed the combined influence of all variables. The moderating role of inflation was tested through the interaction between ROA and inflation. A significant interaction coefficient indicates that inflation either enhances or diminishes the connection between ROA and stock prices. The study focuses exclusively on food and beverage companies listed on the Indonesia Stock Exchange from 2022 to 2024. Maintaining uniformity within the selected sector ensures that the methodology, sample, and conclusions remain aligned throughout the research process.

4 | RESULTS AND DISCUSSION

4.1 Results

The research units consist of food and beverage firms registered on the Indonesia Stock Exchange. The study's population consists of 98 companies. Based on purposive sampling criteria, 42 companies were chosen to serve as the final specimen because they had information that met the requirements of the study. The observation period covers three years, from 2022 to 2024, resulting in a total of 126 observations. The selection of the food and beverage industry was based upon the industry's direct connection to public consumption needs and its sensitivity to changes in production costs, purchasing power, and inflationary pressure. This study aims to explain the state of the corporations during the observation period, particularly the relationship between Return on Assets, stock prices, and inflation. Maintaining consistency regarding the research object is necessary to ensure that the analysis remains focused and does not overlap with other sectors.

Table 1. Descriptive Analysis Results

Variable	Obs	Mean	Std. Dev.	Min	Max
VAR_Y	126	2561.69	3116.117	24	13625
VAR_X	126	0.0842269	0.0611844	0.0010337	0.3319433
VAR_M	126	0.0323	0.0167383	0.0157	0.0551

Source: STATA 17 Output.

According to Table 1, the summary analytics demonstrate that this study used 126 observations from food and beverage corporations registered on the Indonesia Stock Exchange throughout the 2022–2024 timeframe. Variable Y, namely stock price functioning as the dependent variable, possesses an average score of 2,561.69 along with a standard deviation of 3,116.117. The standard deviation value, being higher relative to the mean, demonstrates that stock prices vary considerably across companies and observation periods. Variable X, namely Return on Assets, has an average score of 0.0842 coupled with a standard deviation of 0.0612. This result demonstrates that the profitability level among the sampled enterprises differs across firms, ranging from very low to relatively high values. Variable Z, namely inflation, has an average score of 0.0323 alongside a standard deviation of 0.0167. This value demonstrates that inflation during the observation period remained relatively controlled, although it still requires attention because changes in inflation may affect production costs, public purchasing power, and investors' expectations of stock prices.

Table 2. Chow Test Results

Description	Value
Regression Model	Fixed Effect Model
Number of Observations	126
Number of Companies	42
R-squared Within	0.0139
R-squared Between	0.1568
R-squared Overall	0.1319
Model F-statistic	0.58
Prob > F	0.5624
F Test: All $u_i = 0$	38.79
Prob > F of Chow Test	0.0000
Significance Level	0.05
Decision	Fixed Effect Model is accepted

Source: STATA 17 Output.

Based on the Chow Test results in Table 2, the Prob > F value of 0.0000 is lower than the 5% significance level. This result indicates that H_0 is rejected and H_1 is accepted. Therefore, the Common Effect Model is not appropriate for this study. The Fixed Effect Model is considered more suitable for analyzing the research data.

Table 3. Hausman Test Results

Variable	FEM Coefficient	REM Coefficient	Difference	Std. Error
VAR_X	3560.353	5861.882	-2301.529	937.928
VAR_XM	-16912.6	-22225.54	5312.943	.

Source: STATA 17 Output.

Based on Table 3, the Hausman Test results show differences in coefficients between the Fixed Effect Model and the Random Effect Model for VAR_X and VAR_XM. VAR_X has a difference of -2301.529, while VAR_XM has a difference of 5312.943. These differences provide the basis for selecting the most appropriate estimation model. The Hausman Test is necessary so that panel regression analysis does not rely solely on coefficient values, but also considers the suitability of the data characteristics.

Table 4. Lagrange Multiplier Test Results

Description	Variance	SD = sqrt(Variance)
VAR_Y	9,710,188	3,116.117
E	629,650.3	793.5051
U	8,145,705	2,854.068

Source: STATA 17 Output.

Based on Table 4, the Lagrange Multiplier Test results show that VAR_Y has a variance value of 9,710,188 with a standard deviation of 3,116.117. The error variance is 629,650.3 with a standard deviation of 793.5051, while the individual variance is 8,145,705 with a standard deviation of 2,854.068. These differences indicate variation across companies that must be considered in the panel regression model.

The classical assumption test represents an important stage in regression analysis to ensure the feasibility of the model, especially in panel data that combine cross-section and time-series dimensions. According to Gujarati in Faisol (2020), the Random Effect Model (REM) uses the Generalized Least Squares (GLS) estimation method. GLS offers an advantage because it does not require strict fulfillment of classical assumptions, particularly heteroscedasticity and autocorrelation. GLS can handle non-constant error variance and correlation across periods. However, the multicollinearity test still needs to be conducted to ensure that there is no high correlation among independent variables that may disrupt the stability of coefficient estimation (Faisol, 2020). This is consistent with the study by Winantisan *et al.* (2024) on the Indonesian banking sector during the 2018–2022 period. That study selected REM as the best model after the Chow Test and Hausman Test, while still conducting a multicollinearity test to ensure that the model was free from correlation problems among independent variables, such as age and gender diversity.

Table 5. Multicollinearity Test Results

Variable	VIF	1/VIF
VAR_X	4.77	0.209671
VAR_XM	4.77	0.209671
Mean VIF	4.77	

Source: STATA 17 Output.

According to Table 5, the average VIF metric of 4.77 sits below the common threshold of 10. This result indicates that the empirical model displays no severe collinearity problems. The explanatory metrics still exhibit an acceptable level of correlation, so the regression coefficient estimates can be considered stable. This condition supports the feasibility of the model for the next stage of hypothesis testing.

According to the empirical results of the first model, ROA has a p-value of 0.0000, which sits below the significance threshold of 0.05. This outcome demonstrates that ROA has a notable influence on stock prices, so H1 is accepted. The regression equation is $Y = 1009.435 + 18429.45X$. The intercept metric of 1009.435 means that when ROA is zero or constant, the estimated stock price is 1009.435. The ROA regression coefficient is positive at 18429.45, meaning that an uplift in ROA will be accompanied by an upward movement in stock prices. Conversely, a drop in ROA may reduce stock prices. The R-squared metric of 0.1309 demonstrates that ROA explains 13.09% of the variation in stock prices, while the remaining proportion is driven by alternative variables outside the research model.

Based on the empirical results of Model II, the interaction between ROA and inflation has a p-value of 0.903, which sits above the significance threshold of 0.05. This result demonstrates that inflation fails to notably moderate the connection between ROA and stock prices, so the moderation hypothesis is rejected. The regression equation for Model II is $Y = 1141.227 + 19611.84X - 4324.325M - 32718.99XM$. The intercept metric of 1141.227 demonstrates that when ROA, inflation, and the interaction between ROA and inflation are zero, the estimated stock price is 1141.227. The ROA coefficient is positive at 19611.84, meaning that an upward shift in ROA is likely to be accompanied by an upward movement in stock prices. The inflation coefficient is negative at -4324.325, demonstrating that an upward shift in inflation is likely to depress stock prices. The interaction metric is negative at -32718.99, but it is not statistically significant. Therefore, inflation cannot be stated to weaken the relationship between ROA and stock prices statistically. The R-squared metric of 0.1326 demonstrates that ROA, inflation, and their interaction account for 13.26% of the variance in stock prices, while the remaining proportion is driven by alternative factors outside the research model.

4.2 Discussion

Return on Assets has a positive and significant effect on the stock prices of food and beverage companies registered on the Indonesia Stock Exchange during the 2022–2024 timeframe. The p-value of 0.0000 sits below the significance threshold of 0.05, so the primary hypothesis is accepted. The regression coefficient of 18,429.45 demonstrates that an upward shift in ROA is likely to be accompanied by an upward movement in stock prices. This outcome shows that the market still considers a firm's capability to generate returns from its assets.

Theoretically, this finding is consistent with Signalling Theory. ROA can serve as a signal of financial performance because it reflects management's ability to utilize corporate resources to generate profit. Investors tend to respond positively to companies that can maintain profitability. In the food and beverage industry, this condition is reasonable because the industry is directly related to public consumption needs. When ROA increases, investors may assess that the company has better profit prospects. This assessment can increase stock demand and raise stock prices.

This finding is consistent with Andari (2024), who examined food and beverage companies and found that

profitability plays a role in increasing stock prices. Similar results were also found by Eko *et al.* (2024) in mining companies and Tarigan *et al.* (2024), who stated that ROA has a positive effect on stock prices. Rizkia (2023) also placed ROA as one of the financial ratios that can be used to explain stock prices. However, this result differs from Harlan Wijaya (2022), who found that the effect of ROA on stock prices and stock returns is not always significant in the manufacturing sector. This difference indicates that the effect of ROA may vary depending on sector characteristics, observation period, and market conditions.

Although ROA has a significant effect, the R-squared value of 0.1309 shows that ROA explains only 13.09% of the variation in stock prices. This figure should be interpreted carefully because most changes in stock prices are still influenced by other factors outside the model. ROA provides information about a company's ability to generate profit from its assets, but it is not sufficient to explain the entire market response. Stock prices may also be influenced by debt to equity ratio, earnings per share, firm size, interest rates, stock liquidity, exchange rates, economic policy, and investor sentiment. This is in line with Amaliah and Manda (2021), Eko *et al.* (2024), and Tarigan *et al.* (2024), who used several financial ratios in stock price analysis. Therefore, ROA is more appropriate as an initial basis for assessment, not as the only measure in investment decisions.

The results of Model II show that inflation does not moderate the relationship between ROA and stock prices. The p-value of the interaction between ROA and inflation is 0.903, which is higher than 0.05, so the second hypothesis is rejected. The interaction coefficient is negative at -32,718.99, but the value is not statistically significant. This means that inflation cannot be stated to strengthen or weaken the effect of ROA on stock prices during the research period.

This finding is consistent with Adrian and Arismaya (2025), who examined ROA, ROE, EPS, and stock returns with inflation as a moderating variable. Simatupang *et al.* (2023) also found that inflation does not always strengthen the relationship between financial ratios and stock prices. Fajarini and Darmawan (2024) stated that inflation does not always change the relationship between macroeconomic variables and stock prices in certain industries. These comparisons show that the role of inflation as a moderating variable does not always appear in every sector and observation period.

The negative direction of the inflation coefficient still needs attention. An increase in inflation may raise raw material costs, energy costs, and distribution costs. This pressure can reduce company profits when firms cannot pass the higher costs on to consumers. However, the food and beverage sector has relatively stable demand because its products are related to daily needs. This condition may explain why inflation was not strong enough to change the relationship between ROA and stock prices during the 2022–2024 period.

5 | CONCLUSIONS AND FUTURE WORK

Based on the results of a panel data regression using a Random Effects Model on 42 food and beverage companies listed on the Indonesia Stock Exchange during the 2022–2024 period, Return on Assets (ROA) has a positive and significant effect on stock prices. This result indicates that asset management efficiency remains an important signal considered by investors when assessing corporate performance. Companies with higher ROA tend to be perceived as having better profit-generating ability, which may increase the potential for stock price growth. However, the R-squared value, which ranges from 13.09% to 13.26%, shows that the model has limited ability to explain changes in stock prices. This means that ROA and inflation are not strong enough to explain overall stock price movements. Other factors, such as capital structure, firm size, interest rates, stock liquidity, market sentiment, and industry conditions, should be considered in future research. The moderation result shows that inflation has not been proven to significantly strengthen or weaken the relationship between ROA and stock prices at the 5% significance level. For management, asset efficiency should be maintained to improve investor confidence. For investors, ROA can be used as an initial basis for analysis, but it should be supported by other financial and macroeconomic indicators.

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