

Fundamental and macroeconomic analysis of stock prices in the consumer non-cyclicals sector listed on the Indonesia Sharia Stock Index

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ABSTRACT

Introduction

Investors looking for investment choices that comply with sharia law find the Indonesian capital market, namely the Islamic Sharia Stock Index, to be of utmost importance. Understanding the elements that influence stock price movements in the consumer non-cyclicals sector from 2017 to 2022 is necessary.

Objectives

The objective of this study is to examine the influence of Return on Assets (ROA), Earnings Per Share (EPS), Debt to Equity Ratio (DER), inflation, and exchange rates on stock prices in the consumer non-cyclicals sector that is listed on the Indonesia Sharia Stock Index (ISSI). The objective is to ascertain the impact of these variables, both individually and together, on stock prices.

Method

The study employed a quantitative descriptive methodology, gathering data from 2017 to 2022 via official corporate websites. The analysis utilized panel data regression and conducted classical assumption testing using EViews.

Results

The results indicate that Return on Assets (ROA), Earnings per Share (EPS), inflation, and exchange rates all have a considerable influence on stock prices. However, DER does not have a substantial individual impact. The F-test demonstrates a statistically significant combined impact of independent variables on stock prices.

Implications

The results underscore the significance of fundamental financial performance and macroeconomic factors for investors and governments when making investment decisions. Gaining proficiency in financial management and comprehending the macroeconomic effects can provide more effective guidance for investment plans in the consumer non-cyclicals sector.

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ABSTRACT

Originality/Novelty

This study offers novel insights into the dynamics of stock price changes in the context of Sharia-compliant investments, specifically in the consumer non-cyclicals sector. It contributes to the broader understanding of the factors that influence stock prices in Islamic capital markets.

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INTRODUCTION

The capital market is a realm of monetary sciences that is concerned with tasks that are associated with funds investments. Through this platform, Indonesian investors can get involved in the capital market on the Indonesia Stock Exchange. This is the most important source of alternative financing for major business projects and also serves as a locomotive for the development of the national economy (Kamal et al., 2021). The Indonesia Stock Exchange has several types of investment indices, such as the Composite Index, LQ45 Index, Sharia Stocks Index, Jakarta Islamic Index, etc. The Sharia Stock Index is meant to accommodate sharia-compliant investors in Indonesia (Andni & Said, 2022; Ansari et al., 2022; Melindawati, 2022).

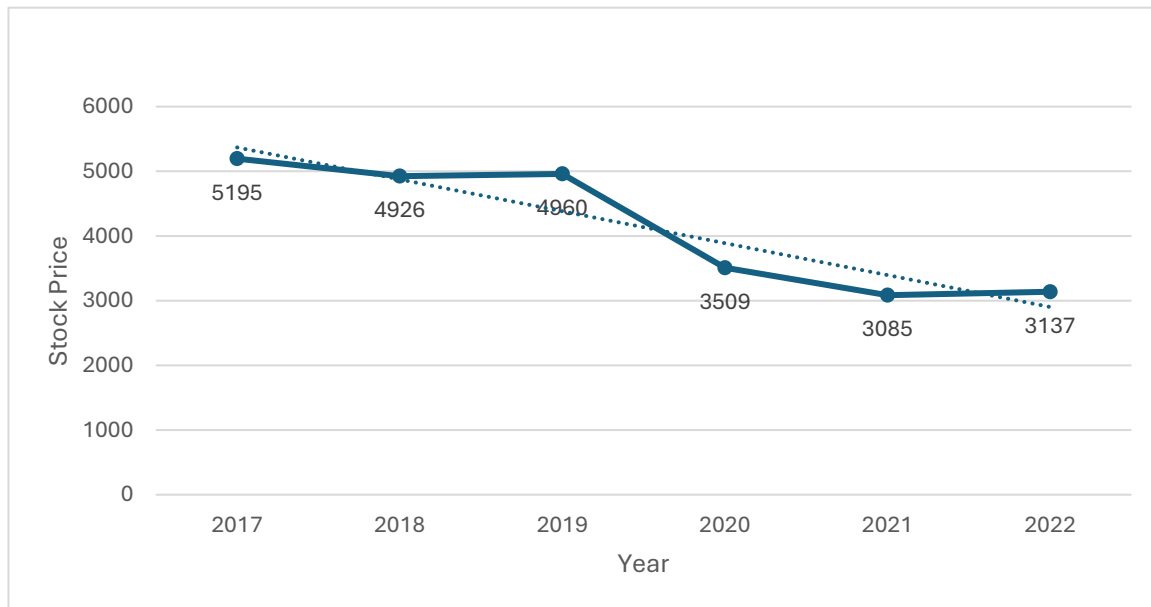
As a whole, the Sharia Stock Index runs very much not too different from the conventional capital market, but within the boundaries of the sharia (Basya, 2020; Jihad & Ramly, 2016). IDX Islamic has requirements for sharia-compliance stock so that it does not carry out businesses whose nature is haram; experiencing activities such as gambling/ *Maysir*, passing the interest to interest-based debt, redemption of illicit goods and services; and having limit interest-based debt, ranging from 45% of total assets (Bursa Efek Indonesia, 2022; Prasetyo, 2017). The first one is sharia-compliant stocks as declared by issuers or public companies according to the Financial Services Authority Regulation No. 17/POJK D.II (II) dated 03 April 2015 concerning the Issuance and Requirements for Sharia Securities issued by Sharia Issuers. Second, securities that have been selected from Sharia Stock and meet the sharia criteria based on OJK Regulation No. 35/POJK. This is also stipulated in Bapepam-LK Rule No. 30 / Pojk. 04/2017, regarding the criteria of the sharia securities list issuance.

Sharia-compliant stocks have been growing steadily over the years. These stocks have gained massive growth in recent years in Indonesia. The significant increase in the number of firms listing sharia-compliant stocks is evident in the number of listed issuers, from 375 in 2017 to 537 in 2022 (Otoritas Jasa Keuangan, 2022). In addition to Sharia-compliant stocks, there are also Sharia-based composite indexes, among others, the Indonesia Sharia Stock Index (ISSI), Jakarta Islamic Index (JII), JII70, and IDX-MES BUMN 17. Some sectors are included in the Indonesia Sharia Stock Index.

Similar to traditional stocks, these areas are Energy, Infrastructure, Consumer Cyclical, Consumer Non-Cyclical, Industry, Healthcare, Real Estate, Transportation, Materials, and Technology.

Figure 1

Stock Price of Consumer Non-Cyclicals Sector



Source: Indo Premier Sekuritas.

Based on the data above, it shows that stock prices from 2017 to 2022 have declined. According to Effendi & Harahap (2020), stock price fluctuations are influenced by two factors: internal and external. Internally, this involves analyzing the financial performance of the company itself, whether there is an improvement in its performance or not. Externally, macroeconomic conditions in a country, including monetary policies, fiscal policies, and political conditions, also affect stock prices.

According to Parahita (2011), factors affecting stock price fluctuations are referred to as "intrinsic value," which is influenced by two aspects: fundamental (internal) and external conditions. Fundamentally, this involves studying the financial management aspects of the company. This can show the company's performance in its business cycle as reflected in various indicators in its financial reports. External conditions include the economic environment, government regulations, and the level of competition. Fitriani (2022) states that external factors are primarily related to macroeconomic conditions, which include inflation, interest rates, exchange rates, and the money supply. These macroeconomic variables are among the external factors that influence stock prices.

Fundamentally, macroeconomic conditions affect stock prices in various ways, and there is a wide range of studies on this topic. According to research by Amanda et al (2023), inflation affects stock prices positively and significantly. The study shows that continuously increasing inflation is negative for investors, suggesting that higher

inflation leads to lower stock prices and vice versa. However, a study by Nurtyas & Yudiantoro (2023) found that inflation does not affect stock prices. Stable inflation rates do not influence stock prices because they are not a primary concern for investors. However, if inflation reaches its peak and is not accompanied by an increase in interest rates, investment returns in the capital market become unattractive, eventually lowering stock prices.

In contrast, Roziqin & Hidajat (2023) concluded that exchange rates do not significantly influence stock prices, as investors do not see exchange rates as a primary factor in stock purchasing decisions. Exchange rates are an external business factor that investors rarely consider. However, Wijayanti & Yudiantoro (2023) found that exchange rates do influence stock prices. Companies engaged in exports benefit from an increase in foreign currency value, while import-oriented companies face burdens when foreign currency values rise. Therefore, the relationship between exchange rates and stock prices remains inconclusive.

Budiman (2021) emphasizes that fundamental analysis is a critical aspect of stock analysis. This type of analysis is used to draw conclusions from financial reports using ratio analysis. Fundamental analysis involves using financial reports to calculate and accumulate stock values or prices in real time. This method assesses the company's financial position and provides information on the company's overall performance (Stevenson et al., 1988). Fundamental analysis includes four main indicators: growth analysis, profitability analysis, debt analysis, and price analysis (Budiman, 2021). Growth analysis includes indicators such as profit and sales analysis. Profitability analysis involves ratios that link profit and sales investments, typically using Return On Investment and Return On Asset measures (Hardiyanti et al., 2022). Debt analysis compares total liabilities with total equity, using the Debt to Equity Ratio to assess how much of the company's own capital is used as debt collateral (Putra, 2023). Price analysis involves examining the Earning Per Share ratio to determine the profitability per share, with higher ratios indicating greater profits (Rizal, 2022).

Juliansyah & Yahya (2023) found that Return On Asset (ROA) does not significantly influence stock prices, meaning that ROA values do not affect stock price movements. Therefore, ROA is not a key factor in stock price changes. However, Febriantoro (2023) showed that ROA does influence stock price movements, indicating that increases in stock prices can boost profits, making companies more attractive to investors seeking higher returns.

Debt Equity Ratio (DER) is defined as the ratio that shows how much debt guarantees its own capital. DER positively affects stock prices. Well-managed debt ensures good profitability, which in turn increases operational financing capital for the company, leading to higher stock demand and rising stock prices (Natalia et al., 2020). Conversely, another study found that DER negatively affects stock prices, suggesting that higher DER values increase the company's debt obligations, lowering stock prices (Sanjaya, 2017).

Earning Per Share (EPS) is the net profit distributed to shareholders, assuming the number of shares outstanding in the market. Investors are attracted to higher profits.

According to Sa'adah & Najuwah (2023), EPS does not significantly influence stock prices, indicating that stock price movements are not driven by EPS values. However, Janaina & Yudiantoro (2022) found that EPS significantly affects stock prices, with higher EPS values leading to higher stock prices. This ratio is crucial for investors to assess potential earnings and future growth before purchasing stocks.

Stock prices fluctuate based on various influencing factors, fundamentally and macroeconomically. These two variables are interrelated, with internal factors (fundamental) and external factors (macroeconomic) playing significant roles. Based on the above discussion, the researcher aims to investigate the declining trend of stock prices in the Consumer Non-Cyclicals sector over the past six years. This study will examine whether the decline is due to fundamental factors, macroeconomic factors, or both. The fundamental variables include Return on Assets, Earnings per Share, and Debt Equity Ratio, while the macroeconomic variables include inflation and exchange rates.

LITERATURE REVIEW

Fundamental Analysis

In broad terms, fundamental analysis is a crucial aspect when examining financial statements. In the realm of stocks, fundamental analysis is a method to identify whether the value and price of a stock are aligned, not undervalued or overvalued. Stevenson et al. (1988) defines it as "the process of identifying securities that are under or overvalued at a point in time. In the quest for extraordinary returns, fundamental analysis attempts to uncover these special situations by applying a variety of appraisal techniques."

Technically, fundamental analysis involves examining key elements within a company's financial statements to calculate and aggregate the value or price of stocks in real time. This method serves as a way to understand a company's financial position and performance, with financial reports being the primary source for analyzing stock value and performance. It also involves comparing the intrinsic value of stocks to market prices to determine if they are fairly priced (Stevenson et al., 1988).

Budiman (2021) highlights that fundamental analysis is a critical component of stock analysis. It is broadly used to draw conclusions from financial ratios in reports. Fundamental analysis is vital in assessing the size and value of a stock before investors proceed with their purchases. There are four key indicators in fundamental analysis: growth analysis, profitability analysis, debt analysis, and price analysis. Growth analysis includes metrics such as profit and sales analysis. Profitability analysis is indicated by ratios like Return on Asset. Debt analysis involves ratios such as the Debt to Equity Ratio, which compares total liabilities to equity. Lastly, price analysis focuses on key ratios like Earning Per Share, which measures the profitability per share of stock.

Macroeconomics

The relationship between stock prices and exchange rates is debated in economic theory, with some theories suggesting that stock prices are influenced by exchange rates, while others propose the opposite. The "Flow-Oriented" theory posits that currency exchange rate movements affect the competitive capabilities of international companies. Exchange rates, in turn, impact company revenues, funding costs, output, and ultimately, stock prices, which are seen as a reflection of the present value of future cash flows (Dornbusch et al., 2010). This theory aligns with transaction and translation exposure theories, where exchange rates affect corporate transactions converted into another currency, such as exports, imports, and interest income (transaction exposure), and influence consolidated financial statements of parent companies (translation exposure).

Fluctuations in exchange rates directly impact a business's profitability and its competitiveness in international markets. When exchange rates rise, the value of export goods decreases, leading to lower sales and revenues, and consequently, a decline in stock prices. Conversely, this will lower the prices of goods for importing companies, making imported goods more attractive to consumers, boosting the importing company's revenue and stock price (Dornbusch et al., 2010).

When exchange rates are seen as a key factor in stock price changes, Fischer's generalization theory suggests that stock capital represents the movements in real business assets, making the stock market a hedge against inflation limits. Investors may buy or sell their stock assets based on announced inflation expectations. Factors that cause changes in exchange rates include inflation rates, interest rates, economic conditions, and monetary policies, which are all significant factors (Dornbusch et al., 2010).

Fischer (1930) explains the relationship between inflation and stock prices through interest rates. The established formula is that the real interest rate equals the nominal interest rate minus the inflation rate. In several economic systems, the real interest rate is a fixed value that represents consumer purchasing power. Therefore, if inflation is expected to rise, the nominal interest rate will also increase. This scenario similarly applies to the capital market; when inflation is unstable, stock values will fluctuate. Thus, the conclusion is that when inflation rates fluctuate within a period, stock prices will also fluctuate in tandem with inflation (Eldomiaty et al., 2019; Zahriyah & Lutfiyanto, 2023). Factors influencing inflation include high demand without corresponding supply, excess money circulation, and increased production of goods.

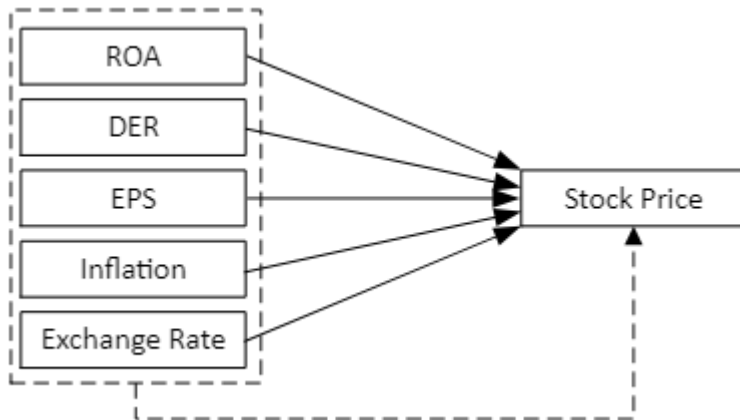
Stock Prices

Stock prices are the prices observed in the stock market at a specific time, determined by market participants and driven by the supply and demand for the respective stocks in the capital market (Almashaqbeh et al., 2021). Researchers suggest that stock prices offered on the stock exchange are influenced by supply and demand, making these prices inherently fluctuating or subject to change over time. The factors influencing these price changes can be categorized as internal and external. Internal

factors are primarily driven by the company's financial performance, while external factors are influenced by macroeconomic conditions and political policies.

Figure 1

Theoretical Framework



Source: Primary data.

Based on the theoretical framework in Figure 1, fundamental analysis represents a long-term investment perspective where investors evaluate past financial performance with the assumption of future profits or dividends. It is important to note that these two techniques significantly influence investor purchasing power and psychology in assessing stock prices in the capital market. Stock prices are affected by both internal and external indicators. Internally, stock prices are influenced by the company's own performance, or fundamentals, which are reflected in financial reports. Externally, stock prices are affected by macroeconomic fluctuations in a country, including factors like inflation and exchange rates.

From the framework above, it can be concluded that fundamental analysis has a direct relationship with stock prices because a company's performance significantly impacts its stock price. On the other hand, exchange rates in macroeconomics do not have a direct relationship but can affect stock prices through changes in profits. Inflation, however, has a direct relationship with stock prices. Based on above description, hypotheses in this study can be formulated as follows:

H1: There is an effect of return on assets (ROA) on the stock prices in the consumer non-cyclicals sector.

H2: There is an effect of earnings per share (EPS) on the stock prices in the consumer non-cyclicals sector.

H3: There is an effect of debt to equity ratio (DER) on the stock prices in the consumer non-cyclicals sector.

H4: There is an effect of inflation on the stock prices in the consumer non-cyclicals sector.

H5: There is an effect of exchange rates on the stock prices in the consumer non-cyclicals sector.

METHOD

This study employs a quantitative descriptive approach, meaning it involves documenting and observing data available on several official websites. This allows readers to understand the most recent and relevant data easily, leading to clear conclusions about the data presented. For data collection, the researcher uses documentation methods, whereby data from relevant company websites is observed and recorded. This collected data is then reanalysed to ensure its meaning is comprehensively understood. The study encompasses a sample of 22 data series from 2017 to 2022, with annual data. In data analysis, the researcher uses panel data regression to determine the influence of variable X on variable Y, thereby testing the proposed hypotheses. The regression analysis is supported by classical assumption tests and conducted using EViews.

RESULTS

Model Selection Analysis

To determine the most appropriate model in this study, the Chow test, Hausman test, and Lagrange Multiplier test were carried out. The results of these tests are presented in Table 1. The Chow test results show a probability value of $0.0000 < 0.05$, so the model chosen is the Fixed Effect Model (Appendix A). In the Hausman test, the probability value is $1.0000 > 0.05$, so the model chosen is the Random Effect Model (Appendix B). Meanwhile, in the Lagrange Multiplier test, the Probability value is $0.0086 < 0.05$, so the model chosen is the Random Effect Model (Appendix C). Based on the results of three tests, it can be concluded that random effect model is the best model for this study.

Table 1

Result of Tests for Model Selection

Test	Statistics	Probability	Decision
Chow	67.523100	0.0000	Fixed Effect Model
Hausman	0.000000	1.0000	Random Effect Model
Lagrange Multiplier	6.904001	0.0086	Random Effect Model

Source: Primary data. Authors' estimation.

Classical Assumption Test

After selecting the best model, the next step is conducting classical assumption test. According to Kuncoro (2014), a random effect model needs only two classical assumption tests: normality and multicollinearity. The normality test produces Jarque-Bera statistics 1841.759 with a probability of 0.000000 (Appendix D). Thus, the model is not normally distributed. This study used 132 observations, which is a large number. According to Gujarati & Porter (2008) and Ghasemi & Zahediasl (2012),

normality is not a problem in research with many observations. Thus, the problem of normality in this study is not considered.

Next test is multicollinearity test (Appendix E). The correlation between independent variables can be explained in Table 2. The results in Table 2 indicate that all correlations between independent variables in this study is less than 0.8 so that it can be concluded that no multicollinearity in this regression.

Table 2

Correlation Between Independent Variables

Variables	Correlation
X1 ⇔ X2	0.3706526560722977
X1 ⇔ X3	0.08713603436003804
X1 ⇔ X4	0.05446613744375886
X1 ⇔ X5	0.007337319574114665
X2 ⇔ X3	0.06789904881900862
X2 ⇔ X4	0.0009223955112952445
X2 ⇔ X5	0.04544683379335081
X3 ⇔ X4	0.02494834597563872
X3 ⇔ X5	0.0553940852899879
X4 ⇔ X5	0.6738056174117352

Source: Primary data. Authors' estimation.

Hypotheses Test Results

The best model for this study is random effect model, thus the hypothesis tests are based on this model (Appendix F). Table 3 summarizes the results of regression using random effect model for this study. Independent variables such as ROA, EPS, inflation, and exchange rate show Probability < 0.05 which indicates that the four variables have significant effects on stock price. Only DER shows probability > 0.05 which indicates that it has no significant effect on stock price.

Table 3

Estimation Model of Random Effects

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26482.83	9063.618	2.921883	0.0041
X1	174.9079	56.99037	3.069078	0.0026
X2	18.94520	1.913190	9.902411	0.0000
X3	3.089660	3.292040	0.938524	0.3498
X4	854.7673	368.1723	2.321650	0.0219
X5	-2.12773	0.679423	-3.13167	0.0022

Source: Primary data. Authors' estimation.

The formula for the multiple linear regression equation is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \text{Error}$$

Where:

a or constant = 26482.83

X_1 or ROA = 174.9079

X_2 or EPS = 18.94520

X_3 or DER = 3.089660

X_4 or Inflation = 854.7673

X_5 or Exchange Rate = -2.12773

So, the equation becomes:

$$\text{Stock Price} = 26482.83 + 174.9079 (\text{ROA}) + 18.94520 (\text{EPS}) + 3.089660 (\text{DER}) + 854.7673 (\text{Inflation}) - 2.12773 (\text{Exchange Rate}) + \text{Error}$$

The constant α has a positive value of 26482.83, which means that if ROA, EPS, DER, Inflation, and Exchange Rate are all zero, the stock price will be 26482.83. b_1 value is positive 174.9079 indicates that for every 1% increase in ROA, the stock price will increase by 174.9079. b_2 has a positive value of 18.94520 which indicate that for every 1% increase in EPS, the stock price will increase by 18.94520. b_3 is positive with value of 3.089660, indicates that for every 1% increase in DER, the stock price will increase by 3.089660. b_4 has positive value of 854.7673, indicates that for every 1% increase in Inflation, the stock price will increase by 854.7673. b_5 shows a negative value of -2.12773 indicates that for every 1% decrease in the Exchange Rate, the stock price will decrease by 2.12773.

The random effect model in this study shows F-statistics of 28.36796 with Probability 0.000000 (Appendix F). It indicates that all independent variables, ROA, EPS, DER, inflation, and exchange rate, simultaneously have significant effects on stock price. Furthermore, the model shows Adjusted R^2 of 0.510902 (Appendix F) which indicates that the model can explain 51% of the dependent variable and the rest of the 49% is explained by other variables not included in the model.

DISCUSSION

Impact of Return on Assets on Stock Prices

The data analysis shows that ROA significantly impacts stock prices. In accordance with Sari et al. (2024), organizations can effectively manage their assets and generate more profits by boosting their Return On Asset value. Generally, a greater Return On Asset number indicates that a company's earnings or performance are strong and productive. As a result, investors are inclined to purchase shares in order to obtain large returns in the future. According to Ahmad et al. (2024), companies that effectively manage their assets and generate profits tend to attract greater investor interest in making investment decisions. This is primarily due to the importance of Return On Assets (ROA) as a key indicator that investors consider before making investment decisions, as it signifies an increase in profitability. Return on Assets is a

financial metric that determines the company's health and attractiveness to market participants.

Return On Assets is a component of fundamental analysis that is conducted before to making a long-term investment. Typically, the financial performance of a company will have an impact on its share values. Return On Assets is a metric that measures profitability. In this context, it represents the profit gained by investing in the future as a result of the capital that has been expended. Share prices are inherently linked to financial performance or fundamental analysis. This relationship serves as an indicator of whether a company falls into a healthy category in terms of asset management (Budiman, 2021; Parahita, 2011).

Impact of Earnings Per Share on Stock Prices

Earnings per share offers a description of the level of profitability that may be observed in each individual share of a corporation (Thaariq & Padikromo, 2024). Generally speaking, investors will be interested in a larger Earnings Per Share value. In this particular scenario, Earnings Per Share serves as a benchmark for the accomplishments of a different organization. As a result, fluctuations in Earnings Per Share have the potential to influence demand for share prices, which in turn has an effect on share prices. While this is going on, Namashuda et al. (2024) have found that the bigger the profit per share, the more appealing it is for investors to acquire these shares. A stable company is one that demonstrates consistency in the increase of its earnings per share on an annual basis. Earnings per share serves as a benchmark that both management and shareholders pay special attention to. This means that if the value of earnings per share tends to be high, then investor interest will also be higher.

Earnings per share is a crucial statistic that should be considered before making any decisions about investments. In general, Earnings Per Share (EPS) is an indicator that determines how much profit we earn per share if we buy the shares. Therefore, this indicator is essential in order to determine how much profit investors get from each share that they hold. The greater the value of Earnings Per Share, the higher it is. earnings that were obtained by investors.

Impact of Debt to Equity Ratio on Stock Prices

Based on the analysis of the data, it appears that DER does not have any impact on stock prices. According to the findings of a study conducted by Dayanti et al. (2024), investors do not take into consideration the Debt Equity Ratio while making investments. This was explained by the findings of the research. This indicates that the Debt Equity Ratio does not necessarily have an effect on the decisions that investors make regarding their investments, regardless of whether the ratio has a high or low number. Whether a firm has a high or low level of debt does not necessarily have an effect on the decisions that investors make on their investments. This is because investors typically focus on how well the company is able to employ the debt it has to cover its operational expenses. In the event that the company is able to use debt for

company operations, investors will receive a positive signal to invest in the company, and share prices will tend to rise.

This is in line with Dayanti et al. (2024) that the Debt Equity Ratio does not have any influence on share prices. According to investors, the existence of the Debt Equity Ratio is not significant. Investors have a tendency to focus on how the company has a positive reputation, the outcomes of which will be taken by investors, specifically profits from purchasing shares. Thus, the rise and fall of the Debt Equity Ratio is not significant for investors. The ratio of total debt against total equity is referred to as the debt equity ratio. This ratio is a component of the firm's financial analysis, namely determining the extent to which the company is able to satisfy its debt obligations when the company's operations are in operation. The British Business Bank is of the opinion that a good ratio for the Debt Equity Ratio is often somewhere between 1 and 1.5 (Bank OCBC NISP, 2023).

Impact of Inflation on Stock Prices

This study shows that inflation has a significant effect on stock prices. It is possible for inflation to occur at any time in any country or region. While the effects of inflation might pose a risk to the economy of a nation, the enterprises that operate in the consumption sector are the engines that drive the economy of the nation. According to the findings of a study by Alwi & Nirawati (2022), the primary reason or source that affects the rise and fall of stock prices is not the percentage of inflation that is either increasing or decreasing.

In this scenario, the price of stocks is unaffected by inflation so long as it remains at a level that is considered to be appropriate. Needless to say, this is consistent with the inelastic nature of the consumer non-cyclical sector. In spite of the fact that there is a crisis in the economy, people or customers will continue to purchase essential requirements. Despite the fact that there has been an increase in inflation, the decrease in people's ability to buy things is not particularly significant. This ensures that the company continues to reap the benefits of the rise in the quantity of items. Because of this, the company is in a position to pay out substantial dividends, which serves as a signal of optimism for the share price of the company in question.

Impact of Exchange Rates on Stock Prices

The result of this study indicates a significant effect of exchange rate on stock prices. As a result of the fact that fluctuations in exchange rates are the most common form of payment for business transactions that involve the use of foreign currencies, they have the potential to impact the competitiveness of a commercial enterprise. According to the influence of currency fluctuations, this is a component that the company must take into consideration while carrying out company operations. As a result, this element will have an effect on the rising share prices. According to the findings of research by Porwati (2024), the exchange rate has an effect on the values of shares. A negative relationship exists between the exchange rate and share prices when using the Portfolio Balance approach.

This means that if a company engages in export-import activities, then the transactions that are carried out will involve the use of foreign currency. This means that if the value of the foreign currency decreases, then the share price will decrease as well. Therefore, the impact of high foreign currency prices will have a negative impact on the income of the company. As a result, trading on the stock exchange companies will have a tendency to choose which ones will benefit more from the increase in the rupiah exchange rate. Additionally, investors will experience changes in investment instruments, which will lead to the switching to instruments that are more profitable. generate a profit similar to that of investing in the finance market.

According to the findings of a study by Dientri et al. (2024) concerning currency rates and stock prices, it is evident that the stability of the rupiah in relation to other currencies will have a substantial impact. This is due to the fact that merchants and firms are both actively engaging in export-import activities. Consequently, when the value of the rupiah is high, it results in a decrease in the price of items that are imported. A decrease in production costs is likely to occur when the costs of raw materials are low. Consequently, this will result in an increase in the purchasing power of investors for the items offered by the firm, which will in turn have an effect on the price of the company's shares.

Limitations of the Study

A major downside with this research study is that it uses historical data from 2017 to 2022, Therefore, it may not incorporate recent market dynamics or any emerging trends affecting stock prices in Consumer Non-Cyclicals Industry. The market environment, behavior of investors, and the policies made by the fiscal authorities change over time, and updated research could identify alternative patterns or influences on stock price. Furthermore, the sample was limited to a distinct timeframe that may not capture long-run cyclical variations or exogenous shocks such as global financial crises or pandemics, which could, in turn, constrain the applicability of the results.

The other limitation is the exercise focused on variables used in the analysis. The study does though look at significant financial ratios such as ROA, EPS, DER, policy of inflation, and exchange rates, and excludes other possible imperatives. Factors such as corporate governance, market sentiment, technological evolution and geopolitical events might also determine stock prices, other than the ones reviewed in this study. Exclude these factors and the complete picture - all the items that conspire to move the price of this Consumer Non-Cyclicals sector - might be missed.

Thirdly, few quantitative research studies have been based on multiple linear regression analysis, which although solid, is bound to lack the appropriate explanatory depth. This approach assumes that variables are related linearly and does not take into consideration non-linearities or interactions between variables. In addition, as with any research that relies on publicly available data, there are potential sources of reporting bias or error in the study's use of secondary data from corporate websites and financial reports. In conclusion, future studies should use new research methods:

qualitative research methods such as interviews and case studies to provide a deeper understanding of the determinants of stock price movement and to support the research results.

CONCLUSION

Retrun On Assets has a partial influence on stock prices, as indicated by the findings of study carried out by researchers. This means that the higher the value of Retrun On Assets, the bigger the return value that is gained. Earnings Per Share also has a partial effect on stock prices, and the more earnings per share there are, the more the return value that is obtained. If the value of the Earnings Per Share is high, then the income ratio per share will also be obtained. The Debt Equity Ratio does not have a partial influence on share prices, and the Debt Equity Ratio is not a reference for investors when they are making investments. On the other hand, inflation and exchange rates do have a partial influence on stock prices. Stock prices are influenced simultaneously by a number of factors, including return on assets, earnings per share, debt equity ratio, inflation, and value for the company.

These findings support the hypothesis that fundamental and macroeconomic variables influence stock prices in the Consumer Non-Cyclicals sector listed on the Indonesia Sharia Stock Index (ISSI). Theoretically, this study enhances the need to introduce for wider amount of variables in future to get a wide and more balanced policy idea of the variables influencing the stock prices in the Consumer Non-Cyclicals sector. These results suggest that future researches should include both macroeconomic indicators and micro-economic factors (corporate governance practices, technological innovations, investor sentiment) in the analyses. Moreover, nonlinear relationships among variables and their interactions should also be investigated, to model the financial markets more realistically, by future research. Including such elements in the theoretical framework will, on the one hand, reinforce the theoretical richness of the model and, on the other, enrich the explanatory capacity of future research advancements.

With respect to practical implication, this investigation underscores the paramount importance of economic indicators and macroeconomic factors for investment judgement. When evaluating investment opportunities in the Consumer Non-Cyclicals sector, financial analysts and investors need to correlate a company performance with the aforementioned financial metrics, and also with macroeconomic variables such as inflation or exchange rates. Drawing on this expansive pool of financial metrics empowers investors to take decisions which are better-informed and better-suited to their investment strategy and risk profile. The same applies to companies in this sector they need to improve their financial efficiencies and disclosure to investors to gain and keep investors.

This study indicates that policymakers should pursue sustained economic policies to alleviate the negative impacts of inflation and exchange rate volatility on the stock market. These rely in turn on an economic framework that allows sustainable growth and financial stability, which should be a core aim of policymakers. As well as

introducing sound monetary policies to avoid inflation and maintaining investor and business confidence with a stable exchange rate. Corporations should: Work with makers of trading services to improve order routing practices and trading venues to improve the design of trading systems. Policymakers should: Strengthen corporate governance practices and increase transparency in financial reporting to support investor confidence and market integrity. Policymakers can advance capital market performance and economic growth more generally by promoting a stable and transparent financial environment.

Author Contributions

Conceptualization	M.M.H., A.W.N., & M.I.	Resources	M.M.H., A.W.N., & M.I.
Data curation	M.M.H., A.W.N., & M.I.	Software	M.M.H., A.W.N., & M.I.
Formal analysis	M.M.H., A.W.N., & M.I.	Supervision	M.M.H., A.W.N., & M.I.
Funding acquisition	M.M.H., A.W.N., & M.I.	Validation	M.M.H., A.W.N., & M.I.
Investigation	M.M.H., A.W.N., & M.I.	Visualization	M.M.H., A.W.N., & M.I.
Methodology	M.M.H., A.W.N., & M.I.	Writing – original draft	M.M.H., A.W.N., & M.I.
Project administration	M.M.H., A.W.N., & M.I.	Writing – review & editing	M.M.H., A.W.N., & M.I.

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Informed Consent Statement

Informed consent was not required for this study.

Data Availability Statement

The data presented in this study are available as an online attachment to this article.

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Conflicts of Interest

The authors declare no conflicts of interest.

REFERENCES

- Ahmad, N. A., Putri, E. D., Aspuri, M., & Ayu, R. S. (2024). Pengaruh return on asset, return on equity, dan earning per share terhadap harga saham: Studi empiris perusahaan sektor industri yang terdaftar di Bursa Efek Indonesia (BEI) periode 2019–2022 [The effect of return on assets, return on equity, and earning per share on share prices: Empirical study of industrial sector companies listed on the Indonesia Stock Exchange (IDX), 2019–2022]. *Neraca: Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(1), 415–429. <https://doi.org/10.572349/neraca.v2i1.790>

- Almashaqbeh, M., Islam, M. A., & Bakar, R. (2021). Factors affecting share prices: A literature revisit. *AIP Conference Proceedings*, 2339(1), 020143. <https://doi.org/10.1063/5.0045110>
- Alwi, H. H., & Nirawati, L. (2022). Pengaruh inflasi, suku bunga Bank Indonesia, dan nilai tukar rupiah (USD/IDR) terhadap Indeks Saham Bisnis-27 di Bursa Efek Indonesia (BEI) [The influence of inflation, Bank Indonesia interest rates, and the rupiah exchange rate (USD/IDR) on the Business-27 Stock Index on the Indonesia Stock Exchange (BEI)]. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 5(2), 620–635. <https://doi.org/10.47467/alkharaj.v5i2.1242>
- Amanda, S. T., Akhyar, C., Ilham, R. N., & Adnan. (2023). The effect of inflation, exchange rate, and interest rate on stock prices in the transportation sub-sector, 2018–2020. *Journal of Accounting Research, Utility Finance and Digital Assets*, 1(4), 342–352. <https://doi.org/10.54443/jaruda.v1i4.54>
- Andni, R., & Said, M. (2022). Determinant of Islamic stock index in Indonesia pre and post pandemic era vaccine. *Journal of Islamic Economics Lariba*, 8(1), 85–100. <https://doi.org/10.20885/jielariba.vol8.iss1.art6>
- Ansari, R., Tulasmi, & Sawitri. (2022). Impact of investor sentiment, exchange rates, and foreign capital flow on Jakarta Islamic Index stock returns. *Journal of Islamic Economics Lariba*, 8(1), 213–228. <https://doi.org/10.20885/jielariba.vol8.iss1.art13>
- Bank OCBC NISP. (2023, February 16). *Apa itu debt to equity ratio? Pengertian dan cara hitung nya [What is debt to equity ratio? Definition and how to calculate]* [HTML]. Bank OCBC NISP. <http://www.ocbc.id/id/article/2023/02/16/debt-to-equity-ratio-adalah>
- Basya, M. B. A. (2020). Akad dan prinsip syariah dalam bursa efek syariah [Sharia contracts and principles in the sharia stock exchange]. *Jurnal Ilmu Akuntansi Dan Bisnis Syariah (AKSY)*, 2(2), 101–112. <https://doi.org/10.15575/aksy.v2i2.9803>
- Budiman, R. (2021). *Rahasia analisis fundamental saham [Secrets of fundamental stock analysis]*. Elex Media Komputindo. <https://elexmedia.id/produk/detail/manajemen-bisnis/raymond-budiman/rahasia-analisis-fundamental-saham-edisi-revisi/9786230025839>
- Bursa Efek Indonesia. (2022, November 26). *Produk syariah* [HTML]. Bursa Efek Indonesia. <https://www.idx.co.id/>
- Dayanti, K. A. T., Primasatya, R. D., & Fernando, H. A. (2024). Pengaruh rasio keuangan terhadap harga saham perusahaan sektor teknologi di Bursa Efek Indonesia (BEI) [The influence of financial ratios on share prices of technology sector companies on the Indonesian Stock Exchange (IDX)]. *Owner: Riset Dan Jurnal Akuntansi*, 8(1), 793–802. <https://doi.org/10.33395/owner.v8i1.1788>
- Dientri, A. M., Darmayanti, N. D., & Rama, R. S. (2024). Pengaruh harga minyak dunia dan faktor makroekonomi terhadap pergerakan Indeks Harga Saham Gabungan (IHSG) di Bursa Efek Indonesia (BEI) selama periode 2018–2022 [The influence of world oil prices and macroeconomic factors on the movement of the Composite Stock Price Index on the Indonesian Stock Exchange (IDX), 2018–2022]. *ADILLA: Jurnal Ilmiah Ekonomi Syari'ah*, 7(1), 22–37. <https://doi.org/10.52166/adilla.v7i1.5388>
- Dornbusch, R., Fischer, S., & Startz, R. (2010). *Macroeconomics* (11th edition). McGraw-Hill/Irwin.
- Effendi, S., & Harahap, B. (2020). Analisis faktor internal dan eksternal perusahaan terhadap harga saham sektor industri barang konsumsi di Bursa Efek Indonesia (BEI) [Analysis of internal and external factors of companies on consumer goods industry sector stock prices in the Indonesia Stock Exchange (IDX)]. *Journal of Applied Managerial Accounting*, 4(1), 102–109. <https://doi.org/10.30871/jama.v4i1.1911>

- Eldomiaty, T., Saeed, Y., Hammam, R., & AboulSoud, S. (2019). The associations between stock prices, inflation rates, interest rates are still persistent: Empirical evidence from stock duration model. *Journal of Economics, Finance and Administrative Science*, 25(49), 149–161. <https://doi.org/10.1108/JEFAS-10-2018-0105>
- Febriantoro, M. R. (2023). Pengaruh return on asset, return on equity, dan earning per share terhadap harga saham pada sektor properti yang terdaftar di Bursa Efek Indonesia (BEI) periode 2019–2021 [The influence of return on assets, return on equity, and earning per share on share prices in the property sector listed on the Indonesian Stock Exchange (IDX), 2019–2021]. *Maeswara: Jurnal Riset Ilmu Manajemen Dan Kewirausahaan*, 1(6), 123–137. <https://doi.org/10.61132/maeswara.v1i6.384>
- Fisher, I. (1930). *The theory of interest: As determined by impatience to spend income and opportunity to invest it*. MacMillan Company.
- Fitriani, F. (2022). Pengaruh variabel makroekonomi terhadap Indeks Harga Saham Gabungan [The influence of macroeconomic variables on the Composite Stock Price Index]. *IEB: Journal of Islamic Economics and Business*, 1(1), 48–58. <https://doi.org/10.19109/ieb.v1i1.12043>
- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486–489. <https://doi.org/10.5812/ijem.3505>
- Gujarati, D. N., & Porter, D. C. (2008). *Basic econometrics* (5th edition). McGraw–Hill Education.
- Hardiyanti, W., Kartika, A., & Sudarsi, S. (2022). Analisis profitabilitas, ukuran perusahaan, leverage dan pengaruhnya terhadap manajemen laba perusahaan manufaktur [Analysis of profitability, firm size, leverage, and their influence on earnings management of manufacturing companies]. *Owner: Riset Dan Jurnal Akuntansi*, 6(4), 4071–4082. <https://doi.org/10.33395/owner.v6i4.1035>
- Janaina, N. N., & Yudiantoro, D. (2022). Pengaruh earning per share (EPS), return on equity (ROE), dan debt to equity ratio (DER) terhadap harga saham properti dan real estate yang terdaftar di JII70 [The influence of earning per share (EPS), return on equity (ROE), and debt to equity ratio (DER) on share prices of property and real estate companies listed on JII70]. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 5(2), 762–771. <https://doi.org/10.47467/alkharaj.v5i2.1314>
- Jihad, A. A., & Ramly, A. R. (2016). Mekanisme operasionalisasi saham syari'ah di Indonesia dan negara lain [Mechanism for operationalizing sharia shares in Indonesia and other countries]. *J-EBIS (Jurnal Ekonomi Dan Bisnis Islam)*, 1(2), 1–22. <https://doi.org/10.32505/v4i1.1235>
- Juliansyah, D., & Yahya, Y. (2023). Pengaruh return on assets, net profit margin, dan debt to equity ratio terhadap harga saham pada perusahaan property dan real estate yang terdaftar di Bursa Efek Indonesia [The influence of return on assets, net profit margin, and debt to equity ratio on share prices in property and real estate companies listed on the Indonesian Stock Exchange]. *Jurnal Ilmu Dan Riset Manajemen (JIRM)*, 12(9), Article 7. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/5501>
- Kamal, M., Kasmawati, Rodi, Thamrin, H., & Iskandar. (2021). Pengaruh tingkat inflasi dan nilai tukar (kurs) rupiah terhadap Indeks Saham Syariah Indonesia (ISSI) [The influence of the inflation rate and rupiah exchange rate on the Indonesian Sharia Stock Index (ISSI)]. *Jurnal Tabarru': Islamic Banking and Finance*, 4(2), 521–531. [https://doi.org/10.25299/jtb.2021.vol4\(2\).8310](https://doi.org/10.25299/jtb.2021.vol4(2).8310)
- Kuncoro, M. (2014). *Metode riset untuk bisnis dan ekonomi: Bagaimana meneliti dan menulis tesis? [Research methods for business and economics: How to research and write a thesis?]* (Fourth edition). Erlangga.

- Melindawati. (2022). Analisis perbandingan kinerja Indeks Saham Syariah pada Bursa Efek Indonesia [Comparative analysis of the performance of the Sharia Stock Index on the Indonesian Stock Exchange]. *Al-Hasyimiyah: Jurnal Ekonomi Syariah*, 1(2), 36–45. <https://ejournal.staisiak.ac.id/index.php/al-hasyimiyah/article/view/33>
- Namashuda, F., Rosmanidar, E., & Rahma, S. (2024). Pengaruh analisis fundamental, teknikal dan bandarmologi terhadap harga saham syariah yang terdaftar di Jakarta Islamic Index periode 2018–2021 [The influence of fundamental, technical and bandarmological analysis on sharia stock prices listed on the Jakarta Islamic Index, 2018–2021]. *El-Mat: Jurnal Kajian Ekonomi & Bisnis Islam*, 5(3), 1752–1766. <https://doi.org/10.47467/elmal.v5i3.5147>
- Natalia, D., Manurung, D. N., Nduru, F., & Sitepu, W. R. B. (2020). Pengaruh return on equity, debt equity ratio, current ratio dan firm size terhadap harga saham (Studi kasus pada perusahaan manufaktur sektor industri dasar dan kimia di BEI) [The influence of return on equity, debt equity ratio, current ratio and firm size on stock prices (Case study of manufacturing companies in the basic industrial and chemical sectors on the IDX)]. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(3), Article 3. <https://doi.org/10.31955/mea.v4i3.457>
- Nurtyas, K. R., & Yudiantoro, D. (2023). Pengaruh price earning ratio, price to book value dan inflasi terhadap harga saham perusahaan Indeks LQ45 di BEI Tahun 2020–2022 [The influence of price earning ratio, price to book value and inflation on share prices of LQ45 Index companies on the IDX in 2020–2022]. *Economics and Digital Business Review*, 4(2), 350–361. <https://doi.org/10.37531/ecotal.v4i2.513>
- Otoritas Jasa Keuangan. (2022, December 14). *Statistik saham syariah—November 2022 [Sharia stock statistics—November 2022]* [HTML]. Otoritas Jasa Keuangan. <https://ojk.go.id/id/kanal/syariah/data-dan-statistik/saham-syariah/Pages/Statistik-Saham-Syariah---November-2022.aspx>
- Parahita, I. (2011). *Investing ideas Kumpulan ide sederhana tentang analisis fundamental [Investing ideas: A collection of simple ideas about fundamental analysis]*. Coffee Morning Press. <https://lms.ojk.go.id/OJK/FrontendLibrary/DetailCatalog/Detail/2/11105>
- Porwati, R. (2024). Analisis pengaruh harga CPO, tingkat inflasi, dan nilai tukar rupiah terhadap harga saham perusahaan subsektor perkebunan kelapa sawit tahun 2017–2021 [Analysis of the influence of cpo prices, inflation rate, and rupiah exchange rate on the stock prices of palm oil subsector companies, 2017–2021]. *Maeswara: Jurnal Riset Ilmu Manajemen Dan Kewirausahaan*, 2(1), 169–179. <https://doi.org/10.61132/maeswara.v2i1.605>
- Prasetyo, Y. (2017). Rasio keuangan sebagai kriteria saham syariah [Financial ratios as criteria for sharia shares]. *EKUBIS*, 2(1), 161–171. <https://ojs.uninus.ac.id/index.php/EKUBIS/article/view/779>
- Putra, D. H. (2023). Analisis pengaruh rasio hutang terhadap aset, rasio hutang terhadap ekuitas, dan struktur modal terhadap tingkat pengembalian ekuitas pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia [Analysis of the influence of debt to asset ratio, debt to equity ratio, and capital structure on the return on equity of manufacturing companies listed on the Indonesia Stock Exchange]. *Yudishtira Journal: Indonesian Journal of Finance and Strategy Inside*, 3(1), 21–29. <https://doi.org/10.53363/yud.v3i1.58>
- Rizal, I. (2022). Pengaruh debt to equity ratio, return on equity, dan earning per share terhadap harga saham di Jakarta Islamic Index [The influence of debt to equity ratio, return on equity, and earning per share on stock prices in the Jakarta Islamic Index]. *Journal of Applied Management Research*, 2(1), 66–72. <https://doi.org/10.36441/jamr.v2i1.455>
- Roziqin, M. F., & Hidajat, S. (2023). Pengaruh rasio hutang terhadap ekuitas, dividen per saham, rasio pembayaran dividen, dan nilai tukar terhadap harga saham perusahaan sektor infrastruktur

- yang terdaftar di Bursa Efek Indonesia pada rentang tahun 2017-2021 [The influence of debt to equity ratio, dividend per share, dividend payout ratio, and exchange rate on share prices of infrastructure sector companies listed on the Indonesian Stock Exchange, 2017-2021]. *Jambura Economic Education Journal*, 5(2), 50-63. <https://doi.org/10.37479/jeej.v5i2.18505>
- Sa'adah, L., & Najuwah, S. (2023). Pengaruh earning per share (EPS) dan dividen per share terhadap harga saham perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia pada rentang tahun 2018-2022 [The effect of earning per share (EPS) and dividend per share on the share prices of mining companies listed on the Indonesian Stock Exchange, 2018-2022]. *Jurnal Manajemen Dan Bisnis Ekonomi*, 1(4), 42-53. <https://doi.org/10.54066/jmbe-itb.v1i4.685>
- Sanjaya, I. D. M. A. (2017). Pengaruh return on equity, debt to equity ratio, price earning ratio, dan earning price share terhadap harga saham (Studi pada perusahaan manufaktur sektor otomotif & komponen yang terdaftar di Bursa Efek Indonesia) [The influence of return on equity, debt to equity ratio, price earning ratio, and earning price share on stock prices (Study of automotive & component sector manufacturing companies listed on the Indonesia Stock Exchange)]. *Jurnal Ilmiah Mahasiswa FEB*, 6(1), Article 1. <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/4386>
- Sari, D., Rosmawati, W., & Asry, S. (2024). Pengaruh return on asset (ROA) dan current ratio (CR) terhadap harga saham pada PT Astra Agro Lestari Tbk periode 2010-2021 [The effect of return on assets (ROA) and current ratio (CR) on share prices at PT Astra Agro Lestari Tbk, 2010-2021]. *Neraca: Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(1), 20-34. <https://doi.org/10.572349/neraca.v2i1.656>
- Stevenson, R. A., Jennings, E. H., & Loy, D. (1988). *Fundamentals of investments* (Fourth edition). West Group.
- Thaariq, J. A., & Padikromo, S. (2024). Pengaruh return on asset (ROA), return on equity (ROE), dan earning per share (EPS) terhadap harga saham pada perusahaan makanan dan minuman yang terdaftar di Bursa Efek Indonesia [The influence of return on assets (ROA), return on equity (ROE), and earning per share (EPS) on share prices in food and beverage companies listed on the Indonesian Stock Exchange]. *Jurnal Ilmiah Wahana Pendidikan*, 10(1), 506-519. <https://doi.org/10.5281/zenodo.10467396>
- Wijayanti, D. P., & Yudiantoro, D. (2023). Pengaruh inflasi, suku bunga, dan nilai tukar terhadap harga saham perusahaan pertambangan periode 2019-2021 [The influence of inflation, interest rates and exchange rates on mining company share prices, 2019-2021]. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 4(6), 1753-1764. <https://doi.org/10.47467/elmal.v4i6.3305>
- Zahriyah, A., & Lutfiyanto, A. M. (2023). Analysis of the influence of inflation fluctuations, BI rate, money supply, and exchange rate on the Composite Stock Price Index of the Indonesian Stock Exchange in the period 2014-2019. *Proceeding International Conference on Economics, Business and Information Technology (ICEBIT)*, 4, 283-289. <https://doi.org/10.31967/prmandala.v4i0.759>

APPENDICES**Appendix A****Chow Test Results**

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.339277	(21,105)	0.0000
Cross-section Chi-square	67.523100	21	0.0000

Cross-section fixed effects test equation:

Dependent Variable: Y

Method: Panel Least Squares

Date: 06/18/24 Time: 08:02

Sample: 2017 2022

Periods included: 6

Cross-sections included: 22

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26218.77	10669.25	2.457415	0.0154
X1	274.2118	51.02361	5.374214	0.0000
X2	18.02518	1.727593	10.43370	0.0000
X3	2.882738	3.693143	0.780565	0.4365
X4	905.5347	433.3617	2.089559	0.0387
X5	-2.168185	0.799936	-2.710447	0.0077

R-squared	0.625051	Mean dependent var	4135.250
Adjusted R-squared	0.610172	S.D. dependent var	7489.508
S.E. of regression	4676.162	Akaike info criterion	19.78273
Sum squared resid	2.76E+09	Schwarz criterion	19.91377
Log likelihood	-1299.660	Hannan-Quinn criter.	19.83598
F-statistic	42.00920	Durbin-Watson stat	0.927056
Prob(F-statistic)	0.000000		

Source: EViews output. Authors' estimation.

Appendix B**Hausman Test Results**

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	5	1.0000

* Cross-section test variance is invalid. Hausman statistic set to zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
X1	-96.050710	174.907902	3805.058605	0.0000
X2	22.422277	18.945199	3.954811	0.0804
X3	3.382281	3.089660	0.951060	0.7641
X4	727.924051	854.767311	1013.677334	0.0001
X5	-2.050452	-2.127731	0.002549	0.1258

Cross-section random effects test equation:

Dependent Variable: Y

Method: Panel Least Squares

Date: 06/18/24 Time: 08:07

Sample: 2017 2022

Periods included: 6

Cross-sections included: 22

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27439.28	9064.300	3.027181	0.0031
X1	-96.05071	83.98191	-1.143707	0.2553
X2	22.42228	2.759549	8.125342	0.0000
X3	3.382281	3.433451	0.985097	0.3268
X4	727.9241	369.5464	1.969777	0.0515
X5	-2.050452	0.681296	-3.009633	0.0033

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.775191	Mean dependent var	4135.250
Adjusted R-squared	0.719524	S.D. dependent var	7489.508
S.E. of regression	3966.441	Akaike info criterion	19.58938
Sum squared resid	1.65E+09	Schwarz criterion	20.17904
Log likelihood	-1265.899	Hannan-Quinn criter.	19.82899
F-statistic	13.92552	Durbin-Watson stat	1.130180
Prob(F-statistic)	0.000000		

Source: EViews output. Authors' estimation.

Appendix C

Lagrange Multiplier Test Results

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

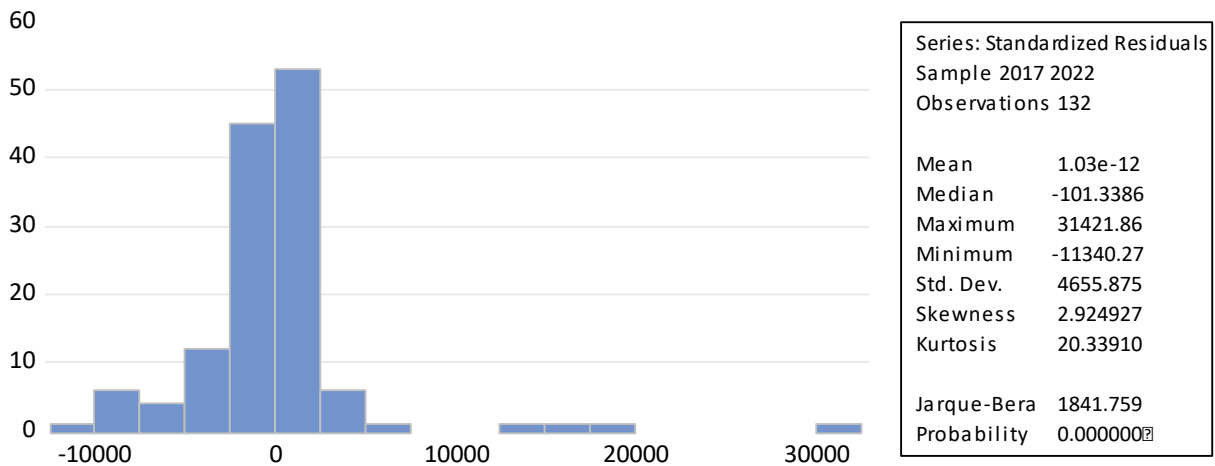
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	6.904001 (0.0086)	0.065114 (0.7986)	6.969115 (0.0083)
Honda	2.627547 (0.0043)	-0.255175 (0.6007)	1.677520 (0.0467)
King-Wu	2.627547 (0.0043)	-0.255175 (0.6007)	0.922925 (0.1780)

Standardized Honda	2.997580 (0.0014)	0.821321 (0.2057)	-1.620799 (0.9475)
Standardized King-Wu	2.997580 (0.0014)	0.821321 (0.2057)	-1.808406 (0.9647)
Gourieroux, et al.	--	--	6.904001 (0.0122)

Source: EViews output. Authors' estimation.

Appendix D

Normality Test Results



Source: EViews output. Authors' estimation.

Appendix E

Multicollinearity Test Results

	X1	X2	X3	X4	X5
			-	-	-
		0.37065265607	0.08713603436	0.05446613744	0.00733731957
X1	1	22977	003804	375886	4114665
			-	-	-
	0.37065265607		0.06789904881	0.00092239551	0.04544683379
X2	22977	1	900862	12952445	335081
			-	-	-
	0.08713603436	0.06789904881		0.02494834597	0.05539408528
X3	003804	900862	1	563872	99879
			-	-	-
	0.05446613744	0.00092239551	0.02494834597		0.67380561741
X4	375886	12952445	563872	1	17352
			-	-	-
	0.00733731957	0.04544683379	0.05539408528	0.67380561741	
X5	4114665	335081	99879	17352	1

Source: EViews output. Authors' estimation.

Appendix F

Random Effect Model

Dependent Variable: Y
 Method: Panel EGLS (Cross-section random effects)
 Date: 06/18/24 Time: 07:57
 Sample: 2017 2022
 Periods included: 6
 Cross-sections included: 22
 Total panel (balanced) observations: 132
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26482.83	9063.618	2.921883	0.0041
X1	174.9079	56.99037	3.069078	0.0026
X2	18.94520	1.913190	9.902411	0.0000
X3	3.089660	3.292040	0.938524	0.3498
X4	854.7673	368.1723	2.321650	0.0219
X5	-2.127731	0.679423	-3.131672	0.0022

Effects Specification		S.D.	Rho
Cross-section random		1897.956	0.1863
Idiosyncratic random		3966.441	0.8137

Weighted Statistics			
R-squared	0.529570	Mean dependent var	2683.986
Adjusted R-squared	0.510902	S.D. dependent var	6039.940
S.E. of regression	4224.066	Sum squared resid	2.25E+09
F-statistic	28.36796	Durbin-Watson stat	0.995121
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.613548	Mean dependent var	4135.250
Sum squared resid	2.84E+09	Durbin-Watson stat	0.787833

Source: EViews output. Authors' estimation.



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