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# THE EFFECT OF RETURN ON ASSETS (ROA) AND RETURN ON EQUITY (ROE) ON STOCK PRICES IN FAST MOVING CONSUMER GOODS (FMCG) COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN THE 2020-2024 PERIOD

Vina Deviany[1)]; Asep Saeful Falah[2)]; Lati Sari Dewi[3)]
[1), 2), 3)]Management Study Program, Latifah Mubarokiyah College of Economics, Indonesia
Coresponding author: [1)]vinadeviany12@gmail.com [2)]kangazef@gmail.com [3)]latisaridewi02@gmail.com

**Abstract**

*This research seeks to examine influence of internal company factors including Return On Assets and Return On Equity on Stock Prices in Fast Moving Consumer Goods Companies listed on the Indonesia Stock Exchange for the period 2020-2024. Descriptive quantitative analysis is applied in this study to interpret the data. Information data is used from the Indonesia Stock Exchange (IDX) website transparently. The study uses panel data with a purposive sampling method involving 5 FMCG companies. Data analysis was carried out using panel data regression with the Fixed Effects Model (FEM) approach, with the help of EViews 12 software as an analysis tool. The results of the analysis show that partially, ROA has a significant effect on stock prices with a significance value of 0.0005 <0.05. ROE also shows a significant effect on stock prices with a significance value of 0.0288 <0.05. Simultaneously, ROA and ROE have a significant effect on stock prices with a significance value of 0.000001 <0.05. This is reinforced by the Adjusted R-Squared value of 82.32%. This research highlights the critical role of managing assets and capital effectively to enhance a company's financial outcomes. The results offer actionable guidance for corporate managers, investors, and other stakeholders in formulating strategic plans regarding internal resource distribution to boost the company's market value.*

Keywords: *return on assets, return on equity, stock price*

## INTRODUCTION

The current global economic conditions are marked by the strengthening of the US dollar and rising interest rates, which have impacted investment flows into developing countries. On the other hand, China continues to experience economic slowdown due to domestic dynamics and global trade challenges. Ongoing geopolitical tensions are expected to continue casting a shadow over the global economy in 2025, threatening the stability of global supply chains.

Domestically, the performance of the State Budget (APBN) shows a positive trend. Inflation is under control, supported by declining food prices. Although there has been a slowdown in industrial activity, consumer optimism remains strong. Overall, national economic performance remains on target. However, Indonesia must remain vigilant against fluctuations in global financial markets that could affect exchange rates, inflation, and investment (Ministry of Finance, 2024).

Capital markets are essential in promoting economic development, particularly in developing nations. A strong stock market can attract investors, and the success of public companies has a broad impact, creating jobs and boosting the national economy. The capital market serves as a bridge between companies in need of funding and investors, enabling businesses to obtain financing for expansion.

In today's highly competitive environment, companies must continuously improve their financial performance to maintain their existence. Companies with high profits are more attractive to investors. Stock investment has become a popular choice for the public seeking long-term gains. According to Indonesian Law No. 8 of 1995, the capital market includes public offerings, securities trading, public companies, as well as related institutions and professions. The Indonesia Stock Exchange (IDX) provides a securities trading system and market data for public access.

One of the leading sectors on the IDX is Fast Moving Consumer Goods (FMCG), which includes daily necessities such as food, beverages, soap, and cosmetics. FMCG products have a high turnover rate and

affordable prices, making them more resilient to economic shocks compared to sectors like property. This makes FMCG companies attractive to investors seeking stability and long-term growth.

The role of the FMCG industry in supporting economic development is evident through its impact on the increase in non-oil and gas Gross Domestic Product.

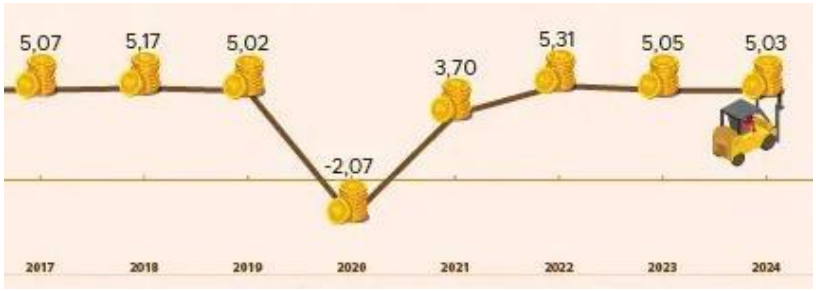


**Figure 1** Growth of Non-Oil and Gas Gross Domestic Product (GDP) in Indonesia from 2017-2024 (percent)

According to Statistics Indonesia (BPS), GDP declined in 2020 due to the pandemic but rebounded in 2021–2024, thanks to the National Economic Recovery (PEN) program. This demonstrates the significant potential of the FMCG industry in supporting economic recovery.

The Indonesia Stock Exchange (IDX) serves as a platform for FMCG companies to access capital, with the ten largest companies by market capitalization showing high liquidity and investor confidence. The stock prices of these companies fluctuated throughout 2020–2024, reflecting the balance between consumer demand and market conditions.

Variations in FMCG stock prices are driven by both internal and external elements, such as the COVID-19 pandemic, which shifted consumer behavior and weakened purchasing power. This study selected five companies due to the stable performance of their stock prices, which consistently stayed above IDR 3,000 from 2020 to 2024. This threshold was used as an indicator of strong liquidity and investor confidence. According to Fahmi (2020), "High-priced stocks in Indonesia are generally categorized into three tiers: medium (above IDR 3,000), upper (above IDR 5,000), and premium blue-chip (above IDR 10,000)." Therefore, setting the threshold at IDR 3,000 allows the researcher to include high-quality companies while maintaining a diverse sample. This approach enables a comprehensive yet focused analysis of leading FMCG companies in the Indonesian market. The five companies selected for this study are PT Gudang Garam Tbk., PT Indofood CBP Sukses Makmur Tbk., PT Siantar Top Tbk., PT Indofood Sukses Makmur Tbk., and PT Unilever Indonesia Tbk. Although UNVR's stock price declined in 2024, it is still included due to its stability in previous years.

Investors consider a company's financial health, including assets, equity, and net income. The stability of stock prices and high demand for essential goods make the FMCG sector attractive for analysis. The financial data of the five companies show varying trends, with some experiencing growth in assets and equity, while net income fluctuated. By examining this financial performance, this study assesses the extent to which total assets, total equity, and net income influence the stock prices of FMCG companies, aiming to provide deeper insights for investors in making investment decisions.

Investors generally conduct thorough analysis before investing in stocks, as stocks represent ownership in a company and offer variable income such as dividends and capital gains. In order to reduce potential losses and increase profits, investors commonly use a company's financial statements as a reference for evaluating performance. A widely adopted approach is the analysis of financial ratios, especially profitability indicators like Return on Assets (ROA) and Return on Equity (ROE), which are seen as key tools for assessing how efficiently a company uses its assets and manages its equity. When ROA and ROE are high, it reflects the company's ability to generate maximum profit, thereby enhancing its appeal to investors.

The objective of this research is to examine influence of ROA and ROE on stock prices of Companies in the FMCG sector listed on the IDX throughout the 2020 to 2024 period. During this period, the economy experienced significant fluctuations due to the COVID-19 crisis, the subsequent recovery process, and

consumer responses to boycott movements. The FMCG sector is particularly interesting to study due to its unstable stock price movements and the limited number of studies specifically examining the relationship between ROA and ROE and stock prices in this sector. The findings of this research are expected to support investment decision-making for investors and help companies formulate financial strategies that are adaptive to market dynamics.

## RESEARCH METHODS

This study applies a quantitative approach within a descriptive research framework, using secondary data from the financial records of FMCG companies registered on the Indonesia Stock Exchange for the years 2020–2024. The sample consists of five FMCG companies selected through purposive sampling based on specific criteria: listed on the IDX during 2020–2024, consistently publishing financial reports and stock prices, having high market capitalization, and maintaining stock prices above IDR 3,000. Data collection methods include documentation studies, literature review, and company website observations. This study's analysis covers descriptive statistical methods, various panel data regression models (Common, Fixed, and Random Effects), model selection with Chow and Hausman tests, classical assumption testing (multicollinearity and heteroskedasticity), and a panel regression to determine the influence of ROA and ROE on stock prices, concluding with t-test, F-test, and R-squared ($R^2$) analysis.

## RESULTS AND DISCUSSION

### Panel Data Regression Model

**Table 1 Fixed Effect Model**

Dependent Variable: Y
Method: Panel Least Squares
Date: 05/15/25 Time: 12:06
Sample: 2020 2024
Periods included: 5
Cross-sections included: 5
Total panel (balanced) observations: 25

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -19174.99 | 7554.475 | -2.538230 | 0.0206 |
| X1 | 1192.825 | 280.8060 | 4.247860 | 0.0005 |
| X2 | 389.0349 | 163.6936 | 2.376605 | 0.0288 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.867434 | Mean dependent var | 11017.20 |
| Adjusted R-squared | 0.823246 | S.D. dependent var | 8642.937 |
| S.E. of regression | 3633.679 | Akaike info criterion | 19.46537 |
| Sum squared resid | 2.38E+08 | Schwarz criterion | 19.80666 |
| Log likelihood | -236.3172 | Hannan-Quinn criter. | 19.56003 |
| F-statistic | 19.63027 | Durbin-Watson stat | 1.201234 |
| Prob(F-statistic) | 0.000001 | | |

Source: *Eviews 12 Output*

Based on the table above, it can be seen that the Prob. t value of the Return On Assets (X1) and Return On Equity (X2) variables are 0.0005 and 0.0288, while the Prob. f value is 0.000001 and the adjusted r square value is 0.823246.

In this study, the selected model is the Fixed Effect Model (FEM). This decision is based on the results of the Hausman test, which indicate that the unobserved variables are correlated with the independent variables. Therefore, FEM is chosen as it provides unbiased estimates and is suitable for data characteristics that exhibit heterogeneity across individuals (Baltagi & Badi H., 2021).

### Panel Data Regression Model Selection

**1). Chow Test**

**Table 2 Chow Test**

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

| Effects Test | Statistic | d.f. | Prob. |
|---|---|---|---|
| Cross-section F | 23.604238 | (4,18) | 0.0000 |
| Cross-section Chi-square | 45.796075 | 4 | 0.0000 |

Source: *Eviews 12 Output*

According to the table above, the Chow test results indicate that both the cross-section F and chi-square probability values are 0.0000, which is less than α = 0.05. This implies that the fixed effect model is the appropriate choice. Therefore, the next step is to perform the Hausman test.

**2). Hausman Test**

**Table 3 Hausman Test**

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 | 13.008458 | 2 | 0.0015 |

Source: *Eviews 12 Output*

The Hausman test results presented in the table indicate that the random cross-section probability is 0.0015, which is below the significance level of 0.05. This confirms that the appropriate model is the fixed effect model. As such, the testing process is concluded at this point, and there is no need to proceed to the Lagrange Multiplier (LM) Test, since the Fixed Effect Model (FEM) has been definitively selected.

**Classical Assumption Test**

The classical assumption tests that are commonly applied include normality, multicollinearity, heteroscedasticity, and autocorrelation tests. According to the results of the Chow and Hausman tests, the most suitable model for this research is the Fixed Effect Model (FEM). Given that FEM is estimated using the Ordinary Least Squares (OLS) method, classical assumption testing is necessary. However, for panel data regression with OLS, only the multicollinearity and heteroscedasticity tests are required. (Napitupulu et al., 2021).

**1). Multicollinearity Test**

**Table 4 Multicollinearity Test**

| | X1 | X2 |
|---|---|---|
| X1 | 1.000000 | 0.876166 |
| X2 | 0.876166 | 1.000000 |

Source: *Eviews 12 Output*

Based on the table above, the result of the multicollinearity test is 0.87, which is less than 0.90. This indicates that multicollinearity does not occur in the estimation model.

**2). Heteroscedasticity Test**

**Table 5 Heteroscedasticity Test**

Dependent Variable: ABS_RES
Method: Panel Least Squares
Date: 05/15/25 Time: 12:35
Sample: 2020 2024
Periods included: 5
Cross-sections included: 5
Total panel (balanced) observations: 25

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1139.769 | 1553.126 | 0.733854 | 0.4725 |
| X1 | 46.83608 | 57.73099 | 0.811281 | 0.4278 |
| X2 | -18.63427 | 33.65380 | -0.553705 | 0.5866 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.244080 | Mean dependent var | 1008.833 |
| Adjusted R-squared | -0.007894 | S.D. dependent var | 744.1179 |
| S.E. of regression | 747.0490 | Akaike info criterion | 16.30163 |
| Sum squared resid | 10045479 | Schwarz criterion | 16.64292 |
| Log likelihood | -196.7704 | Hannan-Quinn criter. | 16.39629 |
| F-statistic | 0.968673 | Durbin-Watson stat | 2.011604 |
| Prob(F-statistic) | 0.473678 | | |

Source: *Eviews 12 Output*

Referring to the table above, the heteroscedasticity test indicates that the probability values for ROA (X1) and ROE (X2) are 0.4278 and 0.5866, respectively. Since these values are greater than the significance level of 0.05, it can be concluded that the estimation model is free from heteroscedasticity.

**Panel Data Regression Analysis**

The regression equation used to estimate stock prices based on two main factors; Return on Assets and Return on Equity is as follows:

$$\mathbf{Y = -19174.9913632 + 1192.82477807*X1 + 389.03491666*X2}$$

This equation represents the regression model used to predict stock prices. The explanation is as follows:

a) The value -19174.99 is the constant in the model. This constant indicates the stock price when both ROA and ROE are equal to zero. Although having ROA and ROE at zero is rare and logically the stock price cannot be negative, this result is a mathematical output of the model and does not always reflect real-world conditions. Therefore, the constant serves merely as a starting point in the regression model.
b) The regression coefficient for ROA is positive at +1192.82, meaning that for every 1-point increase in ROA, the stock price increases by 1192.82. This suggests that ROA has a positive influence on stock price. An increase in ROA generally leads to an increase in stock price.
c) The regression coefficient for ROE is positive at +389.03, meaning that for every 1-point increase in ROE, the stock price increases by 389.03. This indicates that ROE also has a positive effect on stock price. Stock prices tend to increase as the ROE becomes higher.

**Hypothesis Test**

**1) t-Test (Partial Test)**

**Table 6 Partial Test Results**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -19174.99 | 7554.475 | -2.538230 | 0.0206 |
| X1 | 1192.825 | 280.8060 | 4.247860 | 0.0005 |
| X2 | 389.0349 | 163.6936 | 2.376605 | 0.0288 |

Source: *Eviews 12 Output*

The individual effect of each independent variable on the dependent variable is explained as follows:

a) The ROA variable has a significant p-value of 0.0005, which is below the 0.05 threshold (0.0005 < 0.05). This suggests that Return on Assets (ROA) significantly influences the stock prices of FMCG companies listed on the Indonesia Stock Exchange from 2020 to 2024.

b) The ROE variable also has a significant p-value of 0.0288, which is less than 0.05 (0.0288 < 0.05). This confirms that Return on Equity (ROE) has a significant partial impact on the stock prices of FMCG companies listed on the Indonesia Stock Exchange in the same period

**2) F-Test (Simultaneous Test)**

**Table 7 Simultaneous Test Results**

| Cross-section fixed (dummy variables) | | | |
|---|---|---|---|
| R-squared | 0.867434 | Mean dependent var | 11017.20 |
| Adjusted R-squared | 0.823246 | S.D. dependent var | 8642.937 |
| S.E. of regression | 3633.679 | Akaike info criterion | 19.46537 |
| Sum squared resid | 2.38E+08 | Schwarz criterion | 19.80666 |
| Log likelihood | -236.3172 | Hannan-Quinn criter. | 19.56003 |
| F-statistic | 19.63027 | Durbin-Watson stat | 1.201234 |
| Prob(F-statistic) | 0.000001 | | |

Source: *Eviews 12 Output*

In a simultaneous analysis evaluating the influence of ROA and ROE on stock prices, the resulting p-value is 0.000001, which is lower than the significance threshold of 0.05 (0.000001 < 0.05). This suggests that both Return on Assets and Return on Equity significantly impact the stock prices of FMCG companies listed on the Indonesia Stock Exchange throughout the 2020–2024 period, both individually and collectively.

The Adjusted R-Squared ($R^2$) value of 0.8232, or 82.32%, indicates that the independent variables (ROA and ROE) explain approximately 82.32% of the variation in stock prices. The remaining 17.68% is attributed to other factors not examined in this study, such as Net Profit Margin (NPM) and Earnings Per Share (EPS).

This result aligns with the findings of Risanti & Murwanti (2022), whose study produced an Adjusted R-Squared value of 0.9590. This means that 95.9% of the variation in stock prices could be explained by the joint effect of ROA, ROE, NPM, and EPS—demonstrating a very high level of explanatory power, close to a perfect prediction of 100%.

**Conclucion**

The analysis results reveal that Return on Assets (ROA) has a significant partial effect on stock prices, with a p-value of 0.0005, which is below the 0.05 threshold. Similarly, Return on Equity (ROE) also has a significant impact, indicated by a p-value of 0.0288. When considered together, ROA and ROE have a statistically significant influence on stock prices, with a joint significance value of 0.000001. This finding is further supported by an Adjusted R-Squared value of 82.32%, demonstrating strong explanatory power. The study highlights the critical role of effective and optimal management of assets and capital in enhancing corporate financial performance.

**REFERENCES**

Badan Pusat Statistik. (2025). *Badan Pusat Statistik*. https://www.bps.go.id/id/infographic

Baltagi, & Badi H. (2021). *Econometric Analysis of Panel Data, 6th Edition. Springer*

Fahmi. (2020). *Pengantar Pasar Modal.* Alfabeta.

Kementrian Keuangan. (2024). *Rapor Keuangan Negara Indonesia edisi November 2024*.

Napitupulu, R. B., Simanjuntak, T. P., Hutabarat, L., Damanik, H., Harianja, H., Sirait, R. T. M., Tobing, L., & Ria, C. E. (2021). *Penelitian Bisnis, Teknik dan Analisa dengan SPSS - STATA - Eviews. 1 ed.* Madenatera.

Undang-Undang Republik Indonesia Nomor 8 Tahun 1995 Tentang Pasar Modal, Pub. L. No. 8 (1995). https://www.ojk.go.id/id/kanal/pasar-modal/regulasi/undang-undang/Documents/Pages/undang-undang-nomor-8-tahun-1995-tentang-pasar-modal/UU Nomor 8 Tahun 1995 (official).pdf

Risanti, K. A., & Murwanti, S. (2022). *The Effect Of Return On Asset (ROA), Return On Equity (ROE), Net Profit Margin (NPM), And Earnings Per Share (EPS) On Stock Price (Case Study In The Industry Company Sector Of Consumer Goods Listed On The Indonesia Stock Exchange Period 2018-2020). Jurnal Pendidikan Tambusai*, *6*(2).