

THE INFLUENCE OF RETURN ON ASSETS, RETURN ON EQUITY, AND EARNINGS PER SHARE ON STOCK PRICES IN TECHNOLOGY SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (IDX)

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Abstract: Stock price is one of the important indicators of a company's success. The purpose of this study is to determine the influence of Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS) on stock prices. The data analysis method used in this study is quantitative analysis, which involves analyzing numerical data and using statistical calculations to test hypotheses. The quantitative data analysis methods applied in this research include descriptive statistics tests, classical assumption tests, and multiple linear regression analysis. Out of a population of 22 companies, a sample of 15 companies was selected for this study, covering the period from 2021 to 2023. The data analysis results indicate that Return on Assets (ROA) does not have a significant effect on stock prices, as indicated by $t\text{-value} < t\text{-table}$ ($0.824 < 2.018$) with a significance of $0.415 > 0.05$. Similarly, the analysis shows that Return on Equity (ROE) also does not significantly influence stock prices, with a $t\text{-value} < t\text{-table}$ ($-0.919 < 2.018$) and a significance of $0.364 > 0.05$. It can be concluded that neither ROA nor ROE significantly impacts stock prices. However, Earnings Per Share (EPS) does have a significant influence on stock prices, with a significance of 0.020. Future researchers are encouraged to conduct studies using different variables, such as ROA, ROE, and EPS, and to expand the sample size to achieve more in-depth research.

Keywords: Return On Assets , Return on Equity, Earning per share

1. Introduction

Signaling theory is a concept in which the provider of information can choose how to interpret and convey the information received. A good company can differentiate itself from a bad one by sending credible signals about its quality to the capital market (Spence, 1973). Signaling theory involves information signals that need to be considered by investors, determining whether they will invest in a particular company. This theory is used because a company's stock price constantly fluctuates, which can act as a signal from management to investors. Signaling aims to reduce information asymmetry for both the company and external parties (investors). Moreover, relevant, accurate, and timely information is highly needed by investors for analysis in making investment decisions. One type of information used as a signal by management to external parties is the company's annual financial statements (Hendrayanti, Fauziyanti & Estuti, 2020).

This signaling theory provides a picture of the overall quality of a company when compared to others. A company that generates profit signals that its issuer is less likely to face bankruptcy compared to issuers with lower profits (Sari & Paramita, 2021). The theory indicates that a good-quality company will indirectly signal the market, enabling it to distinguish between good and bad companies. Stock prices hold significant value and are one

of the key indicators of a company's success (Suharti & Nurhayati, 2020). When a company's stock price is high, it means the company has successfully managed its operations, which attracts the attention of investors and increases the company's capital. Conversely, a low stock price indicates poor company performance, and market confidence is not only based on current performance but also on future prospects (Chaeriyah, Supramono & Aminda, 2020). In determining share prices, various influencing factors are required. There are several factors that influence stock prices, namely internal and external. Factors internal, namely company performance, risk level, financial ratios in the form of *return on investment equity* (ROE), *return on assets* (ROA), the amount of dividends that divided or *earnings per share* (earnings per share) and others. External factors are inflation, exchange rate fluctuations, domestic political turmoil and others (Elviani, Simbolon, & Dewi, 2019). The large number of companies *going public* encourages investors to be careful before making decisions in making investments. Making the right investment decisions good financial analysis is needed, not only looking at the net profit generated companies but investors also need financial report analysis as a consideration in determining investment (Ani, Trianasari, & Cipta, 2019).

Investment is the investment of capital in one or more assets owned and usually for a long period of time with the hope of making a profit in the future (Sunariyah, 2011). Investing in shares has a higher level of risk compared to other investments, in making decisions to make an investment. It is necessary to pay attention to two things, namely risk *and* return *in* investment. In securities that have the same risk, investors tend to choose profit high. The amount of return *depends* on the investor's ability to handle risk. The higher the level of risk taken, the higher the level of return (*high risk high return*). Before investing their capital, investors must assess the company's financial performance, one of which is one of them is by analyzing the company's financial ratios. Financial ratios are analysis tools to explain certain relationships between one element and another. others in a financial report. *Return On Assets* (ROA) has a very important meaning as an analysis technique comprehensive financial ratio. According to Tandeilin (2010: 372) ROA is a ratio that illustrates the extent to which the company's assets can generate profits. Thus, this ratio relates the net profit obtained from company operations with the total amount of assets owned. The higher the value this ratio then affects the interest of investors to carry out stock buying and selling transactions, so that it will increase the sales volume of the Company's shares. In other words The level of *Return On Assets* (ROA) will affect the volume of sales of the Company's shares (Tri Putri, 2021).

According to (Tandelilin, 2001: 240) describes the extent to which the company's ability to generate profits that can be obtained by shareholders. If the *Return On Equity* value (ROE) high means the company is successful in generating profits from its capital itself. The growth of *Return On Equity* (ROE) shows the company's prospects getting better because of the potential for increased profits obtained by the company, so that it will increase investor confidence and will make management easier companies to attract capital in the form of shares. By increasing *Return On Equity* (ROE), this will increase the value of the company's stock price (Zakaria, 2021).

Shareholders or investors must have a certain amount of information relating to stock price movements in order to make decisions about which company shares are worth buying. to be selected in capital investment. The information in question is issued by the issuer in the form of a prospectus containing important data documents regarding accounting information. company.

Earning Per Share (EPS) is always a concern in financial reports, Investors are interested in *Earning Per Share* (EPS) because it shows the profit for each share. share sheet. *Earning Per Share* is one of the ratio analyses that is at the angle from the perspective of investors or company owners because it shows how much profit is made. generated by the company per share (Tandelilin, 2007: 241). Financial ratios that are often used by investors to analyze a company's ability to generate profits Profit based on the shares owned is profit per share or *Earning Per Share* (EPS). According to (Eduardus Tandelilin, Hartono, & Hanafi, 2013) *Earning Per Share* (EPS) is the amount of net profit of the company that is ready to be distributed to all shareholders. company shares. According to the explanation above, it can be concluded that *Earning Per Share* (EPS) or earnings per share is the profit given to shareholders for each share owned.

Several share prices of companies in the *technology* sub-sector experienced increases and decreases. stock prices every year. If stock prices continue to decline, This will have an impact on the company, namely the company will experience a decline. will result in a decrease in shareholder prosperity. Increase in share prices Shares are a sign of capital participation in a company that is widely used in the capital market. Shares traded in the capital market can be obtained through purchase or other means that then provide the right to dividends according to with the size of the capital investment in a particular company. Companies that have The highest share price value is the DCII company in 2022 at 35,800 and the company with the lowest share price is the Techno9 Indonesia Tbk company in 2023 amounting to 29.

2. Literature Review

For investors, one of the important indicators to assess the company's future growth prospects is to look at the extent of the company's profitability growth. One commonly used measure of profitability is Return On Assets. According to (Hanafi 2012), Return On Assets is a ratio that measures a company's ability to generate net profit based on a certain level of assets. This ratio illustrates the company's ability to generate profits from the assets used. The size of the return on assets calculation shows how well the company can generate profits available to shareholders with all the assets it owns. Based on previous research by (Anggraini 2020), it was concluded that Return On Assets (ROA) has a significant effect on stock prices. This shows that when net profit increases and is higher than the amount of assets, the Return On Assets will increase, which will affect stock prices. The higher the Return On Assets, the higher the stock price will be. This research result is in line with the research conducted by (Sholiqin, 2023), which concluded that ROA positively influences stock prices . But previous research by (Sari, 2024) return on assets (ROA) has no effect on stock prices

Return On Equity is a ratio often used by investors. This ratio measures the ability of equity capital to generate profits for shareholders (investors). The larger the Return On Equity, the better. According to (Hery 2015), Return On Equity is a ratio that measures a company's ability to generate net profit for shareholders based on a certain amount of capital. Based on previous research by (Ani et al. 2019) and (Masrivah, 2024), it was concluded that Return On Equity (ROE) in their study had a positive and significant effect on stock prices. This indicates that the higher the ROE, the better the position of the company's owners and the higher the ability of the equity capital to generate profits for shareholders, thereby increasing stock prices. A good Return On Equity will lead to a company's success, which results in high stock prices. This research result is in line with the study conducted by (Anggraini

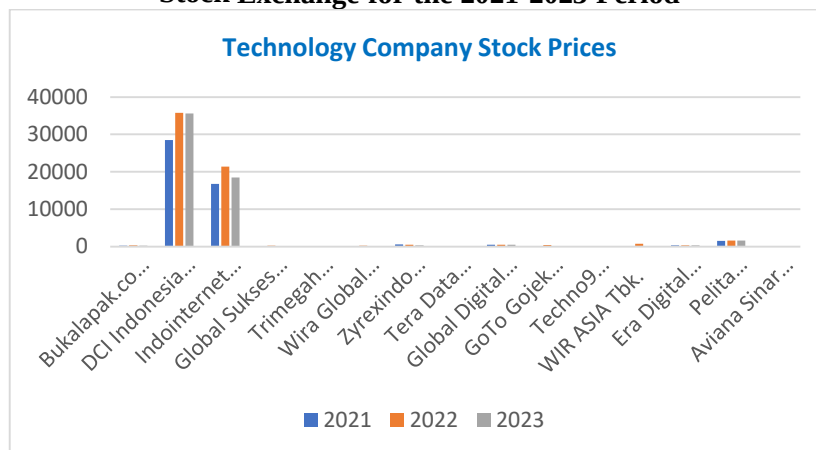
2020), which concluded that Return On Equity (ROE) influences stock prices. Additionally, other research states that Return On Equity (ROE) affects stock prices (Sujatmiko 2019).

Earnings Per Share can be considered an important component in company analysis because the Earnings Per Share information of a company shows the amount of net profit ready to be distributed to each shareholder. Earnings Per Share usually attract general investors' attention, as it indicates how much money is generated per share. If the EPS value rises, the stock price will increase. When someone decides to buy shares, they are essentially buying a portion of the ownership of the company they are investing in (Hartono 2015). Based on previous research by (Sujatmiko 2019), it was concluded that Earnings Per Share (EPS) significantly affects stock prices. When the EPS value is high, the dividends paid to shareholders will also be high, and this will impact stock prices. The higher the EPS, the higher the demand for shares, leading to an increase in the company's stock price. This research result is in line with the study by (Dewi 2022), which stated that EPS positively influences stock prices. Additionally, other research also shows that EPS affects stock prices (Yuliana 2020).

Tables and Figures

In this study, the object that the author uses as the object of research is *technology* sector companies listed on the Indonesia Stock Exchange (BEI). The author's reasons choosing *technology* sector companies listed on the IDX as research objects because *Technology* sector companies are one of the sectors that are expected to have good prospects. the future is bright and is one of the sectors that has a role which is quite large in contributing to technology. The following table shows stock price data obtained from *technology* sector companies listed on the Indonesia Stock Exchange (IDX).

Diagram 1. Stock Price Data of Technology Sector Companies Listed on the Indonesia Stock Exchange for the 2021-2023 Period



Source : <https://www.idx.co.id> data processed 2024

Based on the table above, there are several share prices of companies in the *technology* sub-sector. experiencing increases and decreases in stock prices every year. If the stock price experiencing a continuous decline, this will have an impact on the company, namely the company will experience a decline which will result in a decrease in prosperity from shareholders. An increase in share prices is a sign of capital investment in a company that is widely used in the capital market. Shares traded in the capital market can be obtained through purchase or other means. then grants the right to dividends according to the size of the capital investment in a particular company. The company that has the highest share

price value is the company DCII in 2022 is 35,800 and the company with the lowest stock price namely the company Techno9 Indonesia Tbk in 2023 amounting to 29.

3. Method

This research is included in the category of quantitative research, namely research that will be based on quantitative data, namely data in the form of numbers and figures (Sunadar, 2017). In accordance with the data needed is secondary data. By collecting data in the form of financial reports of *technology* sector companies listed on the Indonesia Stock Exchange in 2021 - 2023. The data source in this study can be obtained from the Indonesia Stock Exchange website.

The sample used in this study was determined by using purposive sampling or sampling carried out based on certain criteria. From a population of 22 companies, a sample of data used in this study was obtained, namely 15 companies from 2021 to 2023. The data analysis method used in this study is the quantitative analysis method. Quantitative analysis is the analysis of data in the form of numbers and uses statistical calculations in analyzing hypotheses. The quantitative data analysis used in this study is a descriptive statistical test, a classical assumption test and multiple linear regression analysis using the *Statistical Product and Service Solution* (SPSS) application.

4. Result and Discussion

The normality test in this study used *the Kolmogorov Smirnov test with results* shows that the *Kolmogorov-Smirnov Statistical Test* value is 0.126 and the significant value or Asymp. Sig. (2-tailed) of 0.073 is greater than 0.05, so H_0 is accepted, which means in this case the residual data is normally distributed. So it can be concluded that the regression model in this study meets the assumption of normality or has been normally distributed and is worthy of being studied.

An indication of multicollinearity is if the *Tolerance* value for *the Return On Assets* (ROA) variable is 0.161, *the Return On Equity* (ROE) variable is 0.161 and the *Return On Assets* (ROA) variable is 0.161. *Earning Per Share* (EPS) is 0.796. Likewise, the *Variance Inflation Factor* value (VIF) in the *Return On Assets* (ROA) variable is 6.225, the *Return On Equity* variable (ROE) of 6.195 and the *Earning Per Share* (EPS) variable of 1.256. From each variable, the *Tolerance* value is more than 0.1 and the VIF value is less than 10, then it can be concluded that there is no multicollinearity and the data distribution is normal. From the results of the SPSS output test, it shows the *Durbin Watson* (DW) value of 1.344. where in this study there was no autocorrelation because the *Durbin Watson* (DW) value was between -2 and +2 or $-2 < DW < +2$.

The results of the heteroscedasticity test data processing show that the significance value of each variable is greater than 0.05. So it can be concluded that the regression model in this study does not experience heteroscedasticity.

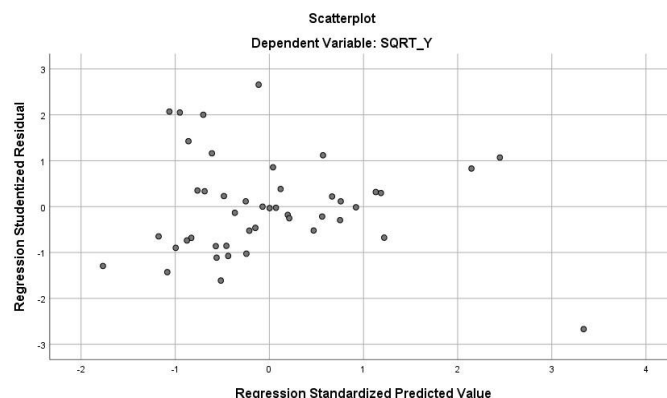


Figure 1. Heteroscedasticity Test Results

Data source: SPSS data processed 2024

Table 1. Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.164	1.924		4.764	.000
	ROA	.967	1.174	.295	.824	.415
	ROE	-.710	.773	-.328	-.919	.364
	EPS	1.158	.480	.388	2.413	.020

Source: Processed secondary data, 2024

From the multiple linear regression equation above, it can be analyzed as follows:

- The constant of 9.164 shows that if the value of the independent variable is considered constant (equal to 0) then the share price of the subsidiary company *technology* sector listed on the Indonesia Stock Exchange amounted to 9,164.
- The value of the multiple linear regression coefficient X1 is 0.967 with a positive direction of relationship. positive indicates that if *Return On Assets* has increased by 1% then it will be followed by a 1% increase in stock prices of 0.967 assuming the other independent variables are held constant.
- The value of the multiple linear regression coefficient X2 is -0.710 with a direction of relationship negative indicates that if *Return On Equity* increases 1% will be followed by a 1% decrease in the share price of -0.710 with assuming other independent variables are held constant.
- The value of the multiple linear regression coefficient X3 is 1.158 with a positive direction of relationship. *negative* indicates that if *Earning Per Share* has increased 1% will be followed by a 1% decrease in the share price of 1,158 with assuming other independent variables are held constant.

The results of the data analysis show that *Return On Assets* on stock prices shows $t\text{-count} < t\text{-table}$ ($0.824 < 2.018$) with a significance of $0.415 > 0.05$, which means H_0 is accepted and H_a is rejected, So it can be concluded that there is no influence and no significance of *Return On Assets* on stock prices. This result shows that the company cannot take advantage of its assets optimally to generate net profit after tax, so that *Return On Assets* shows no significant effect on the company's stock price (Ardiyanto, Wahdi, & Santoso, 2020). Therefore, investors cannot use the *Return On Assets* ratio as a guideline in making investment decisions. The higher the ratio this causes an increase in net profit, with an increase in the company's net profit, it can increase shareholder rights in the form of dividends, this will cause stock prices increase, and vice versa. The ability of *Return On Asset* to predict stock prices is very possible because of the nature and pattern of *Return On Asset* which carried out by the company very precisely so that the stock price obtained is maximum. In addition income generated by capital derived from debt cannot be used for cover the large capital costs and the shortfall must be covered by some of the income derived from shareholders (Rahmawati, 2019). The results of this study are in line with the results of research conducted by (Anggi et al., 2020) stating that *Return On Assets* has no effect on stock prices. But it is different from the results previous research conducted by (Yuliana, 2020) stated that *Return On Assets* affect stock prices.

The results of the analysis show that *Return On Equity* has no effect and is not significant. on stock prices. Where $t\text{-count} < t\text{-table}$ ($-0.919 < 2.018$) and significant $0.364 > 0.05$ which means H_0 is accepted H_a is rejected. So it can be concluded that there is no influence and *Return On Equity* is not significant to stock prices. This shows that the company's ability to generate profits is measured by the use of capital owned by the company has not been allocated effectively, so this has an impact on the decline in net profit. The company is less than optimal in generating invested profits by investors so that investors will reconsider whether they want to invest in the company or not (Arif Mangantar, 2020). The results of this study are in line with the results of research conducted by (Nasution, 2019) stated that *Return On Equity* has no effect on stock prices. But it is different from the research results Previously, what was done by (Santoso, 2020) stated that *Return On Equity* has a significant impact on stock prices.

The results of the analysis show that Earning Per Share has a significant influence on stock price. Thus $t\text{-count} < t\text{-table}$ ($2.413 > 2.018$) and significant $0.020 < 0.05$ which this means that H_0 is rejected and H_a is accepted. So it can be concluded that there is a significant influence. *Earning Per Share* to stock price. This result shows that increasing *Earning Per Share* will indicate that the company's ability to generate net profit after tax increases. With the increase in net profit after tax, generated by the company, then the return that will be received by the shareholders will also increase. *Earning per share* is an important component that must be considered in company analysis, *Earning Per Share* information of a company shows the amount of net profit of the company that is ready to be distributed to all shareholders of the company. *Earning per share* is a ratio that shows how much profit which is obtained by investors or shareholders per share and is also the indicators most often taken into account by investors before making a decision investing because all the results that can be achieved by the company can provide direct impact on the amount of profit obtained according to the number of shares owned (Suwandri, 2020). The results of this study are in line with the results of the study has been conducted by (Anggi et al., 2020) which states that *Earning Per Share* has a significant effect on stock prices. This study is not in line with the

study conducted by (Ani et al., 2019) which states that *Earning Per Share* has no effect on stock prices.

5. Conclusions

Based on the data obtained and the results of the data analysis that has been carried out as well as the discussion that has been presented in the previous chapter, conclusions can be drawn regarding Return On Assets, Return On Equity and Earning Per Share in relation to price shares in technology sub-sector companies listed on the Indonesia Stock Exchange. Return On Assets and Return On Equity have no influence and are not significant on share prices in technology sub-sector companies listed on the Indonesia Stock Exchange for the period 2021-2023. Earning Per Share has a significant influence on stock prices in technology sub- sector companies listed on the Indonesia Stock Exchange for the period 2021-2023.

Based on a series of data tests obtained in this study, suggestions for companies in the technology sector to be able to utilize their assets optimally to generate net profit after tax. For companies in the technology sector in the technology sector to increase the measured by the utilization of owned capital so that it can be allocated effectively.

Furthermore, for other researchers who should conduct research on the place or type of ROA, ROE and EPS variables in future research. They should add other variables and increase the sample so that the research is more in-depth.ability to generate profits.

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References

- Ani, N. K. S., Trianasari, T., & Cipta, W. (2019). Pengaruh Roa Dan Roe Serta Eps Terhadap Harga Saham Sektor Farmasi Yang Terdaftar Di Bei. *Bisma: Jurnal Manajemen*, 5(2), 148-157.
- Ardiyanto, A., Wahdi, N., & Santoso, A. (2020). Pengaruh return on assets, return on equity, earning per share dan price to book value terhadap harga saham. *Jurnal Bisnis & Akuntansi Unsurya*, 5(1).
- Brigham, E. F., & Houston, J. F. (2015). *Fundamentals of Financial Management*, concise 8th edition. Mason, OH: South-Western, Cengage Learning.
- Brigham, E. F., & Houston, J. F. (2013). *Fundamentals of financial management*. South-Western Cengage Learning.
- Chaeriyah, I., Supramono, S., & Aminda, R. S. (2020). Pengaruh Earning Per Share (EPS) Dan Return on Investment (ROI) Terhadap Harga Saham Pada Sektor Perbankan. *Manager: Jurnal Ilmu Manajemen*, 3(3), 403-412.
- Dewi, N. S., & Suwarno, A. E. (2022). *Pengaruh ROA, ROE, EPS dan DER terhadap harga saham perusahaan (Studi empiris pada perusahaan LQ45 yang terdaftar di bursa efek Indonesia tahun 2016-2020)*. Paper presented at the Seminar Nasional Pariwisata Dan Kewirausahaan (SNPK).
- Eduardus Tandelilin, S., Hartono, J., & Hanafi, M. M. (2013). Detecting the existence of herding behavior in intraday data: Evidence from the Indonesia stock exchange. *Gadjah Mada International Journal of Business*, 15(1), 27-44.

- Elviani, S., Simbolon, R., & Dewi, S. P. (2019). Faktor-Faktor Yang Mempengaruhi Harga Saham Perusahaan Telekomunikasi. *JRAM (Jurnal Riset Akuntansi Multiparadigma)*, 6(1).
- Hendrayanti, S., Fauziyanti, W., & Estuti, E. P. (2020). Effect Npm, Roa, Roe, And Eps On Price Stock (Companies Lised In Lq45 Index). *Jurnal Capital: Kebijakan Ekonomi, Manajemen dan Akuntansi*, 2(2), 59-68.
- Masrivah, R. F. S., & Rijanto, R. (2024). Return on assets: the effect of corporate social responsibility and return on equity. *Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(04), 645-656.
- Sari, S. S., & Rijanto, R. (2024). The effect of return on asset and net profit margin on stock price. *Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(05), 829-838.
- Sholiqin, Y., & Handayani, R. (2023). Pengaruh Return On Asset, Net Profit Margin Dan Earning Price Share Terhadap Harga Saham Pada Sektor Kesehatan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2018-2022. *Nusantara Journal of Multidisciplinary Science*, 1(1), 110-120.
- Spence, D. (1973). *An eigenvalue problem for elastic contact with finite friction*. Paper presented at the Mathematical Proceedings of the Cambridge Philosophical Society.
- Suharti, T., & Nurhayati, I. (2020). Pengaruh Roa, Roe Dan Eps Terhadap Harga Saham Pada Perusahaan. *Manager: Jurnal Ilmu Manajemen*, 3(1), 59-64.
- Sunariyah, S. (2011). MSi. Pengantar Pengetahuan Pasar Modal. In: Yogyakarta: UPP STIM.
- Tri Putri, O. (2021). *Pengaruh, Eps, Roa Dan Der Terhadap Harga Saham Perusahaan Sub-Sektor Industri Textile Yang Go Public Di Bursa Efek Indonesia (Bei) Tahun 2015–2019*. 021008 Universitas Tridianti Palembang,
- Zakaria, M. (2021). Analisis Pengaruh Debt to Equity Ratio (DER), Return On Asset (ROA) dan Earning Per Share (EPS) terhadap Harga Saham melalui Kebijakan Dividen sebagai Variabel Intervening (Studi pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdaftar di Bursa Efek Indonesia 2015-2019). *Business Management Analysis Journal (BMAJ)*, 4(1), 75-96.