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ANALYSIS OF THE EFFECT OF RETURN ON ASSETS, RETURN ON EQUITY, AND NET PROFIT MARGIN ON EARNINGS PER SHARE IN COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2022

Bima Akbar Oktawiandra[1] , Roekhudin[2]

[1,2] *Accounting Department, Faculty of Economics and Business, Brawijaya University, Indonesia*

Abstract. This study aims to determine the effect of profitability ratios, namely Return on Assets, Return on Equity, and Net Profit Margin, on Earnings per Share. The method used in this study was designed quantitatively using cross-sectional data based on the 2022 Statistical Report issued by the Indonesia Stock Exchange (IDX). Sampling was conducted using the purposive sampling method, with the criteria being that companies had conducted an IPO and were listed on the Indonesia Stock Exchange, and that companies had EPS, ROA, ROE, and NPM values > 0. The analysis method used was multiple linear regression analysis, which also included classical assumption analysis. The results of the study indicate that Return on Assets and Return on Equity have a positive and significant effect on Earnings per Share. Meanwhile, Net Profit Margin has a positive but insignificant effect on Earnings per Share.

Keywords: Earnings per Share, Return on Assets, Return on Equity, Net Profit Margin.

I. INTRODUCTION

Business processes certainly require business capital. With capital, companies can carry out their operational activities to generate profits. When companies make profits, they can keep their businesses running. Causally, working capital greatly affects the sustainability of a business. Without capital, businesses will not run ideally or may even come to a halt. According to Fitranto (2022), capital in a business is a key indicator of its sustainability because it is used to produce goods or services and, furthermore, to expand the business in the future. One source of capital for a company is shares. As reported by the Indonesia Stock Exchange, shares are part of financial market instruments that indicate an individual's or a business's ownership in a company or limited liability company, which is referred to as a shareholder and has the authority to receive dividends and contribute to the General Meeting of Shareholders (GMS). When investors invest in a company, they definitely expect a return on their shares. As a result, investors will certainly be selective in purchasing shares from a company. One financial aspect that is of particular concern to investors is Earning per Share. This is in line with the statement by Siddiq et al (2020), which explains that the most common concern for investors is the return they will get from a share they purchase. According to Mantik (2019), Earnings per Share is an indicator that represents the level of return that a company gives to its investors. When Earnings per Share is high, the company has succeeded in providing a good return on

investment to its investors, and vice versa. Therefore, the Earnings per Share indicator is important both for companies in showing their good performance and for investors when buying shares.

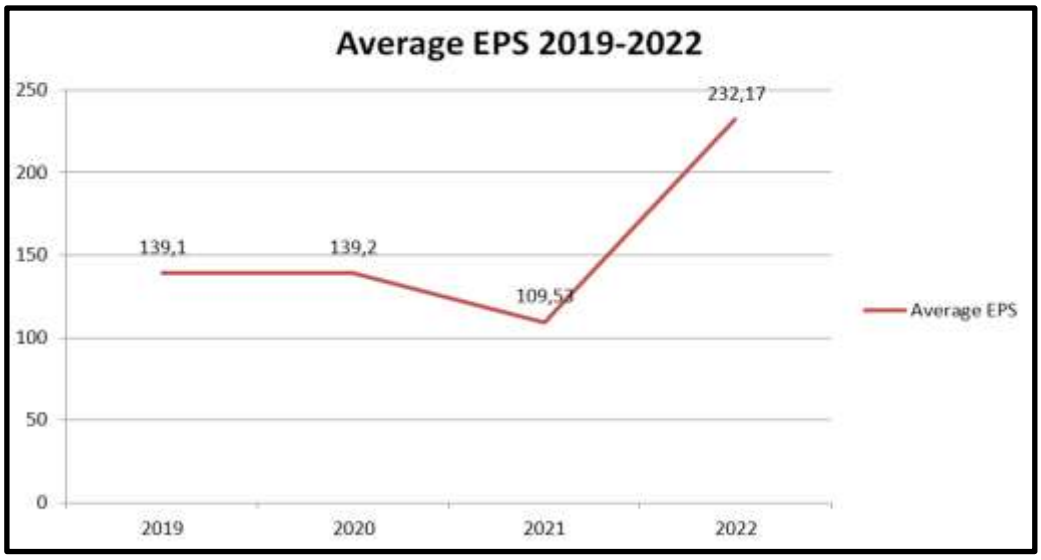

Figure 1. Average Earnings per Share (EPS) 2019-2022
Source: Indonesia Stock Exchange, processed (2023)

The graph shows that from 2019 to 2022, over a period of four years, the average Earnings per Share in 2022 was the highest. In that year, the average Earnings per Share increased significantly by 112%. Upon closer inspection, the EPS in 2019-2021 was very low due to Covid-19, which caused limited mobilization and a decline in people's purchasing power. As a result, sales in all sectors, especially in the product and service sectors, experienced a decline in both sales and profits. This is in line with research by Junaidi & Salim (2021), which explains that Covid-19 has a negative impact on company performance in the sense that the pandemic has caused companies' profit levels to decline and worsen with the PPKM (Enforcement of Restrictions on Community Activities) policy during Covid-19, which indirectly caused people's purchasing power to decline.

In signaling theory, it is explained that information related to company performance is provided to the public so that it can be used by certain parties, especially potential investors, in making decisions such as whether or not to purchase the company's shares. This information certainly influences investors' decisions. When financial performance is not very good, it can make investors reluctant to buy shares or invest capital in the company. The connection is that earnings per share is one piece of information about management's performance and a major factor for investors in evaluating a company's performance, as explained in the previous paragraph. Profitability ratios are one of the indicators used by investors because they are closely related to the profits generated by the company. The research by Purwaningsih & Widjanarko (2022) explains that companies that can provide high earnings per share represent a high level of profitability ratios in the company. Therefore, the researchers attempted to examine the level of influence of profitability ratios (ROA, ROE, and NPM) on Earnings per Share, which is an important indicator for investors to determine a company's performance in generating profits.

From previous studies, Return on Assets (ROA) can be used to determine its effect on Earning per Share (EPS). In the analysis studied by Siddiq et al. (2020) with the variables of liquidity (Load to Deposit Ratio), solvency (Debt to Assets Ratio), and profitability (Return on Assets) in commercial banks listed on the Indonesia Stock Exchange from 2008 to 2017, the results showed that the profitability variable (Return on Assets) did not have a significant effect. Meanwhile, according to Septiana (2020) in her research on the effect of ROA on EPS at PT Indo Tambangraya Megah Tbk from 2014 to 2018, it was concluded that ROA had a positive effect on EPS. In addition, the effect of Return on Equity (ROE) on EPS can also be seen from previous studies. According to Fadli & Suraya (2019) in their study entitled "The Effect of Leverage (DAR) and Profitability (ROE) on Earning per Share (EPS)" with a sample of infrastructure companies PT. Jasa Marga (Persero) Tbk. and PT. Citra Marga Nusaphala Persada Tbk for the period 2013-2017, the results show that ROE does not have a significant effect on EPS. Meanwhile, according to Sholeqah et al. (2020) in their research analyzing the Debt to Equity Ratio, Return on Equity, and Price Book to EPS in companies in the Infrastructure, Utilities, and Transportation sectors from 2015 to 2018, the results showed that ROE had a positive effect on EPS. Then, for the Net Profit Margin (NPM) variable, it can also be determined According to Susilawati (2014), in her analysis of the effect of Debt to Equity Ratio, Net Profit Margin, Current Ratio, and Return on Equity on manufacturing companies from 2008 to 2011, she concluded that the effect of NPM on EPS is significantly positive, so that an increase in NPM will result in an increase in EPS. Meanwhile, according to research by Welas & Duci (2016) on the influence of CR, NPM, DER, and TATO on chemical sector companies from 2011 to 2015, it was concluded that NPM has no effect on EPS.Therefore, the researchers were interested in observing the effect of Return on Assets, Return on Equity, and Net Profit Margin on Earning per Share in companies listed on the Indonesia Stock Exchange in 2022. The update made in this study is in the specification of profitability ratios (ROA, NPM, and ROE) as variables that affect Earnings per Share in all industrial sectors listed on the Indonesia Stock Exchange in 2022, whereas previous studies only analyzed several company sectors.

II. LITERATURE REVIEW

A. Signal Theory

Signaling theory is a theory about the relationship between information provided by companies and management to investors as a reference for investors' views on company performance. Michael Spence was the first person to introduce the idea of signaling theory. According to him (in Amanda et al., 2019), signaling theory is generally defined as the signaling provided by the owner of the information to the recipient so that the information can be understood and utilized by the recipient. Meanwhile, according to Alfiani Rochman & Andayani (2023), signaling theory is a form of initiative from a company's management by providing information on the company's performance as a guide for investors in assessing the company's performance. Signaling theory is the grand theory in this study because the definition of signaling theory is linear to the purpose of this study, where the Earning per Share level becomes a signal of information generated by a company to investors to see the returns obtained from the investment, thereby helping investors to see the possibility of future profits and determine their investment decisions. Earnings per share are closely related to profitability, so profitability ratios are among the factors that can affect earnings per share.

B. Earnings per Share

Gitman & Zutter (2015) explain in their book that Earnings per Share is an indicator to see how much rupiah or dollars (depending on the currency used) investors will get as capital holders. The Earnings per Share rate is one of the factors that investors use to assess whether to invest in a company's shares. This is in line with what Adriani & Nurjihan (2020) stated, that Earnings per Share is information that can be used by investors as a reference in determining the purchase of shares in the company, where a high Earnings per Share value provides a positive indication that the potential return that can be obtained from each share is profitable, thereby stimulating capital owners to invest in the company.

C. Profitability

According to Meylinda et al. (2022), profitability ratios are ratios that represent information related to the level of profit earned by a company compared to its sales or assets. Meanwhile, according to Martiana et al. (2021), profitability ratios are estimation tools used to assess a company's performance in generating profits from its resources, such as assets, capital, and sales levels in a given period. The reason for choosing the Return on Assets and Return on Equity ratios is because of their broad coverage, as they can show the overall financial condition by comparing accounts in the income statement (current year profit) with the balance sheet (assets and equity), whereas other profitability ratios only cover components of the income statement. This is confirmed in the research by Wuwur et al. (2022), which states that the calculation of the ROA and ROE ratios can represent the overall financial condition of a company because they cover the income statement and balance sheet. In addition, the reason for choosing Net Profit Margin is that companies often use NPM to assess company performance and investors use it to see the prospects of investment returns on the company. In line with what Puspitawati & Fazrin (2017) said in their research, Net Profit Margin is most widely used by companies to assess their financial performance and by investors to assess a company's ability to provide a return on investment by looking at the highest Net Profit Margin. Through previous research related to the effect of ROA, ROE, and NPM on EPS, a hypothesis can be drawn, namely:

H1: Return on Assets, Return on Equity, and Net Profit Margin have a significant effect on Earnings per Share

D. Return on Assets

Gitman & Zutter (2015) argue that Return on Assets is an indicator for assessing how effective a company's management is in generating profits from its assets. According to Putri et al. (2022), Return on Assets reflects the extent to which a company is effective in converting assets into profits. According to Sartika (2022), the benefits are received by the company's management, where by calculating and analyzing Return on Assets, the company can find out how to optimize the use of assets in generating profits, especially in the company's main operations such as production or sales of products and services. According to Ardinindya et al. (2022), the effect of Return on Assets on Earning per Share is significantly positive, where an increase in ROA is followed by an increase in EPS. However, according to Siddiq et al. (2020), ROA does not have a significant effect on EPS. Based on previous studies, it can be observed that ROA has a more dominant positive and significant effect on EPS. Therefore, the following hypothesis is formed:

H2: Return on Assets has a positive and significant effect on Earnings per Share

E. Return on Equity

According to Gitman & Zutter (2015), Return on Equity is an indicator used to assess the level of return on investment provided by a company to its common shareholders. According to Wijayanto et al. (2022), Return on Equity is a parameter that represents the position of company owners, reflecting the level of income earned by the company on its equity. There are two factors that influence the value of Return on Equity. According to K.Y (2021), these two factors are net profit and equity. Net profit in financial statements is profit after deducting interest and taxes. Meanwhile, equity in financial statements is the total capital owned by the company, such as shares, dividends, retained earnings, and others. According to Sholeqah et al (2020), Return on Equity has a significant positive effect on Earning per Share because the more efficient a company is in controlling its capital, the more it will increase its profits, which indirectly affects the value of earnings per share, commonly referred to as Earning per Share (EPS). Meanwhile, according to Fadli & Suraya (2019), ROE has a positive but insignificant effect on EPS. One possible explanation for this phenomenon is that the company's capital is not efficiently converted into profits because the profits obtained still need to be allocated to certain costs, thereby reducing the profits and resulting in a decrease in the profits received by the capital owners. Previous studies have shown that Return on Equity tends to have a positive and significant effect on Earning per Share. Therefore, the hypothesis of this study is:
H3: Return on Equity has a positive and significant effect on Earnings per Share

F. Net Profit Margin

The description from Gitman & Zutter (2015) explains that Net Profit Margin is the percentage of every rupiah or dollar (depending on the currency used) of a company's sales that has been previously deducted from all costs such as taxes, interest, and preferred stock dividends. The calculation of Net Profit Margin will have a significant influence on the decisions of capital owners. According to DiLallo (2022), investors can compare several companies with each other based on their Net Profit Margin values, comparing which companies have a high Net Profit Margin. The interpretation of this is that when the NPM value is high, it indicates that the company is very efficient in converting revenue into profit, and this is what investors will choose because it is more profitable and can provide higher returns to investors. Meanwhile, according to Hutabarat et al. (2023), Net Profit Margin has a positive and significant effect on Earning per Share, where an increase in Net Profit Margin is accompanied by an increase in Earning per Share. However, this differs from the findings of Alfisah & Kurniaty (2021), who found that NPM has a positive but insignificant effect on EPS. From previous studies, it can be seen that Net Profit Margin tends to have a positive and significant effect on Earning per Share. Therefore, the hypothesis of this study is:
H4: Net Profit Margin has a positive and significant effect on Earning per Share

G. Research Framework

Pressure in this study is proxied by financial targets. In agency theory, pressure from principals (shareholders) on agents (management) to achieve certain financial performance targets can lead to conflicts of interest (Jensen & Meckling, 1976). Generally, shareholders use financial targets as a measure of a company's performance success; the higher the level of profitability generated by the company, the better the company's performance (Pamungkas et al., 2018). In line with the fraud hexagon theory, high financial targets stimulate financial statement fraud (Vousinas, 2019). This encourages management to engage in opportunistic

behavior, such as manipulating financial statements to achieve financial targets, thereby increasing the risk of potential financial statement fraud in the company. This statement is in line with research conducted by Mappadang (2023) and Burlacu et al. (2025). Based on this and the results of previous studies, the first hypothesis to be tested in this study is as follows.

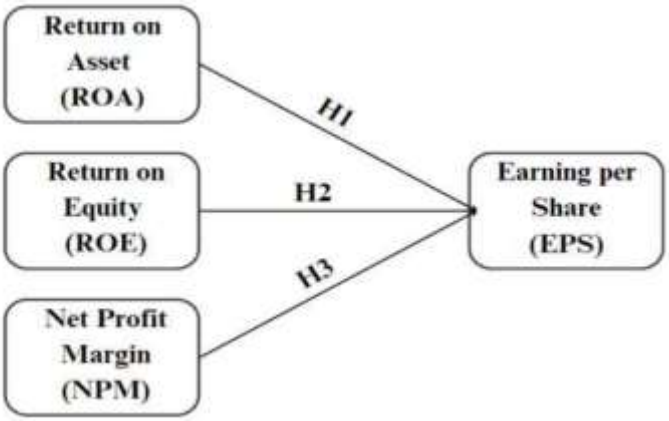

Figure 2 Research Framework Model

III. RESEARCH METHODOLOGY

Quantitative methods were used to conduct this study. Based on the statement by Ibrahim et al. (2018), quantitative research provides certain conditions by collecting data in the form of numbers as a representation of an event, which will later be analyzed using statistical techniques. In this study, the population used was companies listed on the Indonesia Stock Exchange (IDX) in 2022 and accessed through the IDX website. The purposive sampling method was used by researchers to take samples in this study. According to Ma'rifah & Akbar (2022), Purposive Sampling is an approach in selecting samples from the research population by setting several requirements or criteria for the sample. The requirements for the sample in this study include:

1. The company went public and was listed on the Indonesia Stock Exchange (IDX) in 2022.
2. The company has an EPS, ROA, ROE, and NPM value > 0

As of 2022, there are 809 companies listed on the Indonesia Stock Exchange from various business sectors, referred to as the population. Next, the researchers cleaned the data to remove companies with EPS, ROA, ROE, and NPM values equal to 0. From the population that met these two criteria, the researchers obtained a sample of 484 companies from various sectors. These 484 samples were analyzed to determine whether there was an influence between the profitability ratio and Earning per Share. For this study, the data was sourced from the financial reports of each IPO company listed on the IDX published by the Indonesia Stock Exchange (IDX). The type of data in this study was cross-sectional, covering 2022 from various companies that were included in the sample criteria. According to Mardani (2023), cross-sectional data is also known as cross-sectional data, where the data is collected from various subjects at a specific time. The data collection technique used in this study is document study. The data was obtained by downloading data related to Return on Assets, Return on Equity, Net Profit Margin, and Earnings per Share from the Indonesia Stock Exchange website, which is compiled in the Indonesia Stock Exchange Yearly Statistics 2022, which was used as the data source in this study.

The statistical tool used to perform multiple linear regression in this study was SPSS software. Classical assumption tests were conducted by the researcher to determine the normality of the data and other factors prior to regression analysis. According to Purnomo (2016), classical assumption tests are a testing method to determine the existence of symptoms related to multicollinearity, residual normality, heteroscedasticity, and autocorrelation in the research regression model. The classical assumption tests used are normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. Furthermore, the researchers also conducted hypothesis testing in this study. According to Anuraga et al. (2021), hypothesis testing is a test used to determine the truth of a statement or hypothesis based on statistical test results and to draw conclusions about whether the preliminary assumption is statistically correct or not. The hypothesis testing or statistical testing conducted in the context of this study used the F-statistic and t-statistic tests. These tests were implemented to observe the statistical relationship between the independent and dependent variables and to determine whether the preliminary assumptions in this study were accepted or rejected. Before conducting the analysis, the researcher transformed the data by applying logarithms to all sample values because the units of each variable in this study were different, such as ROA in the form of a percentage, ROE in the form of a percentage, NPM in the form of a percentage, and EPS in the form of rupiah per share. In addition, according to Ghozali (2021), data transformation was carried out to make the data normally distributed using several techniques, one of which was by applying a logarithm with a base of 10.

Regression Equation:

$$\text{Log}(Y) = a + b.\text{Log}(X_1) + b.\text{Log}(X_2) + b.\text{Log}(X_3)$$

Explanation:
Log(Y) : Logarithm value of Earnings per Share
Log(X_1) : Logarithm value of Return on Assets
Log(X_2): Logarithm value of Return on Equity
Log(X_3): Logarithm value of Net Profit Margin
a : Constant value of the equation
b : Coefficient describing the degree of influence of ROA, ROE, and NPM on EPS

IV. RESULTS AND DISCUSSION

A. Descriptive Test

Table 1. Descriptive Statistical Test Results

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
ROA	484	-2,00	0,44	-1,2997	0,42937	0,184
ROE	484	-2,00	0,55	-1,0151	0,43233	0,187
NPM	484	-2,00	3,01	-0,8679	0,56081	0,315
Valid N (listwise)	484					

Source: SPSS 27 Output (2023)

The descriptive statistical test showed that the variance of ROA was 0.184, ROE was 0.187, and NPM was 0.315. From these results, the variance of ROA and ROE was close to zero (0),

which means that the ROA and ROE variables had a normal data distribution. Meanwhile, the NPM variable has a fairly high value of 0.315, indicating that the data in this variable has a less than normal distribution. It can be concluded from the three variables that two of them, namely Return on Assets and Return on Equity, have a normal data distribution. Meanwhile, the Net Profit Margin variable has a less than normal data distribution.

Then, for the mean values of ROA, ROE, and NPM, they are -1.2997, -1.0151, and -0.8679, respectively. The means of these three variables have negative values due to the effect of data transformation, where the researcher transformed the data using a logarithm with a base of 10 for all samples of the research variables. Then, the maximum values for each variable are ROA at 0.44, ROE at 0.55, and NPM at 3.01. It can also be seen that the samples included in the data analysis technique are in accordance with the predetermined sample size of 484 samples.

B. Normality Test

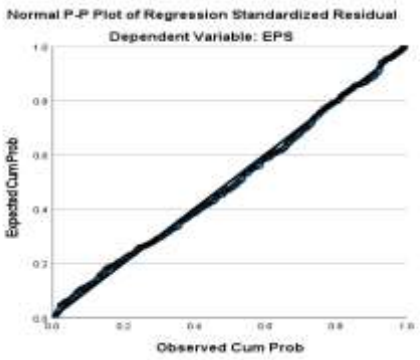

Figure 3. Normality Test Results (Source: SPSS 27 Output (2023))

The normality of data in a study can be seen through the shape of the Normal P-Plot curve. When the plot points on the curve follow the fit line, it can be concluded that the data in the study does not exhibit normality. In Figure 3, the plot points follow the fit line of the Normal P-Plot curve. It can be concluded that the study did not find any evidence of normality.

Table 2. Kolmogorov-Smirnov Test Results

One-Sample Kolmogorov-Smirnov Test			Unstandardized Residual
N			484
Normal Paramaters	Mean		0,0000000
	Std. Deviation		6.541,693378
Most Extreme Differences	Absolute		0,031
	Positive		0,031
	Negative		-0,029
Test Statistic			0,031
Asymp. Sig (2-tailed)			0,200
Monte Carlo Sig (2-tailed)	Sig.		0,333
	95% Confidence Interval	Lover Bound	0,291
		Upper Bound	0,375

Source: SPSS 27 Output (2023)

The Kolmogorov-Smirnov test was also conducted by researchers to examine the distribution of the research data. The purpose of this was to reinforce the normality test in order to determine in more detail whether the research data had a normal distribution or not. The Kolmogorov-Smirnov test analysis can be observed in the Asymp.Sig (2-tailed) value in the One-Sample Kolmogorov-Smirnov Test table. In the Kolmogorov-Smirnov test, the Asym. Sig value must be greater than 0.05 for the research data to be considered normally distributed. In Table 4.2, the Asymp. Sig (2-tailed) value is 0.200, which is greater than 0.05. Thus, the data used is normally distributed.

C. Multicollinearity Test

Table 3. Multicollinearity Test Results

Coefficients								
Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
							Tolerance	VIF
1	(constant)	29169,903	956,771		30,488	<0,001		
	ROA	0,264	0,130	0,138	2,030	0,043	0,286	3,503
	ROE	0,891	0,124	0,468	7,213	<0,001	0,313	3,200
	NPM	0,63	0,060	0,043	1,055	0,292	0,783	1,278

Source: SPSS 27 Output (2023)

The ROA variable has a tolerance value of 0.286, which is greater than the tolerance requirement of 0.01. Then, the VIF value for the ROA variable is 3.503, which is smaller than the VIF requirement of 10.00. In conclusion, the ROA variable is free from multicollinearity. Then, for the ROE variable, it has a tolerance value of 0.313, which is greater than the tolerance requirement value of 0.01. Then, the VIF value of the ROE variable is 3.200, which is smaller than the VIF requirement value of 10.00. It can be concluded that the ROE variable is free from multicollinearity. For the last variable, NPM has a tolerance value of 0.783, which is greater than the tolerance requirement of 0.01. The VIF value of NPM is 1.278, which is smaller than the VIF requirement of 10.00. Therefore, the NPM variable is also free from multicollinearity. The three independent variables in this study, namely ROA, ROE, and NPM, are free from multicollinearity. This also means that this study is free from multicollinearity.

D. Heteroscedasticity Test

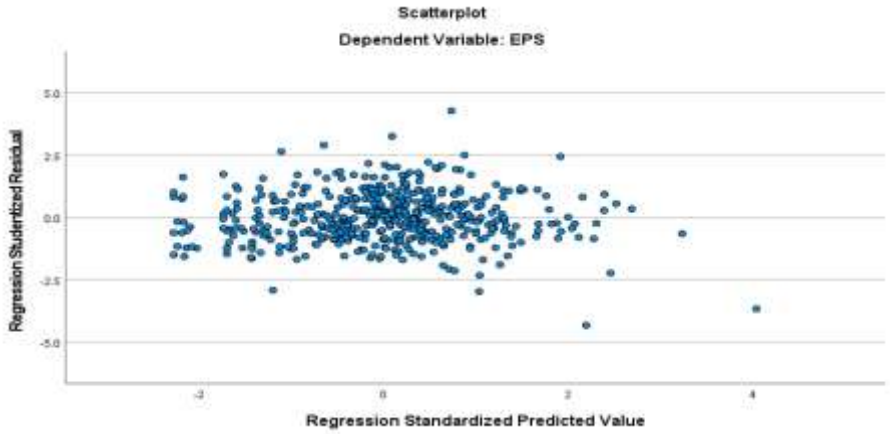

Figure 4. Heteroscedasticity Test Results (Source: SPSS 27 Output (2023))

In Figure 4, the distribution of points in the Scatterplot graph is scattered irregularly. In addition, the distribution of these points is below and above the number 0 on the Y-axis (Regression Standardized Residual). This pattern indicates that this study is free from heteroscedasticity. Therefore, it can also be concluded that this study has a regression model that can predict EPS values from the three predetermined independent variables, namely ROA, ROE, and NPM.

E. Autocorrelation Test

Table 4. Autocorrelation Test Results

Model Summary					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0,607	0,368	0,364	652,10433	1,889

Source: SPSS 27 Output (2023)

Table 4 shows the Durbin-Watson value in this study to be 1.889. The lower bound (dU) value from the Durbin-Watson table is 1.860. Meanwhile, the upper bound (4-dU) value is 2.132. When comparing these three values, it can be concluded that the lower bound (dU) value of 1.860 is smaller than the DW value of 1.889. Furthermore, the DW value is smaller than the upper bound (4-dU) value of 2.132. It can be stated that this study does not show any signs of autocorrelation.

F. Statistical Test (Coefficient of Determination)

Table 5. Results of the Coefficient of Determination Test

Model Summary					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0,607	0,368	0,364	652,10433	1,889

Source: SPSS 27 Output (2023)

The researcher conducted a statistical test of the coefficient of determination to see the percentage of independent variables in this study (ROA, ROE, and NPM) that could influence the dependent variable (EPS). To see this, we can look at the R-Square value in the model summary table. The R-Square value is 0.368, which is 36.8% when converted to a percentage. This shows that ROA, ROE, and NPM can simultaneously or collectively influence EPS by 36.8%. Then, the error value can be determined by subtracting 100% from the R-Square value. The error value in this study is 63.2%. It can be concluded that 63.2% of the dependent variable or EPS is influenced by variables outside ROA, ROE, and NPM that were not included in this study.

G. Statistical Test (F-Test)

Table 6 F Test Results

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,203E+10	3	4010807123	93,142	<0,001
	Residual	2,067E+10	480	43061213,2		
	Total	3,270E+10	483			

Source: SPSS 27 Output (2023)

The ANOVA table shows the significance and F-count values in this study. The significance value is 0.001, which is smaller than the significance requirement of 0.05. Then, the F-table is obtained from the value distribution table, which in this study is 2.6234, which is smaller than the F-count value of 93.142. The significance value and the comparison of the F-count and F-table values indicate that the independent variables simultaneously in this study have an effect on the predetermined dependent variable. In the previous test, the percentage of influence of the independent variables on the dependent variable was determined. It was concluded that ROA, ROE, and NPM significantly influence the dependent variable, EPS, by 36.8%.

H. Statistical Test (t-statistic Test)

Table 4.7 Results of the t-statistic Test

Coefficients								
Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
							Tolerance	VIF
1	(constant)	29169,903	956,771		30,488	<0,001		
	ROA	0,264	0,130	0,138	2,030	0,043	0,286	3,503
	ROE	0,891	0,124	0,468	7,213	<0,001	0,313	3,200
	NPM	0,063	0,060	0,043	1,055	0,292	0,783	1,278

Source: SPSS 27 Output (2023)

The ROA variable has a significance of 0.043, which is smaller than the significance requirement of 0.05. This illustrates that ROA has a significant effect on EPS. The magnitude of ROA's effect on EPS is equal to its coefficient of 0.264. Then, the ROE variable has a significance of 0.043, which is smaller than the significance requirement of 0.05. Apart from ROA, the ROE variable also has a significant effect on EPS ( ) with an effect size of 0.891. For the last variable, NPM, it has a significance of 0.292, which is greater than 0.05. This value indicates that NPM does not have a significant effect on EPS.

Based on these analysis results, we can create a regression equation that represents the level of influence of ROA, ROE, and NPM on EPS. The equation can be written as follows.

Regression Equation:

$$\text{Log}(Y) = 29169.903 + 0.264.\text{Log}(X_1) + 0.891.\text{Log}(X_2) + 0.063.\text{Log}(X_3)$$

Explanation:

Log(Y) : Logarithmic value of Earning per Share
Log(X_1) : Logarithm value of Return on Assets
Log(X_2) : Logarithm value of Return on Equity
Log(X_3) : Logarithm value of Net Profit Margin

I. Discussion

1. The Effect of ROA on EPS

The first hypothesis of this study is that Return on Assets has a positive and significant effect on Earnings per Share. From the results of the t-Statistic test, we can see the regression coefficient value and significance of the Return on Assets variable in influencing the dependent variable. This is in line with the signaling theory that Earnings per Share is one of the signals given by business units to capital owners and is closely related to the returns that investors will get from the company's performance. Likewise, these results are in accordance with the study by Ardinindya et al. (2022), which found that the effect of Return on Assets on Earnings per Share is positive and significant, where an increase in ROA is followed by an increase in EPS. Furthermore, according to Septiana (2020), Return on Assets has a positive and significant effect on Earnings per Share because Return on Assets provides shareholders with an indication that the company is very good at managing its assets to convert them into profits.

2. The Effect of ROE on EPS

The second hypothesis of this study is that Return on Equity has a positive and significant effect on Earning per Share. The results of the t-statistic test show that the regression coefficient of Return on Equity is 0.891, indicating that Return on Equity has a positive effect on Earning per Share. In addition, the significance value of ROE is 0.001, which is less than 0.05, indicating that Return on Equity has a significant effect on Earning per Share. Therefore, it can be concluded that H2 is accepted, or Return on Equity has a positive and significant effect on Earnings per Share, where every increase in the value of ROA will increase the value of EPS by 0.891. This is in line with the signal theory that Earnings per Share is one of the pieces of information provided by the company to investors and is closely related to the returns that investors will get from the company's performance. Similarly, these results are also in line with the research by Sholeqah et al. (2020), which found that Return on Equity has a positive and significant effect on Earning per Share because the more efficient a company is in using its own capital, the more it will increase its profits, which indirectly affects the value of earnings per share (Earning per Share).

3. *The Effect of NPM on EPS*

The third hypothesis of this study is that Net Profit Margin has a positive and significant effect on Earning per Share. From the results of the t-statistic test, it can be seen that the value of the Net Profit Margin regression coefficient is 0.063, indicating that Net Profit Margin has a positive effect on Earning per Share. In addition, the significance value of NPM is 0.292, which is greater than 0.05, indicating that Net Profit Margin has an insignificant effect on Earnings per Share. It can be concluded that H3 is rejected because the results of the statistical analysis show that Net Profit Margin has a positive but insignificant effect on Earnings per Share.

To determine why Net Profit Margin has no significant effect on Earning per Share, the researcher conducted a data variance analysis to examine the distribution of the three independent variables used in this study using IBM SPSS 27 software. Table 1 shows the results of the descriptive statistical test, indicating that the variance of the NPM variable is high at 0.315, so the data on the NPM variable can be said to be less normally distributed. From these results, the researcher tried to find out about outliers using Microsoft Excel using standardization to see the distance of the NPM variable value from the average value of the NPM variable. Then, the researcher obtained a total of twenty-six samples that became outlier

data, specifically in the NPM variable, which can be seen in Figure 4.10 below. In this data, it is clear that the NPM levels of each company are very far from their averages. A total of 26 companies were included in the list from various sectors, such as 1 company from the energy sector, 4 companies from the basic materials sector, 4 companies from the industrials sector, 7 companies from the consumer non-cyclicals sector, 2 companies from the consumer cyclicals sector, 2 companies from the financials sector, 2 companies from the properties & real estate sector, 3 companies from the technology sector, and 1 company from the transportation & logistics sector. From these results, researchers attempted to conduct further analysis, which revealed that the NPM values of these outlier data points were very far from the mean. First, researchers analyzed the sample with the furthest distance, Sumber Energi Andalan Tbk (ITMA). Looking at the 2022 financial statements of Sumber Energi Andalan Tbk (ITMA), it can be seen that the profit generated was high, but it was not generated from sales but from the net profit of associated entities amounting to $31,192,770. This resulted in a very high profit amount but low sales. As a result, the NPM value was very high. Then, the researchers also looked at Alakasa Industrindo Tbk (ALKA) in its 2022 financial report. From this financial report, it can also be seen that the profit generated was very small due to the company's cost of goods sold because the purchase of aluminum raw materials was very expensive. Therefore, the profit value was not very large because the profit taken from sales was small. As a result, the NPM value was very low.

Based on the analysis results, it can be concluded that NPM is not significant to EPS due to high data fluctuations or, in other words, outlier data, resulting in an abnormal distribution of NPM data. There are several reasons why this may occur. First, when the NPM value is too high, it may indicate that the profit generated by the company does not come from sales but from other accounts. Second, when the NPM value is too low, it may indicate that the company's profit is small due to the company's large overhead costs, one of which is due to the procurement of expensive raw materials and others.

V. CONCLUSION

A. Conclusion

It can be concluded that:

1. This study shows that 36.8% of the independent variables, namely Return on Assets, Return on Equity, and Net Profit Margin, can explain the dependent variable, namely Earnings per Share (significantly influenced). Then, 73.2% is influenced by variables outside this study.
2. Return on Assets has a positive and significant effect on Earnings per Share, which means that every increase in the value of Return on Assets will also increase the value of Earnings per Share.
3. Return on Equity has a positive and significant effect on Earning per Share, which illustrates that every increase in Return on Equity will also increase the value of Earning per Share.
4. Net Profit Margin has a positive and insignificant effect on Earning per Share, which means that any increase in Net Profit Margin will not affect the value of Earning per Share. This is because the profit generated by a company does not come from sales or cost of goods sold that are too large, thereby reducing existing profits.

B. Implications

a) Theoretical Implications

Based on Signal Theory, which is used as the grand theory in this study, it explains that the signals given by companies to the public, especially investors, can represent the financial performance, especially the profitability, of a business unit. When the signal is positive, it can describe the good financial performance of the company. However, in reality, it can be concluded that Net Profit Margin, as one of the profitability ratios, has an insignificant and positive effect on Earning per Share because some companies have Net Profit Margin values that are too high or too low since the sales level of the company does not necessarily determine whether a company has high profits. This is influenced by several factors found in this study, namely that when the Net Profit Margin value is too high, it may indicate that the company's profits do not come from sales. Similarly, when the Net Profit Margin value is too low, it may indicate that the company has high sales but also high production costs for producing goods or services. As a result, the company's profits are small.

b) Practical Implications

The final results of the study show that one of the three independent variables does not affect the EPS level, which ultimately reveals new knowledge that the effect of profitability on EPS is not absolute. It was found that when the NPM value of a business unit is low, this is due to excessive costs, resulting in low annual profit . Business units need to manage their expenses so as not to reduce the value of net profit and to increase the NPM value of the business unit in the following period. In addition, capital owners need to note that a company's financial performance does not necessarily reflect the return on investment. Technical and fundamental analysis must be emphasized to see the rate of return that is in line with expectations so that there are no mistakes in investing capital in business units.

c) Policy Implications

Regarding NPM, which does not have a significant effect on EPS based on POJK 13 of 2023, the Financial Services Authority (OJK) can implement policies related to information administration in financial reports by requiring IPO companies to explain in as much detail as possible why the NPM value of their business units is very high or very low. This policy is based on transparency and risk management. Through this, the OJK can maintain the stability of the capital market so that there are no extremely high fluctuations in value.

C. Limitations

The limitations of this study lie in the analysis of the reasons why NPM does not have a significant effect on EPS. Not all IPO company data that included outliers were examined in depth. The researchers only took two companies, with the highest and lowest NPM values, to analyze their financial statements for that period. The limitations of the researchers lie in the time available to complete their undergraduate studies.

D. Recommendations

One of the final results of this study is a recommendation to relevant parties, including:

1. For future researchers, adding other financial ratios as independent variables in conducting further research will provide more detailed information on the financial ratios that affect earnings per share.

2. For prospective investors, be careful in making decisions to buy a company's shares by not only looking at the NPM ratio because there are many other financial ratios of a company that can affect the rate of return on investment that will be received and it is recommended for prospective investors to consult with brokers who are more knowledgeable about a company's financial statements.

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