Analysis of Return on Asset, Return on Equity and Earnings Per Share on Stock Prices in Banking Sector Companies in 2019-2023

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ABSTRACT:
The investment trend in Indonesia is starting to increase, making many people want to try to start investing, but if this desire is not based on understanding it will lead to high risks. This research aims to determine the factors that can influence the movement of share prices, especially fundamental analysis, namely analysing financial reports to determine the financial performance of companies in the banking sector that have high market capitalization in Indonesia. By measuring Return on Assets (ROA), Return on Equity (ROE) and Earning Per Share (EPS), whether the variables in this research influence stock market prices. By using SPSS to process data and produce conclusions. Based on the results of this research, it is stated that the variables X1 (ROA) and X3 (EPS) have a partially significant effect on share prices, in contrast to the variable So, prospective investors who want to start investing should look at the company's financial reports first, especially analysing the assets, net profit and profits generated by the company.

Keywords: Innovation Performance, Big Five Personality, Analysis of Return on Assets, Return on Equity , Earning Per Share , Share Prices

I. INTRODUCTION

Align with today's increasingly advanced technological era, where people can easily access information using the internet. This has an impact on the number of people who know about and are involved in investment, this is shown by the increasing investment trend over the last five years. There are several types of investment, namely shares, bonds, mutual funds, gold, deposits, etc. People can choose the type of investment according to their needs and investment objectives. Several types of investment, stock investment, are the investment instruments that are most popular with the public, especially young people (Abidin et al., 2016). Many digital platforms and stock broker companies have emerged that accommodate people's desires to be able to invest without the hassle of just using an application and can do it anywhere (Shabirina, 2021).

According to data from the Indonesian Stock Exchange (BEI) until January 31 2023, in the capital market the number of investors increased to 10.4 million SID and the number of investors who chose the type of stock investment was 4.5 million people. When compared to 2022 with the number of capital market investors amounting to 10.3 million investors and stock investors amounting to 4.4 million people, from this data it can be concluded that the number of investors has increased by more than 100,000 new investors (CNBC;2023). Before making a decision to invest in the capital market, you cannot do it rashly (Goestjahjanti, Efriani, et al., 2023). It is important to have an understanding of investment that investors need to know so that the investment they make is in line with their expectations, namely making a profit. You need to study the risk profile and carry out appropriate analysis (Goestjahjanti, Pasaribu, et al., 2023). There are several analyses before deciding to invest in shares, namely technical analysis and fundamental analysis. Technical analysis is an analysis that is usually used by traders or investors before making a decision to invest in company shares (Goestjahjanti, 2020). "Technical analysis can be done by looking at the cycle of changes in stock prices over a certain period of time. Share prices can be determined based on supply and demand for the shares themselves (Abidin et al., 2016).

Fundamental analysis is a solid foundation that is one of the factors for making investment decisions in the financial markets. Currently, investors are faced with a variety of investment choices, ranging from shares, bonds, to other complex financial instruments. In the face of this complexity, fundamental analysis emerges as a crucial tool for evaluating investment viability and determining optimal profitability.

One of the main focuses of fundamental analysis is assessing the intrinsic value of a company or financial asset. This intrinsic value reflects an estimate of the fair value or actual value of the company or asset, based on historical performance, future prospects, and external factors that influence that value. By evaluating intrinsic value, investors can determine whether the current market price of a stock or asset reflects its fair value, or whether it is too low or too high (Hendra, 2023).

Stock fundamental analysis functions to measure a company's financial performance by looking at the company's financial reports through financial ratio calculations. Several financial ratios that are commonly used to see a company's financial performance are return on assets (ROA). This ratio is used to see the company's ability to use its assets to generate company profits. Meanwhile, return on equity (ROE) is a profitability ratio that measures a company's net profit against its equity in order to measure the rate of return on ordinary shares. (Fanalisa & Juwita, 2022). Earning per Share (EPS) or profit per share is a ratio that measures how capable a company is of generating a profit on one share that will be given to shareholders. (Rosmanidar et al., 2024).

One of the financial sector shares that recorded the most positive growth in the first quarter of 2014 was dominated by the banking sector. As of March 2024, it will experience growth of 3.47%. Compared to shares in the infrastructure sector which only has 1.01%. Meanwhile, in the first quarter of 2024, energy sector shares grew 0.96%, industrial sector shares grew 0.86%, and cyclical shares grew 0.47%. Since 2023, the financial sector will be the largest contributor to daily transactions, around 30% of the total of around IDR 11 trillion. According to capital market observers, investors entrust their money to financial sector companies because of the existence of large capitalized banks or what are called big banks in the IHSG which have high liquidity both in terms of market cap and net profit.
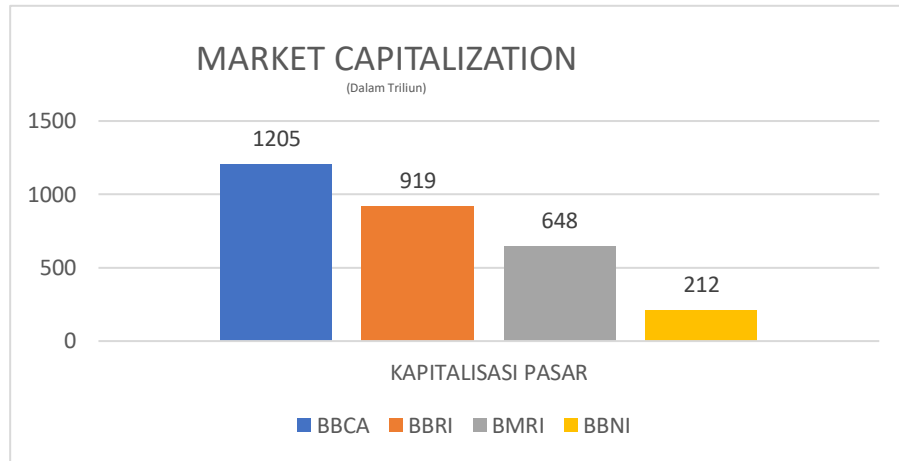
Figure 1. Market Capitalization Level of Banking Companies (Source : Kompas.id)

Based on IDX data until February 2024, four banks are ranked in the top 10 stocks with the largest capitalization. In first place PT. Bank Central Asia Tbk (BBCA) with a market capitalization of IDR 1,205 trillion. Second place PT. Bank Rakyat Indonesia Persero Tbk (BBRI) with a market capitalization of IDR 919 trillion. In fifth place is PT Bank Mandiri Persero Tbk (BMRI) with a market capitalization of IDR 648 trillion. In ninth place is PT Bank Negara Indonesia Persero Tbk (BBNI) with a market capitalization of IDR 212 trillion.

Based on. research gap, there is a mismatch between phenomena and theory, so research can be carried out again using variables that influence stock prices. Investors can use this research as a reference for making decisions about investing in shares, in looking at the company's financial performance and assessing what needs to be considered before buying shares..

II. METHODS

This research uses a quantitative descriptive approach by providing an overview of the research findings. The data used are financial reports of companies in the banking sector listed on the Indonesia Stock Exchange (BEI) during the period 2019 – 2023. 46 banking sector companies listed on the Indonesia Stock Exchange are used as the population. Using a sampling technique, the sampling used is purposive sampling. A sample of 4 companies was obtained which were used in this research, namely PT Bank Central Asia,Tbk (BBCA), PT Bank Rakyat Indonesia.Tbk (BBRI), PT Bank Mandiri Tbk (BMRI) and PT Bank Negara Indonesia Tbk (BBNI). To test the dependent and independent variables, with SPSS as a tool for processing data in this research.

Table 1: Sample of Banking Companies

No	Nama Perusahaan	Kode Saham	Tgl Listing
1	PT Bank Central Asia Tbk	BBCA	31-May-2000
2	PT Bank Rakyat Indonesia (Persero) Tbk	BBRI	10-Nov-2003
3	PT Bank Mandiri (Persero) Tbk	BMRI	14-Jul-2003
4	PT Bank Negara Indonesia (Persero) Tbk	BBNI	25-Nov-1996

Sumber:www.idx.co.id
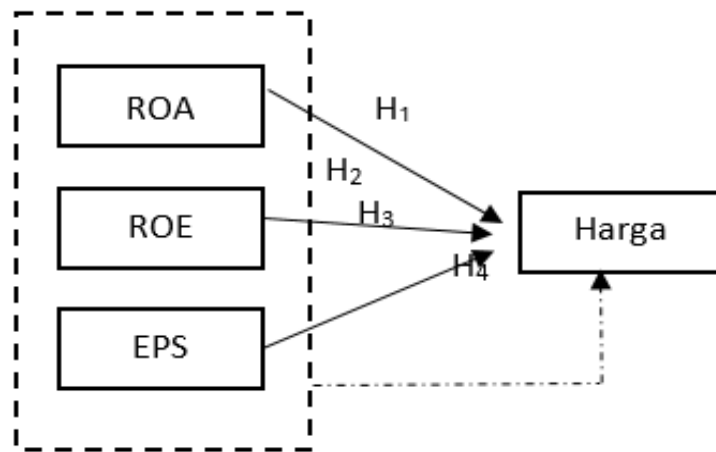
2.1.   Research Framework

Figure 2. Research Framework.

In the research framework described, a hypothesis is generated:

H1 = Between Return on Assets (X1) and Share Price (Y) there is a partially significant influence.

H2 = Between Return on Equity (X2) and Share Price (Y) there is a partially significant influence.

H3 = Between Earning Per Share (X3) and Share Price (Y) there is a partially significant influence.

H4 = There is a simultaneous influence between the variables Return On Assets (X1), Return On Equity (X2), and Earning Per Share (X3) on stock prices (Y).

III. RESULTS

Based on the results of data tabulation based on banking companies' financial reports, the return on assets (ROA) obtained for the last four years is shown in table 2.

Tabel 2 : Return on Asset (ROA) Calculation Results

Emitten	ROA				
	2019	2020	2021	2022	2023
BBCA	3,11	2,52	2,56	3,10	3,46
BBRI	2,43	1,16	1,83	2,76	3,08
BMRI	2,58	1,19	1,77	2,26	2,76
BBNI	2,17	0,47	1,14	1,79	1,94

ROA is a ratio to measure the level of a company's ability to utilize all its assets to generate profits (Muhidin & Situngkir, 2022). In the calculation table above, the ROA value for banking companies, especially BBCA, BBRI, BMRI, BBNI, is known. Referring to the provisions of Bank Indonesia in its circular which states that if the ROA value of a conventional bank is > 1.21%, it can be said that the bank is in a healthy condition. Banking ability can be assessed as good if the ROA value is greater. In the results of the ROA ratio calculation in the table above, it can be stated that the ROA at BBCA bank for 2019 - 2023 is declared healthy. Meanwhile, the ROA value at BBRI and BMRI banks in 2020 was declared unhealthy because it was <1.21%, this could be caused by the Covid 19 pandemic which reduced the company's profit value, while for 2019, 2021-2023 it was declared healthy. The ROA calculation results at BBNI were declared unhealthy in 2020 – 2021, while in 2019, 2022, 2023 they were declared healthy. It was concluded that in 2020 – 2021 BBNI experienced a decline in net profit.

Table 3. Calculation of Return on Equity (ROE)

Emitten	ROE				
	2019	2020	2021	2022	2023
BBCA	16,42	14,70	15,50	18,43	20,06
BBRI	16,48	8,13	10,54	16,94	19,09
BMRI	16,65	8,99	13,75	17,82	20,89
BBNI	14,71	3,71	8,68	13,18	13,64

(Shenurti et al., 2022) One method for assessing how efficient a company is in obtaining profits from capital invested by shareholders is to look at the return on equity (ROE). The greater the ROE, the more effective the company is in utilizing its capital to achieve profits. Referring to the provisions of Bank Indonesia in its circular which states that if the ROE value of a conventional bank is > 15% it can be said to be in a healthy condition. In the ROE calculation table above, BBCA shows that banks have a stable ROE value in a healthy condition from 2019-2023. Meanwhile, BBRI and BMRI in 2020 – 2021 experienced unhealthy conditions for ROE values because they were < 15%. BBNI from 2019 – 2023 is in an unhealthy condition because the value is <15%. It is also known that the total net profit and total equity owned are lower than BBCA, BBRI and BMRI.

Table 4. Calculation of Earning Per Share (EPS)

Emitten	EPS (Rp)				
	2019	2020	2021	2022	2023
BBCA	11598,85	1101,08	255,04	330,61	394,71
BBRI	279,00	151,29	202,93	339,20	398,69
BMRI	780,67	394,26	654,67	963,27	643,41
BBNI	985,81	224,83	588,62	991,05	566,50

Earnings per share (EPS) is a ratio used to evaluate how effective management is in generating profits per share and providing profits for shareholders. A low EPS level indicates that shareholder expectations have not been met by the company, however, a high EPS level indicates an increase in welfare for shareholders. Investors assess the company's performance if the EPS value is higher, this can affect demand for these shares. In the table above, BBCA has the highest EPS value of the three banking companies included in the banking market capitalization ranking, then BMRI produces an EPS value with an average 2019 - 2023 value of IDR 687, then the average EPS value for 2019-2023 is 671. 4 and the average EPS value for BBRI was 274.22, being the smallest EPS value of the 4 banking companies BBCA, BMRI and BBNI.

Table 5. Share Price

Emitten	Harga Saham				
	2019	2020	2021	2022	2023
BBCA	6.685	6.770	7.300	8.550	9.400
BBRI	4.400	4.170	4.110	4.940	5.725
BMRI	7.675	6.325	7.025	9.925	6.050
BBNI	7.850	6.175	6.750	9.225	5.375

The share price is the value of shares formed on the stock exchange at a certain time, determined by market players based on demand and supply in the capital market. From the definition that has been given, it can be concluded that the share price is the price of company

ownership that occurs on the stock exchange at a certain time which is determined by the demand and supply of market players (Muhidin & Situngkir, 2022). In the share price table above, BBCA and BBRI experienced stable market price increases, while BMRI and BBNI experienced unstable share price increases and decreases.

Table 6. Normality Test

| Variabel	Nilai Sig. (2-tailed)
X1	0,200
X2	0,200
X3	0,200

Based on the table of SPSS test results above, it shows that the Sig. of 0.200. Have data that is normally distributed because the significance results obtained are 0.200 > 0.05.

Table 7. Multicollinearity Test

Coefficients[a]			
		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	ROA	0,119	8,379
	ROE	0,116	8,597
	EPS	0,923	1,083
a. Dependent Variable: HARGA SAHAM			
Sumber : Data Olahan SPSS V.29 (2024)			

The results of the multicollinearity test show that the tolerance value is > 0.1, which means that all variables meet the requirements for being free from multicollinearity as in table 3. The tolerance value for the independent variables is X1 ROA (0.119), X2 ROE (0.116), X3 (0.923). Then the results of calculating the VIF or Variance Inflation Factor value of the independent variable show that the VIF value is <10, with ROA values (8.379), ROE (8.597), EPS (0.923). It was concluded that the three independent variables did not show symptoms of multicollinearity.

Table 8. Heteroscedasticity test
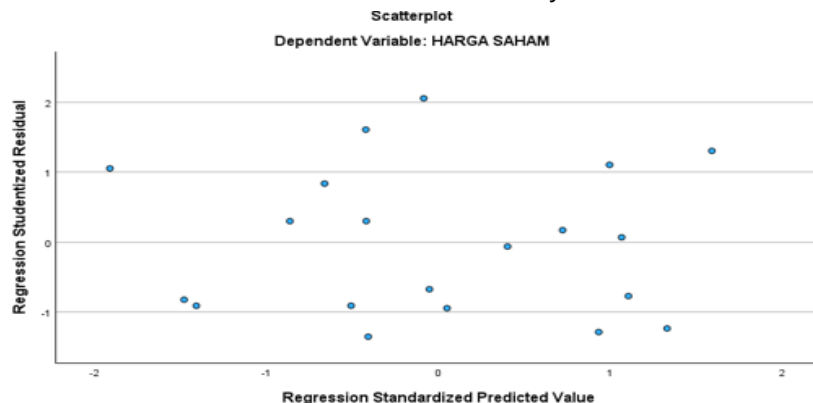
By using the Scatterplots test, the data points are spread around the number 0, both above and below it. These points are not only concentrated on one side, and their distribution

does not show a particular pattern. Therefore, it can be concluded that there is no heteroscedasticity problem.

Table 9. Autocorrelation Test

Runs Test

	Unstandardized Residual
Test Value^a	-247.43941
Cases < Test Value	10
Cases >= Test Value	10
Total Cases	20
Number of Runs	9
Z	-.689
Asymp. Sig. (2-tailed)	.491

a. Median

The runs test is used in this research to test autocorrelation, this test produces a Sig (2-Tailed) value of 0.491 > 0.05, which means that this research data is free from problems or symptoms of autocorrelation.

Table 10. Multiple Linear Regression Analysis Test

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	40,317	1251,966		3,214	0,000
	ROA	3,693	1291,814	0,248	11,416	0,003
	ROE	-0,678	231,435	0,465	0,768	0,454
	EPS	2,488	11046,501	0,442	2,059	0,000

a. Dependent Variable: HARGA SAHAM

Sumber : Data Olahan SPSS V.29 (2024)

From the results of the test table above, the regression equation is obtained as follows:

Y = 40,317 + 3.69ROA – 0.678ROE + 2,488EPS

The variable This means that if the ROA variable increases by one unit while the other variables are considered constant or have a value of zero, then the share price will increase by 3.69. The variable X2 ROE obtains a coefficient value of -0.678, this shows an inverse relationship between ROE and share prices, if the resulting value is negative. This means that if the ROE variable increases by one unit while the other variables are considered constant or have a value of zero, then the share price will decrease by -0.678. The X3 EPS variable obtained a coefficient value of 2.488, indicating a unidirectional relationship because a positive value was produced between the share price and the EPS variable. This means that if the EPS variable increases by one unit while the other variables are considered constant or have a value of zero, then the share price will increase by 2,488.

Table 11. Anova Analysis Test

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.549.239.884	3	5.849.746.628	2.481	.058ᵇ
	Residual	37.718.453.866	16	2.357.403.367		
	Total	55.267.693.750	19			

a. Dependent Variable: HARGA SAHAM
b. Predictors: (Constant), EPS, ROA, ROE
Sumber : Data Olahan SPSS V.29 (2024)

Based on the table above, the result is that the Fcount value is 2.481 while FTable is 3.197, this means that FCount < FTable and the significant number is > 0.05, namely 0.058 > 0.05. It is concluded that together or simultaneously the variables Return On Assets, Return On Equity and Earning Per Share do not affect share prices.

Table 12. Coefficients Analysis Test

Coefficientsᵃ

Model		Unstandardized Coefficients B	Std. Error	dized Coefficients Beta	t	Sig.
1	(Constant)	40,317	1251,966		3,214	0,000
	ROA	3,693	1291,814	0,248	11,416	0,003
	ROE	-0,678	231,435	0,465	0,768	0,454
	EPS	2,488	11046,501	0,442	2,059	0,000

a. Dependent Variable: HARGA SAHAM
Sumber : Data Olahan SPSS V.29 (2024)

1. Return on Assets (ROA) has a significant influence on share prices. The results of the SPSS T test show that the variable It is concluded that H1 is accepted.
2. Return On Equity (ROE) does not significantly affect share prices. From the results of the SPSS T test, it was found that the variable from the test results, it was concluded that H2 was rejected.
3. Earnings Per Share (EPS) significantly influences share prices. The results of the T test using SPSS show that the X3 EPS variable influences stock prices significantly. Judging from the results, the calculated T value is 2.059 > the T table value is 1.746 and a significant value of 0.00 < 0.05 is obtained. It is concluded that H3 is accepted.

Table 13. Determination Coefficient Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.563ᵃ	.318	.190	1.535.384

a. Predictors: (Constant), EPS, ROA, ROE
Sumber : Data Olahan SPSS V.29 (2024)

Based on the SPSS test results from the table above, you can see that 0.563 or 56.3% is the value of R2. The results of this test show that the rise and fall in share prices are influenced by the factors Return on Asset (X1), Return on Equity (X2), and Earning PerShare (X3) with a percentage of 56.3% and are influenced by other factors not examined in this research model amounting to 43.7%.

IV. CONCLUSION AND DISCUSSION

Simultaneously Return on Asset (ROA), Return On Equity (ROE) and Earning Per Share (EPS) have no effect on share prices in banking sector companies listed on the Indonesia Stock Exchange. Partially, Return on Asset0 (ROA) has a significant influence on share prices in banking sector companies listed on the IDX. This research is in accordance with the theory which explains that the higher the value of Return on Assets, the greater the profit obtained by the company, the greater the profit the company produces, the greater the confidence of potential investors and can be used as a reference in making investment decisions. Due to the large number of people's trust in investing in companies, share prices can experience an increase in prices (Gumanti T.A.G, 2011).

Partially Return on Equity (ROE), has no significant effect on share prices, research on banking sector companies listed on the IDX. In accordance with research conducted by Yuni Maryanti (2022), it is stated that rising and falling share prices have no influence on the value of the Retun on Equity ratio. It is concluded that ROE is not a factor in decision making in investing by investors. Partially, Earning Per Share (EPS) influences share prices in banking sector companies listed on the IDX. This research statement is in line with the results of research by Yuni (2022) who stated the results of her research that EPS has a positive and significant influence on share prices, which means that the rise and fall in share prices are influenced by the rise and fall in the value of Earning Per Share. (Mayanti, 2022). Investors can see the EPS value, namely the profit from one share of a company, as an investor indicator before deciding to invest. EPS provides an illustration of the profit that investors will get from owning the number of shares.

For future research, it is recommended to consider conducting research using other ratio variables other than those already researched to find out whether there are other financial ratios that might influence the company's share price, and can use samples from different company sectors other than banking

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