Stock Price (Case Study: Banking Companies Listed on The Indonesia Stock Exchange for the 2018–2022 Period)

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Abstract

This study aims to determine the effect of return on assets, return on equity, debt-to-equity ratio, and earnings per share on stock prices. Data collection uses secondary data, namely the financial reports of banking companies listed on the IDX for the 2018-2022 period of 37 companies. The research method used is structural equation modeling least squares (SEM-PLS). The results of this study indicate that the debt-to-equity ratio has a negative but insignificant effect on stock prices. Meanwhile, return on assets, return on equity, and earnings per share have a positive but not significant impact on stock prices.

Keywords: ROA, ROE, DER, EPS, and Stock Prices

1. Introduction

Banking companies are companies that continue to experience growth. Even though the Indonesian economy is amid the Covid-19 pandemic, which has caused a significant slowdown in the global economy and world geopolitics. Indonesia's economic growth in the fourth quarter recorded a smaller negative growth of -2.19%. This also impacted the banking sector, where credit distribution experienced a slowdown due to reduced consumption and the policies of many business actors to restrain business expansion. Slowing credit demand impacts declining net profit margins (Bank Jago Annual Report, 2020: 72).

The financial sector is one of the sectors that has received a heavy hit due to the impact of Covid-19. The Composite Stock Price Index (IHSG) from the beginning of 2020 to March 20, 2020, aka just three months, the JCI fell from 6,300 to 3,900. Banking companies also experience this. In 2020, the pandemic will also affect Indonesia's giant banks. For example, the share price of Bank BCA (BBCA) fell from IDR 34,000/lot to IDR 23,675/lot (-30%), followed by Bank BRI (BBRI) which fell from IDR 4,500/lot to IDR 2,810/lot (-37%)), and Bank BNI (BBNI) fell from IDR 9,000/lot to IDR 3,600/lot (-60%).

Slowly, the banking industry was able to rise. Regarding capital, national banking has strong wealth with a ratio of 25.6% as of November 2021 (lps.go.id, 2021). The banking industry also created positive performance, with bank credit growth reaching 10.8% as of September 2022 (cnbcindonesia.com, 2022). Followed by investment growth as of September 2022 of 21.7% (keuangan.go.id, 2022) compared to the previous year of 3.2% (keuangan.kontan.co.id, 2022). Growing investment creates investor interest in investing because of the success of the company's performance. It can affect stock prices.

According to Jogiyanto (2017: 143), the stock price is the price of a share that occurs on the stock market at a certain time, determined by market participants and determined by the demand and supply of the shares concerned in the capital market. The average share price of banking companies in 2018-2022 has fluctuated. In 2019, there was an increase of 1,827 compared to the previous year in 2018, namely 1,686. However, in 2020, the average share price decreased to 1,676, but in 2021, the average share price increased again to 2,307, which is greater than in previous years. Meanwhile, in 2022, the average share price will again decrease by 1,733.

According to Brigham & Houston (2017: 145), the profitability ratio is used as a benchmark in determining stock prices because the profitability ratio is a ratio that measures a company's ability to generate profits at a certain level of sales, assets, and share capital. The profitability story can be measured using the return on assets (ROA) and equity (ROE). Hery (2020: 193) states that ROA measures management's effectiveness in managing its investments. The higher the value of return on assets means the better the company uses its assets to earn profits; with the increase in the value of ROA, the company's profitability increases, which has an impact on the stock returns obtained by investors will be even greater. This makes investors interested in buying company shares and affects increasing stock prices and returns (Kasmir, 2018: 201).

The higher the ROE, the better the company's performance in taking advantage of investment opportunities funded by shareholder equity. A high ROE will attract investors to invest in the company so that the demand for shares rises and will increase the company's stock price (Brigham & Houston, 2017: 150). The higher the ROE of a company it will directly guarantee the security of investment in the company (Van Horne & Wachowicz, 2012: 205).

Solvency is the ratio used to measure the extent to which a company's assets are financed by debt (Kasmir, 2019: 153). According to Henry (2018: 168), a high DER indicates that a company has a high amount of debt, so its dependence on equity financing using debt is also high. Brigham and Houston (2017: 162) explain that stock prices tend to decrease with a higher risk of using debt. The low DER value indicates that the company has a small chance, so investors prefer it, and its share price tends to increase.

Market ratios are used to measure the value of shares. The market ratio used in this study is earnings per share (EPS). The higher this ratio in a company means the greater the payments that investors will receive from the investment, so for EPS companies, this can have a positive impact on its share price for the market (Siddiq et al., 2020: 73). The greater the level of the company's ability to generate profit per share for the owner, the more profitable and attractive investment in the company. This will positively affect stock prices (Susilo, 2015: 84).

Based on the background described, the researcher is interested in researching "The Influence of Profitability, Solvability, and Market Ratio to Stock Prices (Case Study: Banking Companies Listed on the Indonesia Stock Exchange Period 2018 - 2022)".

2. Literature

2.1 Stock Prices

According to Jogiyanto (2017: 143), the stock price is the price that occurs on the stock market at a particular time, and market participants determine the share price. The high or low cost of these shares is determined by the demand and supply of these shares in the capital market.

Meanwhile, according to Hartono (2018: 157), the share price is the price of a claim that occurs on the stock market at a particular time, determined by market participants and the demand and supply of the shares concerned in the capital market.

2.2 Return on Assets

According to Sudana (2019:22), return on assets shows the company's ability to use all of its assets to generate profit after tax. This ratio is essential for management to evaluate the effectiveness and efficiency of the company's leadership in managing all of the company's assets. The greater the ROA, the more efficient use of the company's assets, which means the higher the profit the company gets from its assets.

2.3 Return On Equity

Return on equity (ROE) shows the proportion of using debt to finance their investment. By knowing the return on equity (ROE), investors can see the balance between risk and the rate of return on their investment. According to Ridwan (2018: 242), return on equity (ROE) also has the most significant benefit of financing a loan, namely through tax deductions obtained from the government, which allows interest on loans to be reduced in calculating taxable income.

2.4 Debt To Equity Ratio

According to Hery (2018: 168), the debt-to-equity ratio (DER) measures the proportion of debt to capital. This ratio helps know the size of the comparison between the amount of funds provided by creditors and the amount of funds originating from company owners. The higher the DER, the greater the risk faced, and investors will ask for a higher profit level. Creditors may provide interest that is large enough so that the company's ability to get money from outside sources is limited.

2.5 Earning Per Share

According to Darmadji & Fakhrudin (2012: 154), defining earnings per share (EPS) is a ratio that reflects the company's ability to generate profits for each outstanding share.

3. Methods

This type of research uses associative research with a quantitative approach. The population in this study were banking companies listed on the Indonesia Stock Exchange (IDX), totaling 47 companies with a selected sample of 37 companies. The analytical method used in this research is structural equation modeling-partial least squares (SEM-PLS) using SmartPLS software. Descriptive statistics is used to find the strength of the relationship between variables through correlation analysis, make predictions with regression analysis, and make comparisons by comparing the average sample data and population.

4. Research Results

4.1 Descriptive Statistics

Table 1: Descriptive Statistics Results

	ROA	ROE	DER	EPS	STOCK PRICE
Minimum	-18,04	-123,93	19,29	-114	50
Maximum	4,14	20,94	1607,86	1159	16000
Mean	0,280	2,208	524,463	106,756	1847,119
Std. Deviation	2,527	14,713	281,125	202,857	2556,187

Source: The data is processed by researchers (2023)

4.2 Average ROA, ROE, DER, EPS, and Stock Price

The following presents the average of ROA, ROE, DER, EPS, and stock prices to determine the growth rate of each of these variables:

Table 2: Average ROA of Banking Companies

	2018	2019	2020	2021	2022
ROA	0,65	0,40	0,04	-0,38	0,69

Source: Researchers process the data (2023)

Table 3: Average ROA of Banking Companies

Years	Net Profit
2018	126.986.078.051.238
2019	132.742.870.443.730
2020	84.431.355.287.775
2021	122.576.225.978.291
2022	185.423.903.032.102

Source: Researchers process the data (2023)

Table 4: Average Total Assets of Banking Companies

Years	Total Assets
2018	6.402.361.497.775.450
2019	6.958.654.829.127.240
2020	7.750.588.635.783.200
2021	8.440.622.171.141.480
2022	9.222.217.826.832.350

Source: Researchers process the data (2023)

Table 5: Criteria for Determining Banking Company ROA Ratings

Information	Criteria	2018	2019	2020	2021	2022
Very Healthy	ROA >1,5%	12	11	4	8	13
Healthy	1,25% < ROA ≤ 1,5%	4	3	3	3	2
Healthy Enough	0,5% < ROA ≤ 1,25%	15	12	20	16	15
Unwell	0% < ROA ≤ 0,5%	1	5	3	3	3
Not healthy	ROA ≤ 0%	5	6	7	7	4

Source: Researchers process the data (2023)

Table 6: Average ROE of Banking Companies

	2018	2019	2020	2021	2022
ROE	3,76	3,16	1,68	-1,75	4,19

Source: Researchers process the data (2023)

Table 7: Average Total Equity of Banking Companies

Years	Total Equity
2018	964.547.075.183.808
2019	1.088.880.367.351.860
2020	1.124.818.390.673.120
2021	1.277.494.331.161.680
2022	1.387.728.165.464.710

Source: Researchers process the data (2023)

Table 8: Banking Company ROE Rating Criteria

Information	Criteria	2018	2019	2020	2021	2022
Very Healthy	ROE > 15%	2	2	1	3	5
Healthy	12,5% < ROE ≤ 15%	4	4	3	4	2
Healthy Enough	05% < ROE ≤ 12,5%	13	9	10	9	12
Unwell	0% < ROE ≤ 5%	13	16	16	14	14
Not healthy	ROE ≤ 0%	5	6	7	7	4

Source: Researchers process the data (2023)

Table 9: Average DER of Banking Companies

	2018	2019	2020	2021	2022
DER	567,81	538,64	542,43	505,00	468,43

Source: Researchers process the data (2023)

Table 10: Average Total Debt of Banking Companies

Years	Total Debt
2018	5.287.395.216.113.640
2019	5.571.632.211.046.370
2020	6.353.663.029.498.090
2021	6.916.275.529.812.810
2022	7.569.569.796.441.640

Source: Researchers process the data (2023)

Table 11: Average Banking Company EPS

	2018	2019	2020	2021	2022
EPS	120,81	118,82	66,09	94,98	133,09

Source: Researchers process the data (2023)

Table 12: Average Number of Outstanding Shares of Banking Companies

Years	Number of Shares Outstanding
2018	928.124.992.513
2019	944.427.360.671
2020	986.108.639.619
2021	1.141.688.056.748
2022	1.160.883.239.594

Source: Researchers process the data (2023)

Table 13: Average Stock Price of Banking Companies

Years	2018	2019	2020	2021	2022
Stock Price	1.686	1.827	1.676	2.307	1733

Source: Researchers process the data (2023)

4.3 Outer Model Results (Measurement Models)

Table 14: Validity Test Results Based on Outer Loadings

	DER	EPS	STOCK PRICE	ROA	ROE
DER	1,000				
EPS		1,000			
STOCK PRICE			1,000		
ROA				1,000	
ROE					1,000

Source: Researchers process the data (2023)

Based on the outer loading validity test, it is known that all external loading values are > 0.7, which means that they have met the validity requirements based on the loading value.

Table 15: Validity Test Results Based on AVE

	Average Variance Extracted (AVE)
DER	1,000
EPS	1,000
STOCK PRICE	1,000
ROA	1,000
ROE	1,000

Source: Researchers process the data (2023)

The recommended AVE value is above 0.5. Based on the test results, it is known that all AVE values are > 0.5, which means that they have fulfilled the validity requirements based on AVE.

Table 16: Validity Test Results Based on Fornell and Larcker Criterion

	DER	EPS	STOCK PRICE	ROA	ROE
DER	(1,000)				
EPS	0,105	(1,000)			
STOCK PRICE	-0,015	0,102	(1,000)		
ROA	0,039	0,433	0,250	(1,000)	
ROE	0,032	0,330	0,265	0,886	(1,000)

Source: Researchers process the data (2023)

Information:

The value between "()" is the square root of AVE

It is known that the AVE square root value for each latent variable is greater than the correlation value between the latent variable and other latent variables. So, it is concluded that it meets the requirements of discriminant validity.

Table 17: Validity Test Results Based on HTMT

	DER	EPS	STOCK PRICE	ROA	ROE
DER					
EPS	0,105				
STOCK PRICE	0,015	0,102			
ROA	0,039	0,433	0,250		
ROE	0,032	0,330	0,265	0,886	

Source: Researchers process the data (2023)

Based on the results of the discriminant validity test using the HTMT approach, it is known that all values are <0.9, which means that it is concluded that they have met the requirements for discriminant validity based on the HTMT approach.

Table 18: Reliability Test Results Based on Composite Reliability

	Composite Reliability
DER	1,000
EPS	1,000
STOCK PRICE	1,000
ROA	1,000
ROE	1,000

Source: Researchers process the data (2023)

Based on the test, it is known that the CR value is > 0.7, which means that it meets the reliability requirements based on composite reliability.

Table 19: Reliability Test Results Based on Cronbach's Alpha

	Cronbach's Alpha
DER	1,000
EPS	1,000
STOCK PRICE	1,000
ROA	1,000
ROE	1,000

Source: Researchers process the data (2023)

Based on the results of the Cronbach's alpha test, it is known that all CA values are > 0.7, which means that they meet the reliability requirements based on Cronbach's alpha.

Fig 1: Validity Test Results Based on Outer Loadings
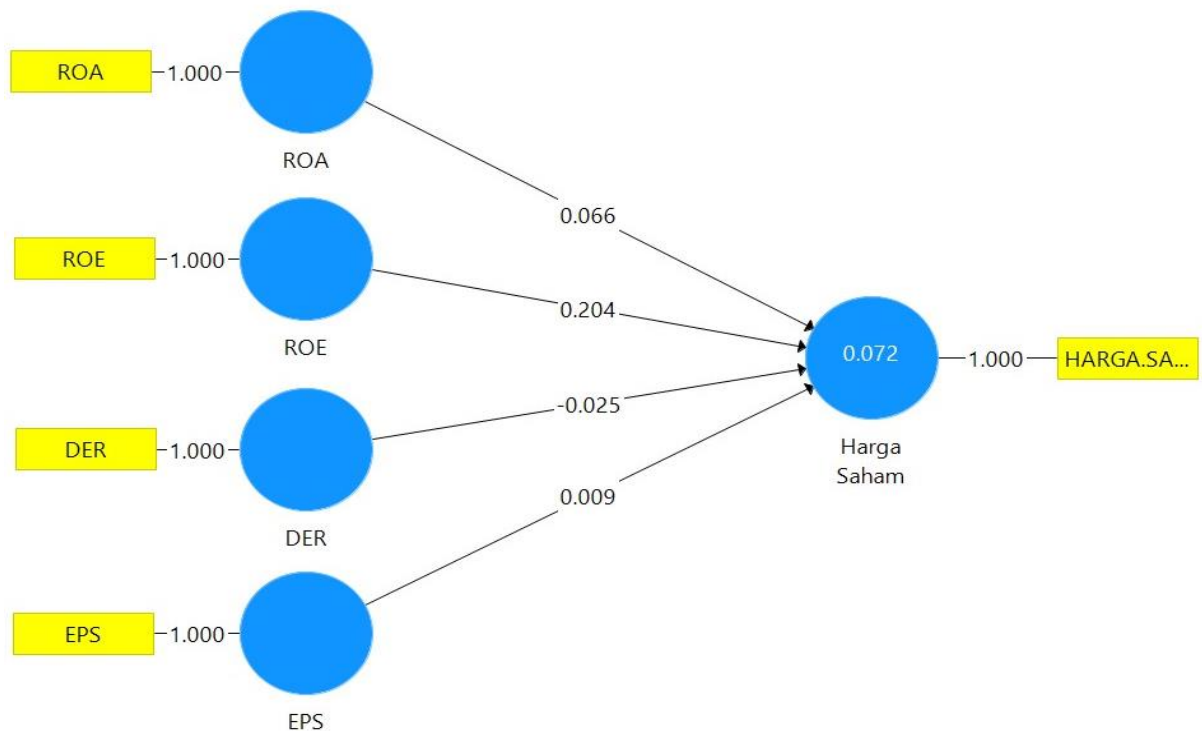
Source: Researchers process the data (2023)

4.4 Inner Model Result (Structural Models)

Table 20: Path Coefficient Test Results & Significance of Direct Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
DER -> STOCK PRICE	-0,025	-0,023	0,064	0,388	0,698
EPS -> STOCK PRICE	0,009	-0,018	0,108	0,081	0,935
ROA -> STOCK PRICE	0,066	0,094	0,173	0,384	0,701
ROE -> STOCK PRICE	0,204	0,216	0,164	1,245	0,214

Source: Researchers process the data (2023)

Table 21: Adjusted R-Square Test Results

	R-*square*	*Adjusted* R-*square*
STOCK PRICE	0,072	0,051

Source: Researchers process the data (2023)

Based on this information, the adjusted R-square value of the stock price is 0.051, which means that ROA, ROE, DER, and EPS can explain the share price of 5.1%. The remaining 94.9% is explained by other factors not present in the study.

Table 22: Q-Square Test Results

	SSO	SSE	Q² (=1-SSE/SSO)
DER	185.000	185.000	
EPS	185.000	185.000	
STOCK PRICE	185.000	178.489	0.035
ROA	185.000	185.000	
ROE	185.000	185.000	

Source: Researchers process the data (2023)

Based on the test results, the Q-square value of the stock price variable is equal to 0.035, which means the low effect or accuracy of predicting changes in exogenous variables on endogenous variables is low.

Table 23: SRMR Test Results

	Saturated Model	*Estimated Model*
SRMR	0,000	0,000

Source: Researchers process the data (2023)

Based on the table above, the estimation results for the model are 0.000 <0.08, which means that the model has an acceptable fit.

4.5 Discussion

After the SEM-PLS analysis test has been carried out, the results of the calculations that have been carried out will be discussed. The trial aims to answer the existing hypotheses so that it can be seen how each independent variable affects the dependent variable.

1. Effect of Return on Assets on Stock Prices

The research results found that ROA has a coefficient value of 0.066 and a P-value of 0.701, which is greater than 0.05. Thus, the ROA variable partially has a positive but insignificant effect on stock prices. From the results of 185 observational data, 26% were included in ROA with very healthy criteria, 8% included in fit criteria, 42% with moderately healthy bars, 8% with unhealthy standards, and 16% included in harmful measures. That is, the level of ROA for banking companies is included in the requirements of being quite healthy.

From the results of the average calculation, it is known that the average net profit is smaller than the average total assets. This shows that the growth in net profit generated tends to be small compared to the value of investments, which has increased, causing the value of ROA to fluctuate. If the company can be better at managing productive assets such as securities and maximizing the credit provided, it can increase profits for the company, which will then increase ROA. This causes investors to invest their capital not only looking at the asset factor because asset growth only sometimes yields the value of the company's net profit to increase. Thus, it does not impact the increase or decrease in stock prices.

2. Effect of Return On Equity on Stock Prices

The research results found that ROE has a coefficient value of 0.204 and a P-value of 0.214, which is greater than 0.05. Thus, the ROE variable partially has a positive but insignificant effect on stock prices. From the results of 185 observational data, 7% were included in the ROE with very healthy criteria, 9% with fit criteria, 29% quite healthy, 39% unhealthy, and the remaining 16% with harmful standards. This means that the ROE level for banking companies for the 2018 – 2022 period is included in the unhealthy criteria.

The results of the average calculation show that the average total equity is greater than the average net profit. This indicates that the company's ability to generate earnings by utilizing its capital has yet to be managed properly. The company has been unable to use its resources effectively and efficiently, so the profit earned is from something other than the invested capital. This means the company can only generate profits using its money if it depends on investor capital and outside loans. This causes investors not to assess the size of ROE as an investment consideration so it does not affect stock prices.

3. Effect of Debt To Equity Ratio on Stock Prices

The research results found that DER has a coefficient value of -0.025 and a P-value of 0.698, which is greater than 0.05. Thus, the DER variable partially has a negative but insignificant effect on stock prices. From the results of 185 observational data, the level of debt to equity ratio (DER) in banking companies for the period 2018 - 2022 has not met banking industry standards, which is less than 90% (Kasmir, 2016:57). The average DER value of banking companies has a value of more than 90%.

The calculation results show that the average total equity and debt have increased. This indicates that the company has a high amount of debt, so its dependence on equity financing using debt is also high. However, investors are generally familiar with credit matters compared to banking companies. Therefore, investors tend to know already that the DER ratio will tend to be large for banks. This was confirmed by increased credit in various sectors, such as mortgages (mortgages). Incessant marketing and promotions in glory are increasingly attracting customers to use credit facilities, especially at large banks. Therefore, a high DER in banking companies does not cause stock prices to decrease, and vice versa because investors do not see the high and low value of DER in banking companies to invest.

4. Effect of Earning Per Share on Stock Prices

The research results found that EPS has a coefficient value of 0.009 and a P-value of 0.935, which is greater than 0.05. Thus, the EPS variable partially has a positive but insignificant effect on stock prices. From the results of 185 observational data, the level of earnings per share (EPS) in banking companies for 2018 - 2022 cannot be good. This can be seen in the average EPS value of banking companies, which has a fluctuating value; this value does not grow positively, is inconsistent, and is unstable.

This shows that the company's ability to generate profits per share tends to be small. This is because a decrease in net profit results in decreased earnings per share. The reduction in net profit was due to the company not being able to optimize the company's income from interest and non-interest and not making efficiency on the company's operational costs.

5. Conclusion

In making investment decisions, financial statement analysis is essential for investors. However, there are other bases for decision-making. Because the results of this study indicate that financial statement analysis has no significant effect on stock prices. In addition, from the results of this study, it is known that the average growth of ROA, ROE, DER, EPS and Stock Prices in banking companies are still fluctuating. Therefore, the company should further improve the management of the use of assets by utilizing their capital so that the resulting net profit is more optimal.

In this study, ROA, ROE, DER and EPS can only explain the stock price variable of 5.1%. So, for future researchers who conduct similar research, it is better to add other variables such as activity ratios, company size, and economic factors such as inflation rates, interest rates, etc.

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