

THE INFLUENCE OF NPM, EPS, TATO ON STOCK PRICE OF BANKING COMPANIES LISTED ON THE IDX FOR THE 2020-2022 PERIOD

Irana Liani RAHAYU¹, Zahrian FARADIZA², Fauziah Nuur Nabilah YUSRIYYAH³

^{1,2,3}Faculty of Management, University of Muhammadiyah Surabaya, Indonesia

Corresponding author: Irana Liani Rahayu

E-mail: irana.liani.rahayu-2020@fe.um-surabaya.ac.id

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Abstract:

In today's business world, which is developing rapidly, many investors are interested in investing their funds in stocks because it promises higher returns, both from dividends and capital gains. Before investing, an investor must know and choose which stocks can provide optimal returns for the funds invested. The capital market is a place for buying and selling transactions of various long-term instruments, including stocks. This study aims to empirically test and prove the effect of NPM, EPS, and TATO on stock prices for the 2020-2022 period. The following research uses a quantitative approach and multiple linear regression analysis with data processing using the tools of the Stata 15 program. The sampling method uses a purposive sampling technique. The sample of this research consisted of 18 companies. The results of the study by conducting the t-test showed that the NPM and TATO variables did not have a significant effect on stock prices, with an NPM probability value of 0.224; TATO with a probability value of 0.807, while the EPS variable has a significant effect on stock prices, with a probability value of 0.034, meaning that this value when compared to the α value, which is 0.05, is less significant. The f test states that the NPM, EPS, and TATO variables simultaneously influence stock prices based on a probability value of 0.0058, which means it is smaller than α of 0.05.

Keywords: NPM, EPS, TATO, Stock price

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INTRODUCTION

In today's business world, which is developing rapidly, many investors are interested in investing their funds in stocks because it promises higher returns, both from dividends and capital gains. Before investing, an investor must know and choose which stocks can provide optimal returns for the funds invested. The capital market is a place for buying and selling transactions of various long-term instruments, including shares.

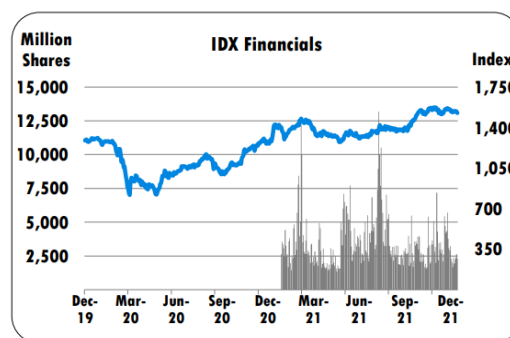
Profitability ratios show a company's ability to earn profits over time. They can provide an overview of the company's capabilities, one of which is measured using NPM so that if the value of the profitability ratio increases, it will increase the attractiveness of investors investing in stocks (Khasanah et al., 2022).

A stable stock price is also a reference for investors to invest in a company. One ratio analysis can measure or be able to make decisions for investors to find out whether a company's performance is good or not by looking at data from several variables, including NPM, which is the ability of management effectiveness in carrying out its operations. In addition, there is Earning Per

Share (EPS), a reference for investors before deciding to invest because the results will determine how the company earns profits according to the shares it owns. Meanwhile, suppose a company wants to measure the effectiveness of resource utilization. In that case, it can use the activity ratio used as Total Asset Turnover (TATO), where the higher the TATO ratio means the more efficient use of all assets in generating sales or income. TATO is essential for creditors and company owners because it efficiently uses company assets (Nazariah et al., 2021).

Stock prices can be influenced by the company's financial performance, which is a function of the company's value. Therefore, investors' decisions in buying and selling shares are strongly influenced by the micro and macro factors of the company.

The Covid-19 pandemic has also been one of the most significant impacts of changes to the stock price index. The research results on the stock market, and the domestic sector influences exchange rates in tourism and social and economic conditions. The movement of foreign investor funds flows become more varied regarding the domestic stock price index due to the Covid-19 pandemic, which has impacted Indonesia's economy. (Arthamevia et al., 2020).



Source: IDX Statistics, 2020

Figure 1. Statistical Quarter Trading Charts

As seen in Figure 1 in the chart above, the share price experienced a drastic decline in March 2020, the month that Covid-19 had just entered Indonesia.

After the Covid-19 pandemic ended, entrepreneurs in the banking sector decided to pay more attention to the company's stock price index. The banking industry is a crucial institution that helps businesses obtain the necessary funds for investment. It is worth noting that since 2022, the price index has improved significantly or even increased compared to previous years. The banking industry is a crucial institution that helps businesses obtain the necessary funds for investment. It is worth noting that since 2022, the price index has improved significantly or even increased compared to previous years.

Quoted from kontan.co.id - Jakarta, stock price movements in banking companies throughout 2022 will still generate profit for investors even though the movement toward the end of the year tends to decline. PT Bank Mandiri Tbk experienced a 43% increase, and PT Bank Negara Indonesia Tbk increased by 38.15. These stocks beat PT Bank Central Asia Tbk and PT Bank Rakyat Indonesia Tbk, which only increased by 17.47% and 19.9%, respectively.

Large bank stocks have been moving upward since July as credit continues showing increased expansion and financial performance is increasing. Research & Consulting Manager of PT Infovesta Utama Nicodimus Kristiantoro said the performance of BBKA and BBRI shares was

lower than the other two big banks because, technically, they were showing an overbought direction, and the increase was already very high.

Signaling Theory. Signal theory suggests that companies provide financial and non-financial information to become a signal or cue regarding the company's condition (Brigham & Houston, 2010). Company signals are divided into good and bad news; of course, the higher NPM shows a positive signal between the comparison of profit after tax with sales. The higher it is, the more investors will be interested. If the EPS value increases, the demand for company shares will increase from potential investors so that shares in the capital market increase. Furthermore, high TATO can be said that the company's turnover can obtain effective and efficient sales (Suryasari & Artini, 2020). So that investors will like it if the TATO value is higher, and they can manage their assets optimally.

Stock price assesses the shareholders' wealth (Brigham & Houston, 2010). High stock prices reflect good management performance and provide a high rate of return for shareholders. Stock price fluctuations are caused by many variables that influence it both internally and externally. Companies that can sustainably increase their share prices will be investors' goal in providing funds to companies (Nur Anisa et al., 2022).

Net Profit Margin (NPM). NPM is a financial ratio that measures the percentage of profit a company earns concerning its income. Expressed as a percentage, it shows how much profit the company generates for every dollar of revenue. To measure NPM can be calculated using the following formula:

$$NPM = \frac{\text{Net Profit After Tax}}{\text{Sale}}$$

Earnings Per Share (EPS). EPS can assess the success of corporations in generating high returns. This ratio gives investors a complete picture of the company's prospects because the higher the EPS, the greater the dividends the shareholders receive.

$$NPM = \frac{\text{Net Profit After Tax}}{\text{Number of Outstanding Shares}}$$

TATO is a ratio used to measure a company's intensity in using its assets or to show the effectiveness of a company's management in managing its assets to gain profit by comparing sales to the average fixed asset. By using the formula:

$$TATO = \frac{\text{Net sales}}{\text{Total Asset}}$$

METHODS

This research is quantitative. The type of data used in this study is secondary data in the form of annual financial reports and year-end closing stock prices of banking companies listed on the Indonesia Stock Exchange for the 2020-2022 period. This data was obtained from the official website of the Indonesia Stock Exchange www.idx.co.id. The population in this study is a banking company listed on the Indonesia Stock Exchange. The total population is 45 companies. The research sampling criteria are Banking companies listed on the Indonesia Stock Exchange during 2020-2022, publishing annual financial reports consecutively from 2020-2022, and reporting consecutive stock prices from 2020-2022. Based on predetermined criteria, 18 companies meet the criteria to be used as research samples with an observation period of 3 years. The sampling

technique used was purposive sampling, so the total data was 148. Data analysis in this study used multiple regression.

RESULT AND DISCUSSION

This research aims to determine whether Net Profit Margin (NPM) affects stock prices. Does Earn per Share (EPS) affect stock prices? Does Total Assets Turnover (TATO) affect stock prices? Moreover, do Net Profit Margin (NPM), Earning per Share (EPS), and Total Assets Turnover (TATO) affect stock prices?

Performing panel data regression analysis aims to achieve this research, so the steps taken are as follows.

Table 1. Chow Test Result

Source	SS	df	MS	Number of obs	= 54
Model	51.70771	20	2.5853855	F (20, 33)	= 9.90
Residual	8.61725389	33	.261128906	Prob > F	= 0.0000
Total	60.3249639	53	1.13820687	R-squared	= 0.8572
				Adj R-squared	= 0.7706
				Root MSE	= .51101

Source: Processed by Author Output Stata15, 2023

The Chow test proves that the Common Effect Model (CEM) or Fixed Effect Model (FEM) model is suitable for use. According to Table 1, the Chow test results above prove that the Prob > F value is $0.0000 < \alpha (0.05)$, and it is concluded that the selected Fixed Effect Model (FEM).

Table 2. Hausman Test Result

	(B) FEM	(B) REM	(b-B) Difference	Sqrt (diag(V_b-V_b)) S. E.
LnNPM	.3065894	.237908	0.686814	.2210145
EPS	-.1770516	3.052575	-3.229627	3.229973
TATO	9.75942	7.024165	2.735255	2.58995

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$\chi^2(3) = (b-B)'[(V_b - V_B)^{-1}](b-B)$

= 4.57

Prob> $\chi^2 = 0.2065$

Source: Processed by Author Output Stata15, 2023

The Hausman test proves a suitable Random Effect Model (REM) or Fixed Effect Model (FEM). According to Table 2, the Hausman test results above determined that the Prob > χ^2 value was $0.2065 > \alpha (0.05)$, and it was concluded that the Random Effect Model (REM) was selected.

Table 3. LM Test Result

Estimated results:		
	Var	sd = sqrt (Var)
LnHarga~m	1.138207	1.066868
e	.2611289	.5110077
you	.7377193	.8589059
Test: Var(u) = 0		
	<u>chibar2(01)</u>	= 22.36

$$\text{Prob} > \text{chibar2} = 0.0000$$

Source: Processed by Author Output Stata15, 2023

The Lagrange multiplier test is used to prove the Common Effect Model (CEM) or Random Effect Model (REM) model, which is suitable for use. According to Table 3, the LM test results above determined that the $\text{Prob} > \text{chi2}$ value was $0.000 < \alpha (0.05)$, and it was concluded that the Random Effect Model (REM) was selected. According to the selection of the model, it is explained that the panel data regression analysis uses the Random Effect Model (REM) as its approach.

Descriptive Statistical Analysis. Descriptive statistics is the process of processing research data that aims to describe the characteristics of data from a sample numerically and visually in tabulation format to make it easier to understand.

Table 4. Statistic Test Result

stats	LnNPM	EPS	TATO	LnHarg~m
min	1.690096	.02	.05	5.429346
max	4.032834	.2	.14	10.42969
mean	2.990695	.0903704	.0677778	7.613962
sd	.6154348	.0513943	.0160972	1.066868

Source: Processed by Author Output Stata15, 2023

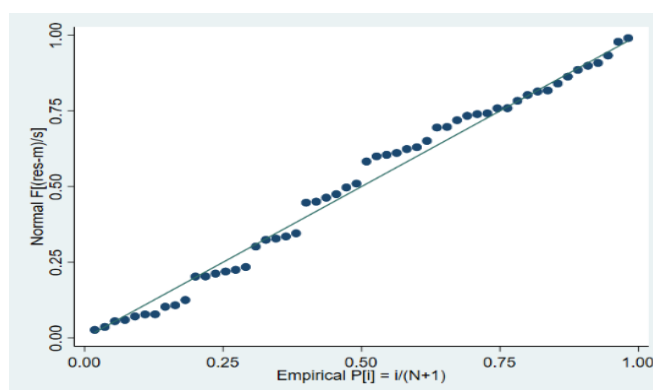
Net Profit Margin has a minimum value of 1.690096, a maximum value of 4.032824, and a mean value of 2.990695 with a standard deviation of 0.6154348. The standard deviation value smaller than the mean means that the data deviation is slight to show good data.

Earnings per share have a minimum value of 0.02, a maximum value of 0.2, and a mean value of 0.0903704 with a standard deviation of 0.0513943. The standard deviation value smaller than the mean means that the data deviation is slight to show good data.

Total Assets Turnover has a minimum value of 0.05, a maximum value of 0.14, and a mean value of 0.0677778 with a standard deviation of 0.0160972. The standard deviation value smaller than the mean means that the data deviation is slight to show good data.

The share price has a minimum value of 5.429346, a maximum value of 10.42969, and a mean value of 7.613962 with a standard deviation of 1.066868. The standard deviation value smaller than the mean means that the data deviation is slight to show good data.

Normality test. The normality test determines whether the distribution of the regression model's residuals is typically distributed (Bramesta, 2016).



Source: IDX Statistics, 2020

Figure 2. Output Normal Probability Plots

Table 5. Kurtosis Skewness Test Output
Skewness/Kurtosis tests for Normality

Variable	Obs	Pr (Skewness)	Pr (Kurtosis)	Adj chi2(2)	Prob>chi2
res	54	0.9646	0.3745	0.82	0.6647

Source: Processed by Author Output Stata15, 2023

From the normality test results obtained, based on Figure 2, the points or distribution of residuals is close to the diagonal line, meaning the regression model is typically distributed. The results of the Skewness Kurtosis test in Table 5 confirm it. The Chi-Square is 0.82, or it can be seen from the Probability Chi-Square is 0.6647, which means > 0.05 indicates that the regression model is usually distributed.

Multicollinearity Test. One of the assumptions in producing a good regression model is the absence of symptoms of multicollinearity between the independent variables. The multicollinearity test tests whether the regression model finds a correlation between the independent variables. Multicollinearity can be seen by paying attention to the tolerance value and variance inflation factor (VIF). The tolerance value limit is 0.1, and the VIF value limit is 10; if the tolerance value is less than 0.1 and the VIF value is greater than 10, it can be concluded that multicollinearity occurs and the model cannot be used (Bramesta, 2016).

Table 6. Multicollinearities Test Output

Variable	VIF	1/VIF
LnNPM	1.52	0.656731
EPS	1.47	0.680757
TATO	1.04	0.957461
Mean VIF	1.35	

Source: Processed by Author Output Stata15, 2023

In Table 6 of the multicollinearity test output above, the tolerance value is > 0.1 , and the VIF value is < 10 for all independent variables. So, there are no symptoms of multicollinearity in the regression model.

Heteroscedasticity Test. According to the heteroscedasticity test, $P > |t|$ is more significant than 0.05. It was concluded that the data did not experience heteroscedasticity in the regression model used.

Table 7. Heteroskedasticity Test Output

Source	SS	df	MS	Number of obs	= 54
Model	.36539647	3	.121798823	F (3, 50)	= 0.43
Residual	14.1932266	50	.283864533	Prob > F	= 0.7331
Total	14.5586231	53	.274691002	R-Squared	= 0.0251
				Adj R-squared	= -0.0334
				Root MSE	= .53279

abs_res	Coef.	Std. Err.	t	P> t	Beta
LnNPM	-.0780163	.1467377	-0.53	0.597	-.0916105
EPS	-.5973724	1.725865	-0.35	0.731	-.0585784
TATO	-3.568313	4.646299	-0.77	0.446	-.109595

_Cons	1.305185	.5411592	2.41	0.020	.
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Source: Processed by Author Output Stata15, 2023

In Table 7 of the heteroscedasticity test output above, $P > |t|$ greater than 0.05. for all independent variables. So, the data above meets the traditional assumptions of the heteroscedasticity test.

Table 8. Panel Data Regression Results from Random Effect Model (REM)

				Number of obs	= 54
				F (3, 50)	= 4.69
				Prob > F	= 0.0058
				R-Squared	= 0.2196
				Adj R-squared	= 0.1728
				Root MSE	= .97034
Source	SS	df	MS		
Model	13.2467687	3	4.41558957		
Residual	47.0781951	50	.941563903		
Total	60.3249639	53	1.13820687		

abs_res	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
LnNPM	.3292838	.2672459	1.23	0.224	-.2074953	.8660629
EPS	6.835962	3.143231	2.17	0.034	.5225971	13.14933
TATO	-2.082726	8.462067	-0.25	0.807	-19.07929	14.91384
_Cons	6.152569	.9855857	6.24	0.000	4.172962	8.132176

Source: Processed by Author Output Stata15, 2023

T Test. Based on Table 8, it can be concluded that NPM and TATO do not have a significant effect on stock prices; the value of $P > |t|$ of NPM is 0.224, and TATO is 0.807, meaning that this value, when compared with the alpha value, which is 0.05, has greater significance. While EPS significantly affects stock prices, the $P > |t|$ of EPS is 0.034, meaning that this value, when compared to the alpha value, which is 0.05, has less significance.

Test f. Based on Table 8, it can be concluded that the independent variables (NPM, EPS, and TATO) simultaneously affect the dependent variable (Share Price), based on the value of Prob > F, which is 0.0058, which means it is smaller than α of 0.05.

Effect of Net Profit Margin (NPM) on stock prices. Based on the partial test results, the net profit margin has no effect on stock prices in banking companies in 2020-2022. In this situation, it can be seen from the regression results, which show that the probability value of the net profit margin is 0.224. This value has a value above the significance of 0.05. These results indicate that the net profit margin does not affect stock prices.

The Effect of Earning Per Share (EPS) on Stock Prices. Based on the partial test results, earnings per share (EPS) affected stock prices in banking companies in 2020-2022. In this situation, it can be seen from the regression results, which show that the probability value of earning per share is 0.034. This value is below the significance of 0.05 and has a coefficient of 6.835962. These results indicate that earnings per share (EPS) affect stock prices.

Effect of Total Assets Turnover (TATO) on stock prices. Based on the results of partial testing, total assets turnover (TATO) has no significant effect on stock prices in banking companies in 2020-2022. In this situation, it can be seen from the regression results, which show that the probability value of total assets turnover is 0.807. This value has a value above the significance of 0.05. These results indicate that total assets turnover (TATO) does not affect stock prices.

Effect of Net Profit Margin, Earning Per Share, Total Assets Turnover on stock prices. Based on the results of simultaneous testing of net profit margin, earnings per share, and total assets turnover affect stock prices in banking companies in 2020-2022. In this situation, it can be

seen from the regression results show that the significance value (F-statistic) is 0.0058, which means it is smaller than α 0.05.

CONCLUSION

This study aims to influence the net profit margin, earnings per share, and total assets turnover on the stock prices of banking companies listed on the IDX in 2020-2022. The net profit margin and total assets turnover variables do not affect the stock prices of banking companies listed on the IDX in 2020-2022. The results of the partial test show that the earnings per share variable affect the stock prices of banking sector companies listed on the IDX in 2020-2022. The results of the simultaneous test show that the variables net profit margin (NPM), earnings per share (EPS), and total asset turnover (TATO) affect stock prices in banking companies listed on the IDX in 2020-2022.

Suggestion. By discovering the effect of the variables Net Profit Margin (NPM), Earning Per Share (EPS), and Total Asset Turnover (TATO) on banking company stock prices for the period 2020-2022, it is hoped that it can add to the understanding of the effect of variable x (NPM, EPS, TATO) on variable y (stock price). For subsequent research, this research can be used as a reference, support, benchmark, and differentiator, and it is desirable to increase other variables that can become indicators in continuing research. It is because some variables still need to be found by researchers with income links.

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