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The Impact of Fundamentals and Technical Analysis on Stock Returns in Banking Companies Listed for Indonesia Stock Exchange 2013-2022

Muhammad Rizki Alwi Ardana[1], Wisnu Panggah Setiyono[2], Sriyono[3)]
Study Program of Management Faculty Of Business, law and social sciences, Universitas Muhammadiyah Sidoarjo
Email: *[1)] rizkialwi.ar@gmail.com, [2)] wisnu.setiyono@umsida.ac.id, [3)] sriyono@umsida.ac.id*

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ABSTRACT

This study aims to provide understanding, knowledge, and testing of the Effect of Fundamental Factors Analysis and Technical Analysis on Stock Returns of Banking Companies listed on the Indonesia Stock Exchange for 2013-2022. The sampling technique used purposive sampling using the documentation model and data collection totaling 7 banking companies listed on the Stock Exchange and 70 total samples of banking companies in the 10-year time frame. The data analysis technique used in the data processing software is Eviews 12, using a linear regression model. The results of this study from the tests that have been carried out show that fundamental components such as price to sales ratio do not affect Stock Returns, Earnings per Share has an effect on Stock Returns, Cash Flow From Operation affects Stock Returns and technical components such as Trading Volume affects Stock Returns, and Market Capitalization does not affect Stock Returns.

INTRODUCTION

Based on some of the data obtained, there was a decrease in returns on several banks in the first trading session of 2023, experiencing a large enough decline, as explained in Table 1:

Table 1. Decrease in Bank Stock Returns

Emiten	Stock Code	Last Price	Price Change	Stock Return
Bank Mandiri	BMRI	9.500	-2,31%	-4%
Bank Rakyat Indonesia	BBRI	4.530	-1,31%	-8%
Bank Central Asia	BBCA	8.375	-0,89%	-2%
Bank Negara Indonesia	BBNI	8.975	-0,28%	-3%
Sumber: RTI				

Table 1 explains that the decline in stock returns was high among the four banking issuers presented. Bank Mandiri (BMRI) experienced the most significant decline in return, followed by three other stock issuers. This decline reflects the less optimistic market sentiment towards the banking sector in that period because it has yet to stabilize fully in the era of Society 5.0 (Dwi, 2023). Several factors can influence the decline in stock returns from company fundamentals and capital market developments that are considered unsatisfactory. However, even though financial sector stocks have slowed down for some time, financial sector stocks, especially banking stocks, are considered to have good prospects in the future (Nurhaliza Putri, 2023). Investors can use two analyses in stock investment to obtain the desired return, namely fundamental and technical analysis. Fundamental analysis is an activity carried out by analyzing the company's fundamental internal data and external factors related to the company in its analysis activities. (I. S. Putra & Elisabet, 2022). According to (Andari & Bakhtiar, 2019), the company's fundamentals using the price to sales ratio can reflect market developments and other company sales, the composition of this ratio can measure changes in stock value, which can affect fluctuations in stock returns.

Another ratio that provides returns for shareholders can be seen in earnings per share, or called earnings per share, including one of the benefits used as a tool to determine a company's profit level (Tri Humaerah et al., 2022). In addition to the ratio, the company's cash flow can also be a determinant in showing a company's fundamentals, which can be said to be healthy if the cash flow from operation is lower than the company's income, this is the direction for investors to assess the rate of development of the company's performance to obtain capital market opportunities and investors in obtaining returns from investment results (A. P. Putra et al., 2023). Some previous studies provide separate results related to fundamental factors, as shown in the research (Antara & Suryanti, 2019), (Krisna & Elizabeth, 2023), (Harahap & Effendi, 2020), They state that the price to sales ratio, earnings per share, and cash flow from operations significantly affect stock returns. However, there is a contradiction in other studies (Prayoga et al., 2023), (Sinaga & Astini, 2022), (Kencana, 2021), showing the results of the price to sales ratio, earnings per share, cash flow from operation do not have a significant effect on stock returns.

Technical factors are also classified as an analysis that uses one of the analysis methods by evaluating the development of stocks (Vijh et al., 2020). Trading volume can provide information that can be utilized and become a direction in determining the uncertainty in stock returns (Ganesh & Iyer, 2023). Whereas a higher market capitalization usually implies a change in the value of the stock and can affect the return on investment or return by investors, conversely, a declining market capitalization tends to reduce the attractiveness of the company in the eyes of potential investors (Gavrilakis & Floros, 2023). Several previous studies provide different results. Research (Niawaradila et al., 2021), and (Yuana & Barata, 2022), shows that trading volume and market capitalization can significantly affect and positively impact stock returns. Active stocks will give confidence to investors. However, other studies show conflicting results, namely in research (Arhama Nessa, 2023) and (Maysie, 2021), that market capitalization and trading volume do not significantly affect stock returns.

In some previous studies, there are still many evidence gaps. The purpose of this study is to identify the effect of price to sales ratio, earning per share, cash flow operation, trading volume, and market capitalization on stock returns and provide a valuable alternative to understand and analyze developments in the capital market and to advance contemporary theories in the field of stock analysis. This research shows novelty in using price to sales ratio, earning per share, and cash flow from operation in combination with fundamental factor analysis.

LITERATURE REVIEW

Price To Sales Ratio

According to (Prihadi, 2019), the company's economic analysis refers to the company's internal analysis, including the price to sales ratio, which is one of the financial aspects that measures the relationship between price and total company sales, if the higher the company's total sales are commensurate with the price and provide the company's financial progress, it will result in higher investor confidence and can affect fluctuations in stock returns. The Price to

$$\text{PSR} = \frac{Price\ Per\ Share}{Sales\ Per\ Share}$$

Sales Ratio calculation formula is as follows (Sukamulja, 2021).

Earnings Per Share

According to (Mohana Rao, 2021), earnings per Share reflects the income received by investors from share ownership in a company, an increase in EPS assessed by a company will attract investors to buy the company's shares, which then has the potential to increase the share price

$$\text{EPS} = \frac{\text{EAT}}{\text{J}_{sb}}$$

and ultimately increase stock returns. The formula used to calculate Earning Per Share is as follows (Handini & Astawinetu, 2020).

Keterangan:

EAT = Profit after tax

Jsb = Number of shares outstanding

Cash Flow From Operation

According to (Tomas Lee, 2022), the amount of operating cash flow is an assessment of the company's ability to generate sufficient cash flow from overall operating activities to pay off the company's obligations in the form of debt, maintenance of operations, dividend payments, and make new investments without relying on external financing sources which are done by analyzing the level of cash flow. Cash flow from operations derived from the primary operations

$$\text{OCF} = Net\ cash\ generated\ by\ the\ company\ from\ operations$$

of the business can be calculated using the following formula (Puspasari, 2021).

Trading Volume

According to (Sopanah, 2021), trading volume is essential in technical analysis because it can indicate the balance of supply and demand to be a determining factor in investing by showing an increasing trading volume so that it can indicate solid or weak interest in a company, providing information to investors to help them understand the market atmosphere and make the right investment decisions. Trading volume activity can be calculated using the formula (Murtaza &

$$\text{Trading Volume} = \frac{\text{Number of Shares i traded at time t}}{\text{Number of shares i outstanding at time period t}}$$

Aryani, 2021).

Market Capitalization

According to (Mekel et al., 2023), market capitalization is the market value of the company manifested through the number of shares available for trading, the scale of the company is

$$\text{Market Cap} = \text{The market price of shares x Total number of shares issued}$$

reflected in the market capitalization value, which indicates the size of the company in the stock exchange market. Market capitalization calculations can use the following (Mladjenovic, 2023).

Stock Returns

According to (Karami, 2019), stock returns are a driving factor for investors to engage in investment activities, which serve as a form of compensation for the availability of investors to bear investment risk, the rate of return is equivalent to the income earned during a specific investment period about the capital invested in equity, which reflects the reward for investors'

$$R_t = \frac{P_t - P_{t-1}}{P_{t-1}}$$

tolerance for risk in their investment efforts. Stock return using the following calculation (Carolin Simorangkir, 2019).

Keterangan

P_t = The stock price at period t.

P_{t-1} = Share price in the previous period.

METHODS

Research Type

This research adopts a quantitative approach, collecting data in numerical form to measure the impact. This research mainly focuses on utilizing quantitative methods to conduct in-depth analyses following the stated objectives. This research uses descriptive quantitative methods to present some numerical data in detail. This study uses secondary data, namely in the form of information from sources in the form of company annual reports, company historical records, archives, and other information needed in this study obtained from the Umsida investment gallery with data in the form of numbers on the company's financial statements needed by researchers.

Study Population

The population in this study are banking companies listed on the IDX in 2013 - 2022. Data from these companies were sampled using purposive sampling techniques with the following characteristics:

Table 2. Research Sample Results

No	Distribusi Sample	Total
1	Banking companies listed on the Indonesian stock exchange in 2013-2022	42
2	Banking companies have complete financial reports that are listed on the Indonesian stock exchange in 2013-2022	22
3	Banking companies have the most significant assets listed on the Indonesian stock exchange in 2013-2022	7
	Total population	7
	Total sample (n x research period) (7 x 10 years)	70

Research Analysis Technique

The technique used in this research is the documentation method in data collection, specifically by obtaining all the information needed to solve the problems set out in the research objectives. This study uses data processing software in the form of Eviews 12 using a linear

regression model using the Chow test, Hausman test, and Lagrange multiplier to determine the expected effect model, fixed effect model, and random effect model after the optimal model is determined, the next step is to test the hypothesis, which includes the F test (simultaneous), t-test (partial) and the coefficient of determination (R2), using the formula for multiple linear regression equations (Priyatno, 2022).

$$Y = \alpha + \beta 1.X1 + \beta 2.X2 + \beta 3.X3 + \beta 4.X4 + \beta 5.X5 + ei$$

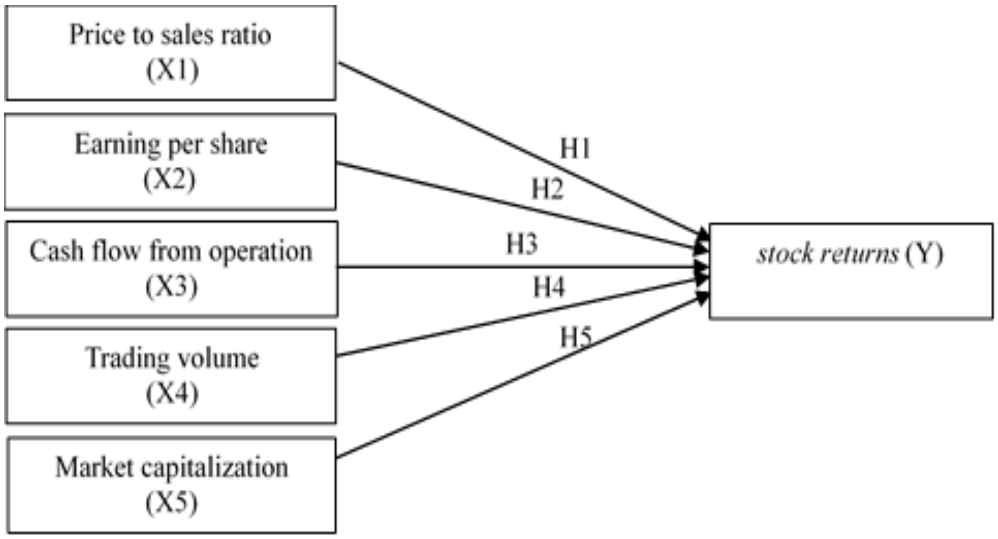
Keterangan,:

Y	= *stock returns*	α	= Konstanta
X1	= Price to Sales Ratio	X2	= Earning Per Share
X3	= *Cash Flow From Operation*	X4	= Trading volume
X5	= Market capitalization	ei	= *Residual Error*

β1, 2, 3 ,4, .i = The regression coefficient of each Xi

Conceptual Framework

Figure 1. Conceptual framework Hypothesis



Hypothesis

Hypothesis are initial assumptions that formulate temporary, conjectural answers and require a calculation approach to test their validity. After preparing the conceptual framework, there are five hypotheses in this study:

H1: Price to sales ratio has a significant effect on stock returns
H2: Earning per share has a significant effect on stock returns
H3: Cash flow from the operation has a significant effect on stock returns
H4: Trading volume has a significant effect on stock returns
H5: Market capitalization has a significant effect on stock returns

RESULTS

Statistik Descriptive

Table 3. Descriptive Statistics Results

	X1	X2	X3	X4	X5	Y
Mean	0.913745	427.4508	24.26390	23.66115	25.43254	0.128759
Median	1.133166	282.3350	24.09190	23.88025	25.89071	0.064667
Maximum	4.316277	1159.000	30.91413	27.21850	27.68361	1.111111
Minimum	-6.755712	17.02000	20.08839	20.41405	23.26755	-0.795624
Std. Dev.	2.222818	333.8443	2.123333	2.153859	1.429281	0.364715
Skewness	-1.803630	0.665393	1.055569	0.147530	-0.121111	0.296083
Kurtosis	7.410344	2.059642	4.698895	1.765766	1.452334	3.859674
Jarque-Bera	81.15866	6.638164	18.35787	4.025982	6.134854	2.724249
Probability	0.000000	0.036186	0.000103	0.133588	0.046541	0.256116
Sum	54.82470	25647.05	1455.834	1419.669	1525.952	7.725569
Sum Sq. Dev.	291.5142	6575669.	266.0040	273.7074	120.5278	7.847995
Observations	70	70	70	70	70	70

Source: Data processed with E-views12 (2023)

In this table, it can be explained that the amount of data in this study is 70. The descriptive statistics value on variable X1 has a Mean value of 0.913745; the Median has a value of 1.133166; the Maximum has a value of 4.316277; minimum value worth -6.755712; Std. Dev has a value of 2.222818; Skewness has a value of -1.803630; and kurtosis has a value of 7.410344. The X2 variable has a mean value of 427.4508, a median value of 282.3350, a maximum value of 1159.000, and a minimum value of 17.02000, Std. Dev has a value of 333.8443, at a Skewness value of 0.665393, and at kurtosis has a value of 2.059642. Then the mean value on X3 is 24.26390; on the Median, it has a value of 24.09190; the Maximum has a value of 30.91413; the minimum value is 20.08839; Std. Dev has a value of 2.123333, at a Skewness value of 1.055569, and at kurtosis, it has a value of 4.698895. next, variable X4 has a Mean value of 23.66115; at the Median with a value of 23.88025; Maximum has a value of 27.21850; minimum value of 20.41405; Std. Dev has a value of 2.153859, at a Skewness value of 0.147530, and at kurtosis, it has a value of 1.765766. Moreover, after that, the X5 variable shows a Mean value of 25.43254, a Median with a value of 25.89071, a maximum value of 27.68361, a minimum value of 23.26755; Std. Dev has a value of 1.429281.

Test of Model Selection

Chow Test

The Chow test assesses the superiority between the common effect model and the fixed effect model. If the probability value is > 0.05, the best model chosen is the common effect model, while if the probability value is < 0.05, then the more optimal model is the fixed effect model. (Amaliah et al., 2020).

Table 4. Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.711697	(6,48)	0.6418
Cross-section Chi-square	5.113507	6	0.5293

Source: Data processed with E-views12 (2023)

The Chow test results show that the cross-sectional chi-square probability value is 0.5293 > 0.05. Therefore, from the Chow test it can be concluded that the more optimal model is the common effect model rather than the fixed effect model.

Hausman Test

The Hausman test distinguishes the advantages of the fixed effect model and the random effect model (Indra, 2018). If the probability is > 0.05, then it is certain that the better model is the random effect model, and vice versa. If the probability is < 0.05, then the better model is the fixed effect model (Amaliah et al., 2020).

Table 5. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.245278	5	0.5147

Source: Data processed with E-views12 (2023)

The results of the Hausman test show a prob value of 0.5147 > 0.05. From the Hausman test, it can be concluded that the best model used is the random effect model compared to the fixed effect model.

Lagrange Multiplier Test

The Lagrange multiplier test determines the more optimal model between the common effect model and random effect model. If the probability value of the test results is < 0.05, it can be concluded that the more optimal model is the random effect model; conversely, if the probability value is > 0.05, the better model is the common effect model (Indra, 2018).

Table 6. LM Test Results

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	3.165057	28.31888	31.48394
	(0.0752)	(0.0000)	(0.0000)

Source: Data processed with E-views12 (2023)

The results of the Lagrange multiplier test show a prob value of 0.0700 < 0.05, so it can be concluded that the best model used in this study is the common effect model.

Classical Assumption Test

The classical assumption test is used to review whether the distribution of the variables in the regression equation is normal. There are two commonly used approaches in panel data regression: Ordinary Least Squared (OLS) and Generalised Least Squared (GLS). The OLS approach is used in the common effect model and fixed effect model, while the GLS approach is used in the random effect model. In the context of this research, the model chosen is the common effect model, so the relevant classical assumption tests are the multicollinearity test and the heteroscedasticity test (Hamid et al., 2020).

Multicollinearity Test

Regression analysis on panel data differs from multiple regression models because it requires particular assumptions within the framework of the panel data model without basic

assumption limitations (Indra, 2018). he regression model is not weakened if the magnitude of each independent variable does not exceed 1 (Rahimallah et al., 2022).

Table 7. Multicollinearity Results

	X1	X2	X3	X4	X5
X1	1.000000	0.428845	-0.522019	-0.370329	0.668553
X2	0.428845	1.000000	-0.028499	-0.751595	0.645361
X3	-0.522019	-0.028499	1.000000	-0.116755	-0.049620
X4	-0.370329	-0.751595	-0.116755	1.000000	-0.717155
X5	0.668553	0.645361	-0.049620	-0.717155	1.000000

Source: Data processed with E-views12 (2023)

The following table shows that between X1 and X2, X3, X4, and X5, the value does not exceed 1. Between X2 and X1, X3, X4, and X5 also does not exceed 1, and between X3 and X1, X2, X4, and X5 is also lower than 1, as well as between X4 and X1, X2, X3, and X5 is also lower than 1, as well as with X5 against X1, X2, X3, and X4 is also lower than 1. Based on the results of these calculations, it can be concluded that no correlation between independent variables was detected because each variable value does not exceed 1.

Heteroscedasticity Test

Heteroscedasticity can check the probability value < 0.05, indicating the presence of a heteroscedasticity problem in the model. Conversely, if the probability value > 0.05, it indicates no heteroscedasticity in the model (Rahimallah et al., 2022).

Table 8. Heteroscedasticity Results

Heteroskedasticity Test: White

Null hypothesis: Homoskedasticity

F-statistic	1.426343	Prob. F(20,39)	0.1680
Obs*R-squared	25.34712	Prob. Chi-Square(20)	0.1885
Scaled explained SS	22.38008	Prob. Chi-Square(20)	0.3202

Source: Data processed with E-views12 (2023)

From the results of the heteroscedasticity test using the white test method, it can be seen from the Obs * R-squared value that the Chi-Square (20) probability value is 0.1885 > 0.05. So, the data studied does not cause heteroscedasticity problems.

Regression Equation

The results of the panel data regression equation calculation can be seen in the following table:

Table 9. Regression Results on Panel Data

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.631799	1.958004	-1.854847	0.0691
X1	0.040382	0.034049	1.186014	0.2408
X2	0.000760	0.000199	3.821268	0.0003
X3	0.055858	0.026611	2.099093	0.0405
X4	0.123347	0.034777	3.546849	0.0008
X5	-0.034410	0.057161	-0.601984	0.5497

Source: Data processed with E-views12 (2023)

Y = -3.631799 + 0.040382 X1 + 0.000760 X2 + 0.055858 X3 + 0.123347 X4 - 0.034410 X5

1. The equation's constant is -3.631799, meaning that if X1, X2, and X3 are fixed or constant, Y is -3.631799.
2. The X1 regression coefficient is worth 0.040382 assuming X2, X3, X4 and X5 are constant, so that every 1% increase in X1 will cause an increase in Y by 0.040382%.
3. The X2 regression coefficient is worth 0.000760 assuming X1, X3, X4 and X5 are constant, so that every 1% increase in X2 will cause an increase in Y by 0.000760%.
4. The X3 regression coefficient is equal to 0.055858 assuming X1, X2, X4 and X5 are fixed, so that every 1% increase in X3 will cause an increase in Y by 0.055858%.
5. The X4 regression coefficient is equal to 0.123347 assuming X1, X2, X3 and X5 are fixed, so that every 1% increase in X4 will cause an increase in Y by 0.123347%.
6. The X5 regression coefficient is -0.034410 assuming X1, X2, X3 and X4 are fixed, so that every 1% increase in X5 will cause a decrease in Y by -0.034410%.

Hypothesis test

Coefficient of Determination Test (R2)

R-squared, which denotes the coefficient of determination, is essential in regression analysis as it is an important measure to evaluate the efficacy of the estimated regression model. This measure provides valuable insights into the quality of the model, revealing the proportion of variation in the dependent variable explained by the independent variables (Indra, 2018).

Table 10. Test Results of the Coefficient of Determination

Root MSE	0.306997	R-squared	0.279457
Mean dependent var	0.128759	Adjusted R-squared	0.212740
S.D. dependent var	0.364715	S.E. of regression	0.323603
Akaike info criterion	0.676041	Sum squared resid	5.654819
Schwarz criterion	0.885475	Log likelihood	-14.28122
Hannan-Quinn criter.	0.757962	F-statistic	4.188692
Durbin-Watson stat	2.516239	Prob(F-statistic)	0.002739

Source: Data processed with E-views12 (2023)

Based on the R-squared test results, the adjusted R-squared shows that the calculated coefficient of determination is 0.212740, equivalent to 21.3%. This indicates that the following variables: Price to Sales Ratio (X1), Earnings Per Share (X2), Cash Flow from Operations (X3), Trading Volume (X4), and Market Capitalisation (X5), together affect 21.3% of the variability in Stock Returns. The study found that 78.7% of the remaining factors were beyond the scope of the analysis, indicating the impact of other variables not accounted for in this study.

F – Test

The F test is used to test the hypothesis collectively regarding the regression coefficient (slope). The aim is to validate whether the selected model is statistically feasible to interpret the impact of the independent variables on the dependent variable. (Indra, 2018).

Table 11. F-test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.631799	1.958004	-1.854847	0.0691
X1	0.040382	0.034049	1.186014	0.2408
X2	0.000760	0.000199	3.821268	0.0003
X3	0.055858	0.026611	2.099093	0.0405
X4	0.123347	0.034777	3.546849	0.0008
X5	-0.034410	0.057161	-0.601984	0.5497

Source: Data processed with E-views12 (2023)

The independent variable is considered significant if the F statistic > the F table value, and vice versa. It is considered insignificant if the F statistic > the F table value. In addition, significance is set when the probability value is < 0,05 and insignificant when the probability value is > 0,05. The F-table value is obtained by calculating Df1 = K - 1 = 6 - 1 = 5 and Df = n - K = 70 - 5 = 65. In this case, K represents the number of variables, and n corresponds to the sample size. Once calculated, the F table value was determined to be 2.36. In this scenario, the calculated F statistic is 4,18, > F-table value of 2,36. In addition, the probability value is 0,00 < 0,05. Therefore, the independent factors, specifically Price to Sales Ratio, Earnings Per Share, Cash Flow from Operations, Trading Volume, and Market Capitalization, simultaneously influence the dependent variable, namely Stock Return.

T – Test

The T statistical test is used to show how far the influence of one independent variable individually by describing the dependent variable by comparing the t value with the t table. (Indra, 2018).

Table 12. Partial Test Results

Root MSE	0.306997	R-squared	0.279457
Mean dependent var	0.128759	Adjusted R-squared	0.212740
S.D. dependent var	0.364715	S.E. of regression	0.323603
Akaike info criterion	0.676041	Sum squared resid	5.654819
Schwarz criterion	0.885475	Log likelihood	-14.28122
Hannan-Quinn criter.	0.757962	F-statistic	4.188692
Durbin-Watson stat	2.516239	Prob(F-statistic)	0.002739

Source: Data processed with E-views12 (2023)

The t-test is used to determine the different effects of each independent variable on the dependent variable. There is no effect if the t-statistic comparison < t-table, while a significant effect is indicated if the t-statistic comparison > t-table. Significance is set if the probability value (Prob value) < 0.05 and insignificant if the value (Prob value) > 0.05. The value on the T-table is obtained through a decrease in the degree of freedom (Df) calculated n - K = 65, resulting in a T-table value of 1.997. The T statistical test is summarised as follows.

a. Price to sales ratio (X1): The calculated t value is 1.1860 < T table 1.997, and the prob value is 0.2404> 0.05, so it can be concluded that the Price to Sales Ratio (X1) is not significant and has no effect on stock returns, so H0 is accepted, and H1 is rejected.
b. Earnings per share (X2): The calculated T value is 3.8212> T table 1.997, and the probability value is 0.0003 <0.05, which means that Earnings per Share (X2) has a statistically significant positive effect on stock returns, so H0 is rejected, and H1 is accepted.
c. Cash flow from operation (X3) has a statistically significant positive effect on stock returns, indicated by the calculated T value of 2.0990> T table 1.997, and a probability value of 0.0405 <0.05 H0 is rejected, and H1 is accepted.
d. Trading volume (X4): The findings show that Trading Volume (X4) has a statistically significant influence and positive impact on stock returns because the T value of 3.5468 > T table 1.997 and the probability value of 0.0008 < 0.05 H0 is rejected and H1 is accepted.

Market capitalization (X5) is insignificant because the T-count value is -0.6019 < T-table 1.997, and the prob value is 0.5497 > 0.05. It can be stated that Market Capitalisation (X5) has no effect and is not significant on stock returns, so H0 is accepted, and H1 is rejected.

DISCUSSION

The Impact of Price to Sales Ratio on Stock Returns

The findings of the results of the test (T-test) or statistical test Price to sales ratio do not have an insignificant effect on stock returns by providing results that have a T value of 1.1860 < T table 1.997 and a prob value of 0.2404 > 0.05, the results of this study are also by the data obtained during the observation where the majority of banking companies that have a high PSR value get a low return value. Between a company's Price Sales Ratio (PSR) and its stock return, companies considered reasonable by investors with high PSR experience an increase in stock returns, while companies with low PSR produce lower stock returns. Other things can arise because sectoral and company-specific characteristics can make a low contribution to the significance of PSR on stock returns. The results of this study follow stock valuation theory, which states that each industry has its unique dynamics, and these factors may need to be fully covered in the calculation of the company's sales valuation against investment (Sukamulja, 2021). The results of this study are in line with the results of research (Prayoga et al., 2023) and the results of (Putranti et al., 2019) which provide results that the price-to-sales ratio has no significant effect on stock returns.

The Impact of Earnings per Share on Stock Returns

he findings of the results of the test (T-test) or statistical test earnings per share have a significant effect on stock returns by providing the results of the calculated T value of 3.8212> T table 1.997 and a probability value of 0.0003 <0.05. So, if a company's test results of earnings per share (EPS) increase, it will impact stock returns; these findings can lead to an increase in stock value, thus affecting the level of stock returns. An increase in EPS value can correlate with an increase in attractiveness for investors to acquire company shares. The impact of this increase in stock demand can be seen from the increase in stock prices, which has a positive effect on the level of stock returns investors can achieve. The results of this test follow the signaling theory, which states that investors can interpret the actions or information disseminated by the company as indicative signals or clues about the current state of the company (Yusi, 2019). The results of this test align with the results of research by (Simanullang & Simanullang, 2023) and (Rukmini et al., 2022), which provide results that earnings per share can significantly affect the company's stock return.

The Impact of Cash Flow From Operation on Stock Returns

The results of the test (T-test) or statistical test of cash flow from operation have a significant effect on stock returns with a T value of 2.0990> T table 1.997 and a probability value of 0.0405 < 0.05. The calculated T value is greater than the T table, and the prob value is smaller than 0.05; it can be said that cash flow from the operation can influence stock returns. Following the explanation (Nurmalia & Paramita, 2020), the ability of operating cash flow to positively impact stock returns is an essential consideration because it describes the relationship between operating cash flow variables and stock returns. This situation will be similar when the total amount of operating cash flow is compared with stock returns. The results of this study follow agency theory, where the company's operations, including other activities, can reflect the company's health in the extent to which it manages its operating activities in increasing a company's value, which results in stock returns that can provide stakeholder or investor interest (Diah Widari P, 2021). his research is in line with the results of research (Sugiana & Hidayat, 2023) and research (Harahap & Effendi, 2020) by providing results showing that cash flow from operations can significantly affect stock returns.

The Impact of Trading Volume on Stock Return

The findings of the results of the test (T-test) or statistical test Trading Volume has a significant effect on stock returns that the T value is 3.5468 > T table 1.997 and the probability

value is 0.0008 < 0.05. The calculated T value is greater than the T table value, and the probability value is smaller than 0.05, where it can be said that the trading volume influences investors looking for a stock return. The high volume of stock trading encourages increased demand for these shares, which can affect the return on stock investment (Duz Tan & Tas, 2021). This study's results align with efficient market theory, which shows that the value of shares fully reflects all information available in the market. High trading volume can be interpreted as an indication of market efficiency. It will increase or decrease stock returns, where investors react quickly and reactively to available information. The strong desire to buy high-volume stocks is consistent with the belief that the market efficiently processes and carefully reflects such information (Murtaza & Aryani, 2021). This research aligns with research (Suhendah & Yonanda, 2022) and research from (Rahmanissa & Isynuwardhana, 2022) providing results that trading volume can significantly affect stock returns.

The Impact of Market Capitalization on Stock Returns

The findings of the results of the test (T-test) or statistical test of market capitalization do not have a significant effect on stock returns by having a calculated T value of -0.6019 < T-table 1.997 and a prob value of 0.5497 > 0.05. It can be explained that the value of the T count is smaller than the T table. The prob value is more significant than 0.05, where it can be said that market capitalization cannot have a significant effect because the large and small values of the market capitalization cannot change and move a stock value, which cannot move the return desired by investors. Market capitalization value is considered an inadequate source of information for investors in choosing companies for stock investment. An increase in market capitalization value sometimes correlates with increased stock return value (Handayani et al., 2022). In terms of market capitalization, noise trading theory can cause price movements that do not always reflect the stock's intrinsic value. Therefore, the effect of market capitalization on stock returns may be reduced or even significantly due to the incongruity disturbance that occurs (DeRosa, 2021). This research is in line with the results of research from (Fakhrudin & Wulandari, 2022) and research from (Arhama Nessa, 2023), both of which have no effect and are not significant to stock returns.

CONCLUSION

The research results found that price to sales ratio has no effect on stock returns. This shows that it arises because sectoral characteristics and certain companies can contribute little to the significance of PSR on stock returns. Second, earnings per share affects stock returns; third, cash flow from operations affects stock returns; fourth, trading volume affects stock returns; fifth, market capitalization does not affect stock returns. Market capitalization cannot have a significant effect because the large and small values of market capitalization cannot change and move a stock value that leads to a return desired by investors.

Suggestion

Suggestions from the analysis of the results of this study can expand the scope of the industry or the banking company sector as a whole to present more comprehensive data because this research is relatively limited. For further researchers, it is necessary to research by developing factors and variables related to price to sales ratio and market capitalization in banking stocks and adding other fundamental variables at the macro level so that this research does not stop at the variables studied by researchers and for companies to continue always to

provide annual financial reports to be more complete and more able to provide insight to investors.

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