
The Effect of Inflation, Interest Rates and Non-Performing Loans On Stock Returns Through Profitability In Banking Companies Indonesia Period 2018-2022

Neneng Maesaroh Tiarawati, Dede Hertina

Universitas Widyatama, Indonesia

neneng.maesaroh@widyatama.ac.id, dede.hertina@widyatama.ac.id

KEYWORDS

stock returns,
inflation, interest
rates, non-
performing loans

ABSTRACT

Even if the Indonesian economy has grown and the stock market has improved after COVID-19, banking stock returns in Indonesia have remained stagnant. The returns on Indonesian banking stocks in 2022 were much lower than in prior years. Identifying the internal and external variables that contributed to the fall in these shares is an obvious challenge. The purpose of this study is to investigate how return on assets (ROA) acts as a mediator between inflation, interest rates, non-performing loans, and stock returns. Thirty businesses make up the sample for this study, which employs testing methodologies including multiple regression and route analysis. Additionally, in order to find the indirect impact, the Sobel test must be used. This study found that stock returns are positively affected by inflation and return on assets, but unaffected by interest rates and non-performing loans. Unlike inflation and interest rates, return on assets can moderate the impact of non-performing loans on stock returns. stock performance. Things that could affect future returns should be carefully considered by investors.

INTRODUCTION

There is an immediate and substantial demand for funding to expand working capital and finance investments within the organization. Economic development in Indonesia has picked up steam since the global COVID-19 pandemic began; in 2022, it hit 5% growth, up from -2% in 2020, when the pandemic was at its worst. An rise in a company's share price is indicative of strong performance and can boost its perceived worth among investors (Nurhayati & Pertiwi, 2021), whereas a decrease in share price is indicative of poor performance and has the opposite effect.

As a measure of the development in the Indonesian stock market following COVID-19, the value of the Indonesian IHSG fluctuated more from 2018 to 2022. In 2019, the financial services industry saw 6% growth, which was the greatest compared to other industries. Financial institutions play a crucial role in maintaining national stability as they are service enterprises built on trust. Investors put their faith in and pay close attention to banking issuers even in the stock market.

A high firm value will give investors hope for the future and attract investors looking for a solid return on their investment. Investors' desire to maximize profits is, thus, understandable. One of the factors that will determine the amounts of returns that investors will acquire in the future is the outcome of stock research used as a foundation for making investment decisions. Consequently, investors need to be aware of both the macro and microeconomic issues that pose a risk to profits return shares (Andes & Prakoso, 2017).

Even though returns on banking shares reached a healthy 0.953 in 2021, they fell precipitously to a value of -0.189 in 2022, marking the lowest return on banking shares between 2018 and 2021. This downward trend continued throughout the years. What causes stock returns to undergo a sharp fall while the capital market and IHSG continue to display growing variations is an intriguing phenomena that deserves more research.

As stated by Pahlevi et al. (2019), economic circumstances can be negatively affected by high and unstable inflation, hence it is crucial to regulate inflation. To counteract the depreciating impact of inflation, which is a major reason why people invest (Hartono et al., 2024). Interest rate risk refers to the potential negative effect on a company's bottom line that might result from market fluctuations in interest rates (Fahmi, 2013). The nonperforming loan ratio is a measure of the bank's management's proficiency in handling troubled loans. (Sudarmawanti & Pramono, 2017) state that a large percentage of nonperforming loans might lead to a rise in other expenses and, ultimately, the possibility of losses for the bank. Before buying shares in a banking company, investors look at a number of basic statistics, including return on assets (ROA) (Alaagam, 2019).

Inflation and interest rates affect returns on shares indirectly via return on assets, according to study (Wiratno et al., 2018). Return on asset (ROA) cannot mediate interest rates relative to returns on stocks or inflation relative to returns on shares, according to studies (Aditya et al., 2018; Adyatmika & Wiksuana, 2018). Bank stock prices are indirectly affected by non-performing loans (NPLs), but ROA is directly affected by them. Return on assets cannot mediate nonperforming loans, according to study (Nasikin & Yuliana, 2022), contrary to findings by (Ningrum, 2021).

For the purpose of analyzing micro and macroeconomic factors, researchers are interested in expanding upon the limitations of prior work. One such study is (Nurfadilah & Manda, 2021) by including non-performing loans and returns on assets as additional variables that impact stock returns. Because these four factors have been under-researched in the past, this study also intends to examine the mediating effect of return on assets on them.

Literature Review

Inflation

The value of investments tends to decline when inflation rates in a country are high. Stock values of banking assets will fall in an inflationary environment, and economic development will be snail's pace in an inflationary one. The cited work is from Pahlevi et al., 2019. Return on assets is severely impacted by inflation, according to research (Kalengkongan, 2013). It is clear from the foregoing that changes in inflation may impact how well a firm generates profits. H1: Inflation has a negative and significant effect on return on assets

Interest rate

Borrowed money from a bank will cost clients an interest rate. According to Kasmir (2014) Businesses struggle to pay their interest and debt payments when interest rates rise too quickly. Interest rates are a policy tool that the Bank of Indonesia uses to communicate its monetary policy decisions to the general population. Generally speaking, the interest rate on a bank loan will be greater than the BI rate. There will be less credit distribution and less money coming into banks as a result of people's newfound aversion to using credit as a product of banks. According to studies (Kalengkongan, 2013), interest rates have a negative and statistically significant effect on ROA. Based on the information provided, it is clear that fluctuations in high interest rates can impede organizations' ability to function to their full potential.

H2: Interest rates have a negative and significant effect on return on assets

Non Performing Loans

Loans that are not performing: "Credit that has been distributed by the bank, and the customer cannot make payments or make installments in accordance with the agreement signed by the bank and the customer." The source cited is Ismail (2016). Understanding the link between low quality, questionable, or otherwise problematic credit and non-performing loans or credit is crucial for investors. A higher NPL indicates that the bank has a greater number of troubled loans (Nasikin & Yuliana, 2022).

The nonperforming loan ratio is an indicator of the efficiency with which a bank handles troubled loans. According to (Sudarmawanti & Pramono, 2017), a high nonperforming loan (NPL) situation can lead to increased additional expenses and, ultimately, bank losses. Return on assets is significantly affected by non-performing loans, according to research (Hertina & Wulandari, 2022). It is clear from the foregoing that non-performing loans affect the efficiency with which a business turns a profit.

H3: Non-performing loans have a negative and significant effect on return on assets

We must be careful not to let inflation become a source of risk by reducing dividend distribution, as this would lead to lower returns (Nurfadilah & Manda, 2021). Inflation significantly and negatively affects stock returns (Wiratno et al., 2018). If rising inflation makes investors wary of purchasing shares and lowers stock returns, as described above, then it follows that inflation might send a negative signal to investors thinking about investing in certain stocks.

H4: Inflation has a negative and significant effect on stock returns

(Andes & Prakoso, 2017) found that when interest rates rise, a company's interest burden and capital expenses go up. As a result, investors see lower stock returns as a result of weaker share prices in the capital market. Share values decline and investors flee to banks to park their money when interest rates increase; this sends a negative signal to share prices and impacts stock returns (Gujarati, 2006). Supporting this view is research showing that interest rates have a negative effect on stock returns (Wiratno et al., 2018), which means that a decline in interest rates leads to higher stock returns and, in turn, affects the bank's bottom line. One possible short-term conclusion from the foregoing is that investors may get the wrong message from interest rates, or that investing in stocks becomes less appealing due to high rates, and that alternative products are better for minimizing losses.

H5: Interest rates have a negative and significant effect on stock returns

A higher NPL indicates that the bank has a greater number of troubled loans (Nasikin & Yuliana, 2022). A decline in a bank's income and a negative signal to its share price are two factors that influence the return on investment (ROI) of a company's shares. Evidence from studies demonstrating that non-performing loans significantly reduce stock returns (Muhamad, 2015) provide credence to this idea. Based on the information provided, it seems that non-performing loans can send a negative message to investors. Specifically, a high non-performing loan value makes stock investments less appealing and leads to a less favorable evaluation from investors, which in turn reduces stock returns.

H6: Non-performing loans have a negative and significant effect on return on assets

Return On Assets

A measure of a bank's managerial efficiency in generating profits is the return on assets (ROA) ratio. In the eyes of investors, a bank's return on assets (ROA) is a barometer of its profitability; a higher ROA indicates better asset utilization and, by extension, higher levels of profit. Next year, according to Ningrum (2021). Research backs this up, showing that ROA significantly boosts stock returns (Bintara et al., 2020).

Before putting their money into a banking company, investors look at key ratios such return on assets (ROA) (Alaagam, 2019). The bank is doing well financially if its return on assets (ROA) is high. An indication that dividends and capital gains will be profitable for

investors is a high profit margin. Research conducted by Sitaneley et al. in 2021.) Based on the information provided, it is reasonable to assume that a high return on assets suggests that the firm is able to make the most of its resources and optimize the return on investment for its shareholders.

H7: Return on assets has a positive and significant effect on stock returns

As a general rule, higher inflation can drive up operating expenses, which in turn reduces dividend payouts as a result of falling profitability and share prices. According to (Tandelilin, 2010), page 343. Share returns will also fall if falling earnings lead to falling share prices. Evidence from studies demonstrating that ROA can mitigate the effect of inflation on stock returns (Wiratno et al., 2018) provide credence to this idea. Inflation affects the growth or decline of stock return values in a roundabout way, via return on assets, as described above.

H8: Return on assets mediates the effect of inflation on stock returns

Market fluctuations in interest rates pose a threat to a company's bottom line, a phenomenon known as interest rate risk (Fahmi, 2013). Generally speaking, the interest rate on a bank loan will be greater than the BI rate. There will be less credit distribution and less money coming into banks as a result of people's newfound aversion to using credit as a product of banks. Reducing banking income will lower stock returns. According to studies (Wiratno et al., 2018), ROA can act as a mediator between interest rates and stock returns. The preceding description leads one to believe that interest rates affect stock return values in a roundabout way through return on assets, which in turn affects the value of stocks.

H9: Return on assets mediates the effect of interest rates on stock returns

It is critical for investors to grasp this connection as it pertains to profits from credit or loans. A larger non-performing loan (NPL) ratio indicates that the bank has a greater number of troubled loans. Research by Nasikin and Yuliana in 2022. One of the main factors that determines a bank's profitability is credit risk. When the number of non-performing loans (NPL) is high, it will reduce earnings, and when it is low, profits will rise. Both stock returns and the impact of non-performing loans on share prices can be mediated by return on assets, according to this study. In light of the foregoing, it is reasonable to assume that non-performing loans affect stock return values in a roundabout way via return on assets.

H10: Return on assets mediates the effect of non-performing loans on stock returns

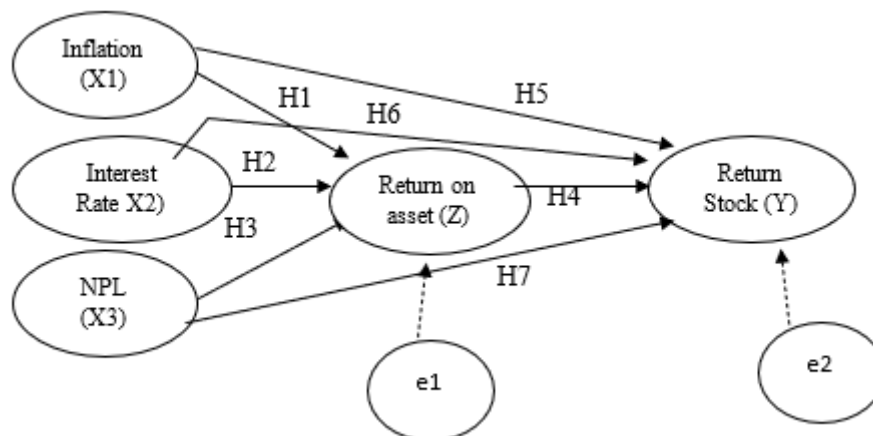


Figure 1 Conceptual framework

RESEARCH METHOD

This study employed quantitative research as its methodology. A total of five variables are utilized in this study: inflation (X1), interest rate risk (X2), non-performing loans (X3), return on assets (Z) and stock returns (Y). This research makes use of panel data. Data on many

variables for the years 2018–2022, in particular, form panel data, which combines time series and cross-sectional information. Information culled from secondary sources, specifically the annual reports produced by the financial institutions under consideration. Visit www.yahoofinance.com for share price information, the Indonesian stock exchange's official website, and bank websites in Indonesia.

This research uses purposive sampling to choose 30 participants from a population of 47 that consists of all banking organizations registered in Indonesia from 2018 to 2022. The selection process involved a number of factors. One method for selecting samples while keeping certain factors in mind is known as purposeful sampling (Sugiyono, 2019:85). Excel was used to process the collected data. The descriptive statistical data analysis procedures used in this study included a battery of tests run via the analytic program Eviews12, including checks for heteroscedasticity, multicollinearity, and normalcy.

To examine preexisting assumptions, researchers use multiple regression analysis. In accordance with (Ghozali, 2018), the following is the meaning of the t-test in hypothesis testing:

If the Sig value. is greater than the significance level (α) of 0.05, then H0 is accepted and Ha is rejected, which means there is no influence between the independent variable and the dependent variable.

If the sig value. is smaller than the significance level (α) of 0.05, then H0 is rejected and Ha is accepted, which means there is a significant influence between the independent variable and the dependent variable.

The research model used in conducting hypothesis testing is:

Equation 1

$$Z = \beta_0 + \beta X_1 + \beta X_2 + \beta X_3 + \dots$$

Equation 2

$$Y = \beta_0 + \beta X_1 + \beta X_2 + \beta X_3 + \beta Z + e \dots$$

Y = Stock Return

Z = Return on Asset

X1 = Inflation

X2 = Interest Rate

X3 = Non Performing Loan

C =Constant

1 – 4 = Regression Coefficient

e = Error term, namely the level of estimator error in research

Calculating the proportion of effect that variable X has on variable Y at the same time is what the coefficient of determination is all about. This research makes use of the path analysis method to examine intervening variables. In particular, it employs the Common Effect Model / Pooled Least Squares, the simplest panel data model approach, to determine the most appropriate linear regression estimation model.

Using a sobel test, we may determine how much the independent variable (X) influences the dependent variable (Y) via the mediating variable (Z). A test tool, namely Calculation for the Sobel Test, which can be found on the website <http://quantpsy.org/>, is used to observe the indirect impact because SmartPLS is unable to accomplish so. According to Ghazali (2018), a variable can be considered a mediator between an independent variable and a dependent variable if the Sobel test statistic is greater than or equal to 1.96 and the significance level is 5%.

RESULTS AND DISCUSSION

Test Path Analysis

Table 1. Chow test

Effect Test	Statistic	d.f.	Prob.
Cross-section F	0.869479	(29,116)	0.6586
Cross-section Chi-square	29.503899	29	0.4391

Source: Data processed with Eviews.2024

From the chow test results. Prob value. Amounting to $0.6586 > 0.05$, then the selected model is the Common Effect Model (CEM) and continues to the lagrange mutplier test stage (LM test).

Table 2. Langrange Mutiplier Test

	Cross-Section	Test Time	Hypothesis	Both
Breusch-Pagan	0.634709 (0.4256)	0.009028 (0.9243)		0.643738 (0.4224)
Honda	-0.796686 (0.7872)	-0.095018 (0.5378)		-0.630530 (0.7358)
King-wu	-0.796686 (0.7872)	-0.095018 (0.5378)		-0.366444 (0.6430)
Standarized Honda	-0.645498 (0.7407)	1.292173 (0.0981)		-4.971046 (1.0000)
Standarized King- Wu	-0.645498 (0.7407)	1.292173 (0.0981)		-3.555893 (0.9989)
Gourieroux,et.al	-			0.000000 (1.0000)

Source: Data processed with Eviews.2024

From the results of the lagrange mutplier test stage (LM test). The prob value is $0.4256 > 0.05$, so the selected model is the Common Effect Model (CEM), so there is no need to proceed to the Hausman test stage and you can be sure that the selected model is the Common Effect Model (CEM).

Multiple Linear Regression Model Equation Test

Equation 1

Table 3. Multiple Linear Regression Test Equation 1

Dependent variable Z_ROA				
Method : Panel Least Squares				
Date:05/07/24 Time :20.16				
Sample :2018-2022				
Periods included :5				
Cross-sections included :30				
Total panel (balanced) observations :150				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	-0.009023	-0.009071	0.994647	0.3216
X1_INFLASI	0.118431	0.168527	0.702743	0.4833
X2_SUKUBUNGA	0.409383	0.206000	1.987290	0.0488
X3_NPL	-0.161698	0.048532	-3.331782	0.0011

Sumber : Data diolah dengan Eviews, 2024

The regression model for this research based on the data in the table above is as follows:

$$Z \text{ Return on asset} = -0.009023 + (0.118431) X1 \text{ Inflation} + (0.409383) X2 \text{ interest rate} + (-0.161698) X3 \text{ Non performing loan}$$

This indicates that in this study, return on assets is directly affected by changes in the variable's value. If there is a 0 rise, the amount is 0.118431, which is the coefficient of inflation. If there is a 0 increase, the amount is 0.409383, which is the coefficient of the interest rate. The non-performing loan coefficient is -0.161698, with a value of -0.161698 for a 0 increase and a constant of -0.009023 derived from this study.

Table 4. Multiple Linear Regression Test Equation 2

Dependent variable Y_RETURNSAHAM				
Method : Panel Least Squares				
Date:05/07/24 Time :20.27				
Sample :2018-2022				
Periods included :5				
Cross-sections included :30				
Total panel (balanced) observations :150				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	1.232142	0.414907	2.969687	0.0035
X1_INFLASI	-17.88973	7.695036	-2.324840	0.0215
X2_SUKUBUNGA	-8.995930	9.516400	-0.945308	0.3461
X3_NPL	-3.472799	2.294826	-1.513317	0.1324
X4_ROA	-13.75888	3.772526	-3.647127	0.0004
R-squared	0.154432	Mean dependent var		0.109997
Adjusted R-squared	0.131106	S.D dependent var		0.886510
S.E of regression	0.826356	Akaike info criterion		2.489183
Sum squared resid	99.01534	Schwarz-criterion		2.589538
Log likelihood	-181.6887	Hannan-Quinn criter		2.529954
F-statistic	6,620578	Durbin-Watson stat		2.548838
Prob (F-statistic)	0.000064			

Source: Data processed .2024

The regression model for this research based on the data in the table above is as follows:

$$Y \text{ Stock return} = 1.232143 + (-17.88973) X1 \text{ Inflation} + (-8.995930) X2 \text{ Interest Rate} + (-3.472799) X3 \text{ Non Performing Loan} + (-13.75888) Z \text{ Return On Asset}$$

According to this study, the change in the variable's value directly impacts stock returns. If prices were to rise by zero percent, the corresponding inflation coefficient would be -17.88973. If the amount increases by 0, the interest rate coefficient will be -8.995930. If there is a 0 rise, the quantity of the coefficient of non-performing loans is -3.472799. If there is a 0 increase, the amount is -13.75888, and the constant from this research is 1.232143, which is the coefficient of return on assets.

Table 5. Results of testing path coefficients and direct effects

Connection variable	Standardize Coefficient	Sig value	Sig tolerance	Decision
Inflation to roa (H1)	0.118431	0.4833	0.05	Not significant
Interest rate to roa (H2)	0.409383	0.0488	0.05	Significant
Npl to roa (H3)	0.161698	0.0011	0.05	Significant

Inflation to stock return (H4)	-31.2181	0.0075	0.05	Significant
Interest rate to stock return (H5)	-11.5100	0.4138	0.05	Not significant
Npl to stock return (H6)	0.012941	0.9929	0.05	Not significant
Roa to stock return (H7)	-15.96208	0.0060	0.05	Significant

Source: Data processed with Eviews.2024

The hypothesis test for the direct significance of inflation's effect on ROA yielded a sig value of 0.483, which is higher than the significance level of 0.05. These findings clarify that ROA is unaffected by the inflation variable. Therefore, it follows that H1 is not supported.

The sig value of 0.048, which is less than 0.05, was obtained from the hypothesis test for direct significance of the impact of interest rates on return on assets. These findings demonstrate that ROA is significantly affected by the interest rate variable. Therefore, it is safe to say that H2 is true.

The hypothesis test on the direct significance of non-performing loans' influence on ROA yielded a sig value of 0.001, which is less than the significance level of 0.05. It is clear from these findings that non-performing loans are a key component influencing ROA. Therefore, we may say that H3 is correct.

With a sig value of 0.007, lower than 0.05, the findings of the hypothesis test for direct significance of inflation's impact on stock returns were achieved. According to these findings, inflation is a major factor influencing stock returns. It follows that H4 is a valid hypothesis.

The hypothesis test for the direct significance of interest rates' effect on stock returns yielded a sig value of 0.413, which is higher than the significance level of 0.05. It is clear from these findings that interest rates do not influence stock returns. Thus, it follows that H5 is not supported.

The sig value we got from testing our hypothesis on the direct significance of the effect of non-performing loans on stock returns was 0.99, which is higher than the significance level of 0.05. These findings provide light on the factors There is no correlation between non-performing loans and stock performance. This leads us to the conclusion that H6 is not true.

An outcome of 0.006, less than 0.05, was produced by the hypothesis test for direct significance of the impact of return on assets on stock returns. According to these findings, ROA is a key determinant of stock returns. Therefore, it is safe to say that H7 is correct.

According to the data in the table, the ROA variable has an Adjusted R-squared value of 0.15. This number can be understood in the following ways: A total of 84.56 percent of the variance in stock returns is attributable to variables not included in this analysis, with the remaining 15.44% coming from non-performing loans (NPL), interest rates, inflation, and return on assets.

Sobel Test

Table 6. Indirect Effect Test Results

Variable	T hitung	T tabel	Decision
inflation – Roa – stock return	-0.69	1.96	Not significant
Interest rate – Roa – stock return	-1.74	1.96	Not significant
Npl – Roa – stock return	2.45	1.96	Significant

Source: Data processed using Calculation for the Sobel Test, 2024

According to the Sobel test for indirect significance of inflation's effect on stock returns via profitability, the computed T was -0.69, which is less than 1.96. These findings clarify that ROA is not a reliable mediator of the link between inflation and stock returns. We can thus infer that H8 is not true. The computed T was -1.74, which is less than 1.96, according to the results of the Sobel test for indirect relevance of the impact of interest rates on stock returns through profitability. With these findings in mind, it is clear that ROA is not a suitable mediator between interest rates and stock returns. Therefore, it follows that H9 is not supported. The T-count for the Sobel test, which evaluated the indirect significance of non-performing loans' influence on stock returns through profitability, was 2.45, which is higher than 1.96. This study's findings shed light on the role of return on assets as a mediator between non-performing loans and stock returns. I think we may safely say that H10 is correct.

The Effect of Inflation on Return on Assets

Researchers have shown that inflation does not significantly impact return on assets through their testing and analyses. This study's findings disagree with those of (Kalengkongan, 2013) which found that inflation significantly reduces ROA, and they corroborate those of (Aditya et al., 2018) which found no such effect.

The Effect of Interest Rates on Return on Assets

Researchers have shown that the BI Rate significantly affects return on assets through testing and analysis. In contrast to the findings of the contradicting study (Kalengkongan, 2013), this research confirms that interest rates have a negative and statistically significant effect on return on assets. according to studies (Aditya et al., 2018), the impact of interest rates on return on assets is null and void.

The Effect of Non-Performing Loans on Return on Assets

Results from the experiments show that non-performing loans significantly impact return on assets. This is due to the fact that the growth or decline of the profitability ratio, namely return on assets, is affected by the non-performing loan (NPL) or non-performing loan ratio, which is itself affected by the level of the NPL. Return on assets is significantly affected by non-performing loans, according to research (Hertina & Wulandari, 2022). At the same time, there is no correlation between non-performing loans and ROA.

The Effect of Inflation on Stock Returns

Testing and analysis conducted by academics have shown that inflation significantly impacts stock returns. This goes against the grain of previous studies that found no correlation between inflation and stock returns (Andes & Prakoso, 2017) and supports the view of (Nurfadilah & Manda, 2021) that found inflation to have a substantial negative impact on stock returns, including a decline in the value of banking asset shares due to high inflation rates. The cited work is from Pahlevi et al., 2019. Banks and investors alike should exercise caution and research inflation trends in Indonesia before committing capital, since sharp spikes in prices might dampen profits.

The Effect of Interest Rates on Stock Returns

Researchers have shown that interest rates do not significantly impact stock returns through testing and analysis. This goes against the findings of (Nurfadilah & Manda, 2021), which demonstrate that interest rates significantly reduce stock returns, and supports the research of Andes et al. (2017), which claims that interest rates do not impact stock returns. When making investment selections, Indonesian investors do not take the reference interest rate or the BI 7-day Reverse Repo Rat into consideration.

The Effect of Non-performing Loans on Stock Returns

Researchers have shown that non-performing loans do not significantly impact stock returns through their testing and analyses. Yes, this is helpful. This is borne up by studies that contradict one another; one finds that non-performing loans significantly reduce stock returns (Muhamad, 2015), while the other finds no such effect (Ayuadinda & Rikumahu, 2018). The

primary factor that investors take into account when making investments is credit risk, which does not directly affect the performance of shares in Indonesian banks.

The Effect of Return on Assets on Stock Returns

Research shows that interest rates significantly impact stock returns; this in turn indicates that investors pay more attention to companies with a high return on assets, or their capacity to make a profit, since higher stock returns reflect this. This is corroborated by studies that find return on assets to be positively associated with stock returns (Bintara et al., 2020), in contrast to studies that find no such relationship (Mangantar et al., 2020). Our findings corroborate that when financial institutions in Indonesia achieve strong stock performance, as measured by high levels of profit, they are able to sustain stock performance and generate higher returns on investment.

The Role of Return on Assets (ROA) as a Mediating Variable on the Effect of Inflation on Stock Returns

Testing and analysis by academics have shown that ROA does not moderate the relationship between inflation and stock returns. Thus, return on assets (ROA) is unaffected by high or low inflation rates when it comes to stock returns. These findings show that banks are able to keep up their performance despite fluctuations in inflation, which means that stock returns are unaffected by inflation. This means that investors' decisions to invest in bank shares are unaffected by inflation through returns on assets. There is evidence that return on assets can moderate the impact of inflation on stock returns (Wiratno et al., 2018), but there is also evidence that return on assets cannot mitigate this effect (Adyatmika & Wiksuana, 2018).

The Role of Return on Assets (ROA) as a Mediating Variable on the Effect of Interest Rates on Stock Returns

Academic research has demonstrated that return on assets (ROA) does not mediate the relationship between interest rates and stock returns. As a result, we can see that interest rates whether high or low do not affect stock returns through ROA and that interest rates do not hinder company profits. Consistent with Aditya and Badjra's (2018) contention that ROA is unable to mitigate the effect of interest rates on stock returns, this study's results contradict those of Wiratno et al. (2018).

The Role of Return on Assets (ROA) as a Mediating Variable on the Effect of Non-performing Loans on Stock Returns

Researchers have shown that return on assets may mitigate the impact of non-performing loans on stock returns through their testing and analyses. The data demonstrates that high levels of non-performing loans (NPL) will lead to falling earnings, which in turn will influence stock returns. Return on assets serves as a signal for investors when making investment decisions. This study's findings corroborate those of (Nasikin & Yuliana, 2022), respectively, which found that ROA mediates the effect of non-performing loans on stock returns and that share prices impact ROA. In contrast, this study's findings suggest that ROA is unable to mediate the effect of non-performing loans on stock returns. The capacity of the firm to optimize stock returns is affected by credit risk, which is in turn affected by the performance of Indonesian banking companies.

CONCLUSION

According to these studies, stock returns are negatively and significantly affected by inflation, while positively and significantly affected by return on assets. Inflation is on the rise, therefore investors should keep an eye on it and look at the return on assets of the firm before making any investments. Stock returns are unaffected by interest rate risk and non-performing loans, hence these factors are not used by investors to predict returns. An rise in corporate earnings indirectly impacts credit risk on the stock returns of banking companies through return on assets, which mediates the effect of non-performing loans on stock returns but cannot

mediate the effects of inflation or interest rates on stock returns. Finding the primary causes of the decline in banking stock returns is still a challenge for this study. Future research should focus on Indonesian banking companies and their operations, and this study could be expanded to examine the mediating role of returns on assets.

REFERENCES

- Aditya, I., Badjra, I. B., & Bagus, I. (2018). Peran profitabilitas dalam memediasi pengaruh tingkat suku bunga dan leverage terhadap return saham. *E-Jurnal Manajemen Universitas Udayana*, 7(4), 1831.
- Adyatmika, I. G. P., & Wiksuana, I. G. B. (2018). Pengaruh inflasi dan leverage terhadap profitabilitas dan return saham pada perusahaan manufaktur di bursa efek Indonesia. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 3(7), 615–648.
- Alaagam, A. (2019). The relationship between profitability and stock prices: Evidence from the Saudi Banking Sector. *Research Journal of Finance and Accounting*, 10(14).
- Andes, S. L., & Prakoso, A. (2017). Pengaruh inflasi, kurs rupiah dan suku bunga terhadap return saham perusahaan manufaktur. *Jurnal Akuntansi Keuangan dan Bisnis*, 10(2), 8–16.
- Ayuadinda, T. R., & Rikumahu, B. R. (2018). Pengaruh Non Performing Loan (npl), Dewan Komisaris Independen, Return On Assets (roa) Dan Capital Adequacy Ratio (car) Terhadap Return Saham (Studi Empiris Pada Bank Umum BumN Periode 2012-2016). *eProceedings of Management*, 5(2).
- Fahmi, I. (2013). *Analisis laporan keuangan: Alfabeta*. Bandung.
- Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25*.
- Gujarati, D. N. (2006). *Dasar-dasar Ekonometrika (Ketiga)*. Erlangga.
- Hertina, D., & Wulandari, D. (2022). Pengaruh harga, kualitas produk dan brand image terhadap keputusan pembelian. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(12), 5379–5384.
- Kalengkongan, G. (2013). Tingkat suku bunga dan inflasi pengaruhnya terhadap Return on Asset (ROA) pada industri perbankan yang go public di Bursa Efek Indonesia. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 1(4).
- Mangantar, A. A. A., Mangantar, M., & Baramuli, D. N. (2020). Pengaruh return on asset, return on equity dan debt to equity ratio terhadap return saham pada subsektor food and beverage di Bursa Efek Indonesia. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(1).
- Muhamad, N. K. (2015). Pengaruh CAR, NPL, dan BOPO terhadap profitabilitas dan return saham pada bank-bank yang terdaftar di BEI tahun 2009-2013. *Jurnal Emba*, 3(2), 258–269.
- Nasikin, Y., & Yuliana, I. (2022). Peran Return On Assets (ROA) Sebagai Variabel Mediasi Pada Pengaruh Non Performing Loan (NPL) Dan BI Rate Terhadap Harga Saham Bank BUMN Periode 2011–2020. *Owner: Riset dan Jurnal Akuntansi*, 6(1), 400–415.
- Ningrum, S. A. (2021). Analisis Pengaruh BOPO, NPL dan LDR Terhadap Return Saham Melalui ROA pada Sektor Perbankan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2020. *Jurnal Sosial Teknologi*, 1(10), 1–218.
- Nurfadilah, D., & Manda, G. S. (2021). Pengaruh Risiko Suku Bunga dan Inflasi Terhadap Return Saham Pada Perusahaan Telekomunikasi Yang Terdaftar Di Bursa Efek Indonesia Periode 2014-2019. *Jurnal Humaniora: Jurnal Ilmu Sosial, Ekonomi dan Hukum*, 5(1), 64–74.
- Nurhayati, E., & Pertiwi, W. N. B. (2021). Analisis Pengukuran Faktor Paling Dominan Yang Mempengaruhi Harga Saham Perbankan BUMN Indonesia Periode 2009–2018. *Sains: Jurnal Manajemen dan Bisnis*, 13(2), 230–256.

- Sudarmawanti, E., & Pramono, J. (2017). Pengaruh CAR, NPL, BOPO, NIM dan LDR Terhadap ROA (Studi kasus pada Bank Perkreditan Rakyat di Salatiga yang terdaftar di Otoritas Jasa Keuangan Tahun 2011-2015). *Among Makarti*, 10(1).
- Tandelilin, E. (2010). Dasar-dasar manajemen investasi. *Manajemen Investasi*, 34, 117–127.
- Wiratno, A., Kurniasari, W., & Yusuf, M. (2018). Pengaruh inflasi dan suku bunga terhadap return saham dengan profitabilitas sebagai variabel intervening di perbankan yang terdaftar di Bursa Efek Indonesia tahun 2013-2015. *Journal of Accounting Science*, 2(1), 67–90.

