THE RELATIONSHIP OF PROFITABILITY FACTORS TO PAST AND FUTURE STOCK RETURNS (EMPIRICAL STUDY OF CONVENTIONAL BANK COMPANIES INDEX IDX FINANCE PERIOD 2020-2023)

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Abstract
Background: This study seeks to explore the connection between profitability and stock returns, specifically investigating how past stock returns influence profitability and how profitability impacts future stock returns. The research focuses on banking companies listed in the IDX Finance index during the 2020-2023 period.
Objective: This study aims to offer empirical evidence regarding the impact of past stock returns on profitability and the impact of profitability on future stock returns.
Research Methods: This study utilizes a quantitative approach, focusing on a sample of 37 conventional banks that exists on the Indonesia Stock Exchange (IDX) Finance in 2020 – 2023. Data analysis was performed using the PLS-SEM method, with the assistance of SmartPLS 4.0 software.
Research Results: The study findings revealed that past stock returns significantly enhance the net interest margin (NIM), which in turn positively influences the return on assets (ROA). Consequently, ROA plays a vital role in driving future stock returns upward.
Research Originality/Novelty: This research provides fresh perspectives by examining the connection between profitability and stock returns, both historically and prospectively, within the context of Indonesia's banking sector. Additionally, it highlights the factors that impact stock returns and the profitability of banking institutions.
Keywords: Profitability, Net Interest Margin, Return on Assets, Stock Returns, Past Stock Returns, Future Stock Returns

Introduction

The goal of every stock investor is to generate financial gains in both the short and long term. The stock returns represent the gains and performance of shares that a company provides to investors who have invested their capital in the company. (Gustiansyah & Pratomo, 2023). A stock is considered undervalued when its market return is lower than its fair value or the price it should be, and vice versa. (Almira & Wiagustini, 2020). Stock returns have two types, namely dividends and capital gain (loss) (Ayu & Suarjaya, 2021). When demand for a stock rises, its price is likely to increase, whereas an increase in supply typically leads to a price decrease (Tambun et al., 2024). Therefore, investors who are investing safely will try to buy stocks that have low risk and whose stock fluctuations tend to be static (Aprilia and Setiawan, 2022). Stocks like this are generally owned by conventional banks listed on the IDX Finance index. This IDX

Finance stock is a composite index in the financial sector, with sub-sectors including banking (G1), investment (G2), financing (G3), insurance (G4), and securities (G5). Of these sub-sectors, the largest index weighting is banking. Banks are crucial to the economy as they offer essential financial services to individuals, businesses, and governments. Because, banking helps facilitate the flow of funds and encourages economic growth.

However, stock returns in the financial sector experienced a rapid increase during the Covid-19 pandemic. For instance, data from www.cnbcindonesia.com indicates that the number of investors in the Indonesian stock market has surged rapidly since the Covid-19 pandemic. This increase is largely due to the strong interest from millennials and Generation Z in financial sector investments, a trend that has been accelerated by the convenience of online account opening. Then, information obtained on the PEFINDO website, that the launch of the IDX-PEFINDO Prime Bank Index in 2023 shows the superior performance of the banking sector in the last five years. Additional information from maritim.go.id indicates that, as of June 21, 2023, the President of the Republic of Indonesia issued Decision Number 17 of 2023, which officially ended the status of the Corona Virus Disease 2019 (COVID-19) pandemic in Indonesia. Consequently, banks saw a rapid rise in stock returns throughout the pandemic and up until its conclusion. This development has indirectly enhanced financial literacy in Indonesia, though further improvement is needed to navigate global market uncertainties.

Interestingly, this study will examine the effect of last year's stock returns on next year's profitability because when stock prices increase, investors tend to retain profits or increase investment, which in turn increases the company's profitability next year. Conversely, with an increase in profitability, investors are more likely to increase investment because fundamentally an increase in company profitability can increase stock returns in the future. Stock returns are not always directly proportional or linear to exchange rates. This is due to other influencing factors such as market conditions, economic factors, regulations, inflation, and the company's fundamental attributes (Ginting and Gularso, 2023). Investors typically examine profitability data before investing in a company, with ROA analysis being essential for assessing future growth potential. Strong profitability indicates robust financial health, boosting investor confidence and driving up stock prices, which, in turn, enhances the company's overall value (Wata and Gularso, 2023). For investors who hope for capital gains by paying attention to stock return and profitability are determinants that can be considered (Setiawan and Venona, 2023). With an efficient (strong form) stock market, it tends to have better stock prices in predicting the company's future profitability (Silva, 2021). High financial performance is like a magnet for investors, attracting them to invest and driving up stock prices and abnormal returns, while also triggering an increase in dividends for shareholders (Kurniati, 2019). The objective of a company's financial performance is to optimize investment returns, as evidenced

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by fluctuations in the company's stock price (Natarajan et al., 2020). Research findings indicate that variations in performance metrics have a positive significant effect on stock returns (Atukalp, 2021). In analyzing stock returns on financial performance, one of them uses profitability ratios as a benchmark to predict stock returns. So analyzing profitability in banking can have an impact on stock returns and it still needs to be tested that past stock returns can affect future profitability.

This research is important because there are still limited studies examining the relationship between profitability and stock returns in the context of the past and the future. Especially in the midst of economic pressures, which at that time were in crisis due to a long pandemic, many investors bought bank stocks because prices were falling and risks were low. This increases investor confidence, making bank stocks an attractive investment alternative. The objective of this research is to delve into the elements influencing stock returns and thereby equip investors with the knowledge to make more sound investment judgments.

This study aims to offer empirical evidence regarding how past stock returns impact profitability and how profitability affects future stock returns. This research offers several benefits for academics, as studies on the impact of stock returns on profitability in the fields of accounting and financial management are still relatively scarce. As a result, this study lays the groundwork for future research on this topic, potentially incorporating additional variables or examining different time periods. For banking institutions, research helps bank management understand how past stock returns influence future profitability. For investors, the information provided allows for a better understanding of what influences the financial success and share price of banking companies, aiding in the selection of banks with strong investment prospects.

Literature Review

Signaling theory, proposed by Spence (1973), describes how companies can communicate with stakeholders, particularly financial statement users, by revealing pertinent information. This signal serves to demonstrate that the company is in a more favorable position compared to its competitors. Information that shows an increase in profits, for example, is considered a positive signal that can attract investors (Dang, et al., 2019). Moreover, substantial assets in a company are often seen as a sign of its long-term viability. When potential investors or the public receive a positive signal, they are more likely to show increased interest in investing in the company's shares or capital. On the other hand, a high level of leverage relative to a company's assets may be perceived as a negative indicator, potentially affecting investors' decisions to invest. In a different context, signaling theory examines how companies with high-quality information are inclined to disclose it promptly and accurately to the public. This information is typically shared through financial statements and made available to a broader audience. The precision and

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transparency of this disclosure serve as an indicator of whether the company is providing a positive or negative signal to investors (Brigham and Houston, 2019). Consequently, signaling theory offers a crucial framework for understanding how firms communicate with stakeholders to mitigate information asymmetry and shape investors' views on the company's future prospects.

The Efficient Market Hypothesis (EMH) posits that market efficiency is achieved when investors behave rationally and consistently strive to maximize their profits, which is considered a fundamental requirement for attaining market efficiency (Tambun et al., 2024). Market efficiency refers to how well and how quickly available information is reflected in prices, ensuring they are accurate and up-to-date (Griffin et al., 2010, as cited in Silva, 2021). Fama's (1970) concept of weak, semi-strong, and strong forms of efficiency describes how the efficient market hypothesis (EMH) applies to different levels of market efficiency (Silva, 2021). Higher market efficiency enhances the ability of stock prices to predict company valuations and future earnings (Silva, 2021). This study aims to demonstrate that the level of capital market efficiency in Indonesia remains between the weak and semi-strong forms, indicating some inconsistency in market efficiency. This scenario provides opportunities for investors and researchers to explore how profitability influences future stock returns using this theory.

Profitability is a vital measure of a company's financial health, indicating its profit-generating capacity (Doralitha et al., 2023). It involves comparing profit (after tax) to capital (equity), including profit before tax and the bank's asset base over a specific period (Nurazizah et al., 2022). The purpose of measuring profitability is to evaluate how efficiently a company utilizes its assets and manages its operations (A. Ross et al., 2021a). According to Stephen A. Ross et al. (2021), profitability can be measured using four metrics:, return on assets (ROA), net profit margin (NPM), earnings before interest, taxes, depreciation, and amortization (EBITDA), and return on equity (ROE). The connection between profitability and future stock returns is clearer when using gross profit measures like ROA (Cakici et al., 2021). Future profitability can be understood as a combination of the current level and the future growth rate (Lim et al., 2024). Net interest margin (NIM) is also a crucial metric for evaluating operational efficiency and banking profitability (Obeid, 2024). Therefore, this study investigates the impact of profitability, as indicated by ROA and NIM, on future stock returns, and examines how past stock returns affect profitability using these same indicators in banking companies.

The historical growth of a company's stock returns can serve as a key factor in enhancing its future profitability. Current stock returns often reflect expectations about future earnings, suggesting that investors use these returns to anticipate and price in future profitability (Collins et al., 1994 in Silva, 2021). As stock prices incorporate predictions about a firm's future profitability, they effectively 'bring the future forward' (Lundholm and Myers, 2002 in Silva, 2021). This is possible when stock prices efficiently mirror investors'

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expectations regarding a company's future performance, including anticipated earnings and cash flows, which are influenced by the precision of future information embedded in the company's intrinsic value. According to the discounted cash flow model, stock prices are equivalent to the sum of discounted expected cash flows (Blaylock et al., 2020). Greater insight into the factors driving future earnings leads to more accurate stock price estimations and improved portfolio management. Since earnings acceleration is linked to future profitability, it can be considered a risk factor from a rational pricing standpoint (Penman and Zhu, 2014 in He and Narayanamoorthy, 2019). Using a simple dividend discount model, Fama and French (2006) demonstrate a positive relationship between expected returns and future profitability (He & Narayanamoorthy, 2020). Positive past stock performance can indicate future profitability, as attractive returns draw investors, resulting in increased capital for growth and enhanced return on assets (ROA). Additionally, a strong historical stock performance can improve a company's reputation, leading to better loan conditions and a higher net interest margin (NIM). In essence, market optimism can create opportunities for companies to thrive, highlighting the impact of investor sentiment on actual outcomes. Consequently, investors may increase their investments due to favorable stock returns observed by others, positively affecting the company's future return on assets. Given that research on this hypothesis is still limited, further investigation is warranted. Given the findings mentioned above, we can propose the following hypothesis:

H_1: *Past Stock Returns have an effect on return on assets*

H_2: *Past Stock Returns have an effect on net interest margin*

Several studies on the Indonesian banking industry suggest that effective profitability practices can translate into increased stock returns for investors (Dewi et al., 2020; Gustiansyah & Pratomo, 2023; Tambun et al., 2024). The fundamental principle of stock valuation highlights that a stock's price is determined by the present value of its future cash flows, which mainly stem from the company's earnings. These earnings are typically distributed to shareholders through dividends or share repurchases (Natarajan et al., 2020). This principle implies that higher profits lead to increased cash flow, making shares more valuable and raising their price, thus providing higher returns for shareholders. The consistency in a company's past financial performance can be a predictor of future returns (Alwathainani, 2009 in Kurniati, 2019), as rising profitability tends to boost investor confidence, driving up stock prices (Setiawan and Venona, 2023). According to the Capital Asset Pricing Model (CAPM) and the dividend discount model, the expected return should serve as a reliable predictor of future returns (Lin & Lin, 2019). These models suggest that firms with higher profitability growth are likely to experience higher average future returns. However, this study will not use these models, focusing instead on whether current profitability directly impacts future

stock returns. Metrics such as ROA (Return on Assets) and NIM (Net Interest Margin) can influence future stock returns by affecting investor perceptions, risk assessments, and market expectations about the company's future cash flow generation. Given the findings mentioned above, we can propose the following hypothesis:

H_3: *Return on assets influences future stock returns*

H_4: *Net interest margin has an effect on future stock returns*

Net Interest Margin (NIM) is determined by taking the difference between the interest income generated from loans and the interest expenses on funding sources, and then dividing that by the average productive assets (Ramadanti and Setyowati, 2022). An increase in the distribution of credit to the public will boost the NIM and overall banking income, which positively impacts the bank's performance and profitability (I Wayan Sudirman, 2013:80 in Sanny & Dewi, 2020). A higher NIM ratio indicates greater interest income from the bank's productive assets, reducing the likelihood of banking difficulties (Almilia and Herdiningtyas, 2005 in Setyarini, 2019). When NIM has a positive influence on ROA, it indicates that bank management is utilizing it's productive assets efficiently (Ramadanti & Setyowati, 2022). Given the findings mentioned above, we can propose the following hypothesis:

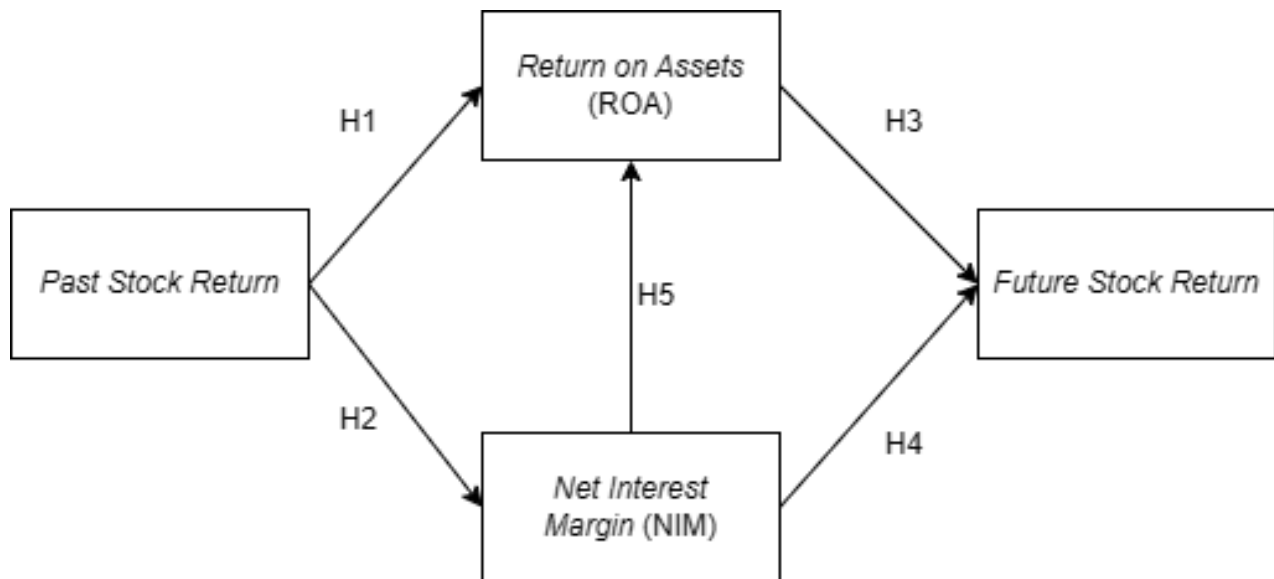H_5: *Net interest margin has an effect on return on assets*

Figure 1. Research Model

Research Methods

This study employs quantitative methods and purposive sampling to establish research criteria, focusing on conventional banks that listed in the IDX Finance Index on the IDX (Indonesia Stock Exchange) from 2020 to 2023, with a four-year observation period. The data sources include annual financial reports and IDX Finance banking reports for the years 2020 to 2023. The criteria for selecting research samples are as follows: (1) IDX Finance banking companies listed on the IDX between February 2023 and July 2023, (2) IDX Finance banking companies that have submitted complete annual reports for 2020 to 2023, (3) IDX Finance banking companies classified as conventional banking, and (4) IDX Finance banking companies that provide financial and annual reports containing relevant research variables. Out of an initial population of 42 companies and 126 data observations, purposive sampling resulted in 37 companies with 111 observations meeting the criteria for analysis using SmartPLS 4. This research utilizes secondary data from banking companies in the finance sector listed on the IDX Finance, as recorded in their financial statements for December 31 of the years 2020, 2021, 2022, and 2023.

The analysis technique used in this research is quantitative, utilizing SEM (Structural Equation Modeling). The financial report data will be examined and analyzed using the SmartPLS 4.0 program, which is a Partial Least Squares (PLS) tool. PLS, also known as variance-based or component-based structural equation modeling, enables both measurement model testing and structural testing to be conducted simultaneously. According to Abdillah and Jogiyanto (2015), PLS is a variance-based SEM technique suitable for confirmatory modeling, making it more appropriate for theory testing in quantitative research compared to theory development in qualitative studies.

Measurement of Variables

Future Stock Returns

Stock returns are factors that encourage investors to invest their capital and take planned investment risks (Tambun et al, 2024). The specified time period, whether one day, one month, one year, or others, considers stock returns that include changes in stock value (capital gain) and cash dividends paid during the period (Natarajan et al., 2020). The formula for future stock returns is as follows:

$$\text{Future Stock Returns} \quad = \quad \frac{(P_{t+1} - P_t)}{P_t} \text{ x } 100\%$$

Information:

P_{t+1} = Next year's closing stock price

P_t = Current closing stock price

Independent Variable

Past Stock Returns

Stock returns represent the amount of profit that investors gain from their stock investments (Nurazizah et al., 2022). Stock returns can make it difficult for investors to articulate the returns that will be provided by the banks where they invest and their summary with banking profits (Atukalp, 2021). This means that past stock returns can be a signal for investors, but cannot directly benefit banks. The formula for past stock returns is as follows:

$$\text{Past Stock Returns} = \frac{(P_{t-1} - P_{t-2})}{P_{t-2}} \times 100\%$$

Keterangan:

P_{t-1} = Last year's closing stock price

P_{t-2} = Closing stock price 2 years ago

***Net Interest Margin* (NIM)**

Net interest margin (NIM) is a ratio used to evaluate how effectively bank management can utilize its productive assets to cover interest expenses (Pandia, 2012, as cited in Susilawati & Nurulrahmatiah, 2021). A higher NIM indicates better bank performance, which is expected to boost company profits and subsequently enhance the company's return on assets (ROA) (Sanny & Dewi, 2020). The formula for calculating net interest margin (NIM) is as follows (SE BI No. 3/30/DPNP, 2001, as cited in Setyarini, 2020) :

$$\textit{Net Interest Margin} \text{ (NIM)} = \frac{\text{Net interest income}}{\text{Total Productive Assets}} \times 100\%$$

***Return on Assets* (ROA)**

Return on assets (ROA) is a profitability ratio that assesses how effectively bank management generates profit (Setyarini, 2020). A higher ROA suggests that the business is likely to be more profitable and efficient (Trisnowati et al., 2022). The formula for calculating return on assets (ROA) is provided below (A. Ross et al., 2021:52-53):

$$Return\ on\ Assets\ (ROA) \quad = \quad \frac{Earning\ After\ Taxes\ (EAT)}{Total\ Assets} \text{ x } 100\%$$

Results and Discussion

Statistical Test Results

Table 1. Descriptive Statistical Test Results

	Mean	Median	Min	Max	Standard deviation
NIM	0,040	0,043	-0,079	0,138	0,024
ROA	0,005	0,010	-0,147	0,047	0,029
Rs (t+1)	0,623	-0,033	-0,856	43,977	4,354
Rs (t-1)	0,782	0,000	-0,856	43,977	4,355

Referring to the descriptive statistics table above, the results detail the smallest and largest values, average, and standard deviation for the variables in this study. Table 1 displays the descriptive statistics for four variables: NIM (Net Interest Margin) with 111 observations, an average of 4.0%, a minimum of -7.9%, a maximum of 13.8%, and a standard deviation of 2.4%; ROA (Return on Assets) with 111 observations, an average of 0.5%, a minimum of -14.7%, a maximum of 4.7%, and a standard deviation of 2.9%; Rs (t+1) (Stock Returns in the next period) with 111 observations, an average of 62.3%, a minimum of -85.6%, a maximum of 4397.7%, and a standard deviation of 435.4%; and Rs (t-1) (Stock Returns in the previous period) with 111 observations, an average of 78.2%, a minimum of -85.6%, a maximum of 4397.7%, and a standard deviation of 435.5%.

Outer Model Results

Outer loadings show how strongly each observed variable (or indicator) is connected to its underlying latent factor (or construct). In simpler terms, this measures how effectively each indicator represents its intended construct. In this study, all loading factors exceed the 0.70 threshold, indicating strong relationships. Cross-loadings reveal how much an indicator also associates with other constructs besides its primary one. Ideally, an indicator should have a strong loading on its intended construct and a weak loading on others to demonstrate discriminant validity. Each indicator's cross-loading is above 0.70, and each indicator shows the highest value for its own construct compared to others in the same row, affirming good discriminant validity.

Construct reliability and validity assess how consistently a construct is measured. This is gauged by how well a set of indicators relate to each other as a group. A high Cronbach's Alpha, ideally between 0.7 and 0.9 in practical scenarios, signifies that the indicators measure the same underlying construct. In this study, all constructs have a perfect Cronbach's Alpha of 1.000, suggesting ideal internal consistency, though values between 0.7 and 0.9 are generally deemed acceptable. Similarly, Composite Reliability, which also measures construct reliability considering the varying contributions of indicators, shows a perfect score of 1.000 for all constructs, aligning with the perfect Cronbach's Alpha and indicating high internal consistency.

AVE (Average Variance Extracted) measures convergent validity, indicating how much variance in the indicators is captured by the construct relative to measurement error. An AVE of 1.000 suggests perfect convergent validity, though a value of 0.5 or higher is typically considered sufficient. Since all constructs have an AVE of 1.000, it implies perfect convergent validity. Thus, with Cronbach's Alpha, Composite Reliability, and AVE all meeting or exceeding their respective thresholds, the variables in this study are deemed to have met the reliability criteria.

Inner Model Results

Table 1. *R Square*

	R Square
NIM	0.035
ROA	0.044
Rs (t+1)	0.011

Source: Research data, 2024

In Structural Equation Modeling (SEM), the R Square value represents the proportion of variance in a dependent variable (or endogenous construct) that is accounted for by the independent variables (or exogenous constructs) within the model. It essentially measures how effectively the model predicts variations in the dependent variable. Higher R Square values signify better predictive accuracy of the model. In Table 1, the R Square values are 0.035 for Net Interest Margin (NIM) and 0.044 for Return on Assets (ROA). This indicates that past stock returns explain 3.5% of the variance in NIM, with the remaining 96.5% attributed to other factors, and 4.4% of the variance in ROA is explained by past stock returns, leaving 95.6% to other variables. For future stock returns, the R Square value is 0.011, meaning that the variables NIM, ROA, and past stock returns collectively account for 1.1% of the variance in future stock returns, with 98.9% explained by other factors.

Table 2. Path Coefficient

	Original Samples	Sample Means	Standard Deviation	T Statistics	P Values
NIM -> ROA	0.212	0.261	0.125	1.698	0.045
NIM -> Rs (t+1)	-0.074	-0.063	0.066	1.118	0.132
ROA -> Rs (t+1)	0.091	0.103	0.048	1.876	0.030
Rs (t-1) -> NIM	0.187	0.218	0.110	1.690	0.046
Rs (t-1) -> ROA	-0.012	-0.092	0.192	0.061	0.476

Source: Research data, 2024

Path coefficients indicate the standardized direct effect of one variable (or construct) on another, measuring both the strength and direction of the causal relationship between two variables. As shown in Table 2, each independent variable's effect on the dependent variable has a t value greater than 1.96 and a p value less than 0.05, indicating statistical significance. The NIM (Net Interest Margin) boosts the ROA (Return on Assets), with a one standard deviation increase in NIM resulting in a 0.212 standard deviation increase in ROA. Conversely, a one standard deviation increase in NIM is associated with a 0.074 standard deviation decrease in stock returns at time t+1. The relationship between ROA and stock returns at time t+1 is weakly positive, with a path coefficient of 0.091. Stock returns at time t-1 and NIM have a positive relationship, with a path coefficient of 0.187, while stock returns at time t-1 and ROA exhibit a very weak negative relationship, with a path coefficient of -0.012.

Table 3. *Indirect Effects*

	Original Samples	Sample Means	Standard Deviation	T Statistics	P Values
NIM -> ROA -> Rs (t+1)	0.019	0.027	0.022	0.860	0.195
Rs (t-1) -> NIM -> ROA -> Rs (t+1)	0.004	0.006	0.005	0.655	0.256
Rs (t-1) -> NIM -> ROA	0.040	0.055	0.044	0.903	0.183
Rs (t-1) -> ROA -> Rs (t+1)	-0.001	-0.010	0.021	0.050	0.480
Rs (t-1) -> NIM -> Rs (t+1)	-0.014	-0.014	0.016	0.879	0.190

Source: Research data, 2024

Indirect effects refer to the influence of one variable on another that is mediated through one or more intermediary variables. Essentially, this represents a chain reaction or domino effect, where a change in one variable impacts another variable indirectly via its effect on an intermediate variable. To calculate indirect effects, path coefficients along the indirect route are multiplied. Table 3 illustrates that several

variables exhibit indirect effects on other variables. Specifically, fluctuations in Net Interest Margin (NIM) have a beneficial, though indirect, impact on Return on Assets (ROA) in the following year (Rs(t+1)). This indicates that an increase in NIM generally leads to a higher ROA in the following year, though not directly. Additionally, Return on Assets from the previous period (Rs(t-1)) has a very minimal indirect effect on Rs(t+1) through NIM and ROA, showing a weak relationship. Rs(t-1) also exerts a weak indirect effect on ROA through NIM. A notable finding is the negative indirect effect between Rs(t-1) and Rs(t+1) via ROA, suggesting that an increase in Rs(t-1) tends to reduce Rs(t+1) indirectly through changes in ROA. Lastly, a negative indirect effect between Rs(t-1) and Rs(t+1) through NIM indicates that an increase in Rs(t-1) tends to lower Rs(t+1) indirectly through changes in NIM. Overall, the analysis reveals several indirect relationships among the variables, though the strength of these influences varies.

The Influence of Past Stock Returns on ROA (Return on Assets)

Past stock returns have no impact on return on assets and are negatively correlated, with a coefficient of -0.012. This suggests that banks with high past stock returns do not influence future return on assets, and if there is any impact, it is likely to result in a decrease in return on assets. This phenomenon might be due to other factors affecting return on assets. According to the efficient market hypothesis (EMH), if markets are efficient and incorporate all available information about stock prices, past earnings should not provide additional predictive value for future earnings. A negative coefficient for past earnings may even indicate a potential 'overreaction' by the market, where high past earnings create inflated expectations that are not realized in subsequent return on assets. Thus, if past stock returns are publicly available information, they cannot predict future return on assets according to the semi-strong form of the EMH.

This finding aligns with the study by Atukalp (2020), which found no statistically significant correlation between stock return rankings and the financial performance rankings of deposit banks in Turkey, and no significant insights into how investors consider bank financial performance when making investment decisions. If past stock returns do not affect future profitability, it implies that investors might not view past stock returns as a reliable indicator. However, this result contrasts with the findings of Silva (2021), Natarajan (2020), and Kurniati (2019), which reported a positive influence and correlation between past stock returns and profitability.

The Influence of Past Stock Returns on NIM (Net Interest Margin)

Past stock returns positively influence the net interest margin (NIM) by 0.187. This indicates that banks with strong past stock performance are likely to experience an increase in future NIM. Banks that

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received new investments from investors in the previous year can see an indirect rise in NIM, reflecting greater effectiveness in profit generation. These findings suggest that strong past stock performance can enhance a company's net interest margin, signaling a better ability to manage the difference between loan and deposit rates. This supports the Efficient Market Hypothesis (EMH), as the market appears to value companies with a history of strong stock performance.

This study aligns with previous research by Silva (2021), Natarajan (2020), and Kurniati (2019). Collins et al. (1994) demonstrated that current stock returns contain information about future earnings, implying that investors price future profitability into stock prices (Silva, 2021). This supports the semi-strong form of the EMH, which asserts that stock prices reflect all publicly available information, including expectations about future profitability. Additionally, this is related to signaling theory, where current stock returns act as a signal of future profitability. According to the signaling model related to dividends, changes in dividends should correlate with changes in profitability (Kurniati, 2019). This connection suggests that higher dividends signal positive future profitability to the market. However, this finding contrasts with Atukalp's (2020) research, which found no effect of past stock returns on profitability.

The Influence of ROA (Return on Assets) on Future Stock Returns

Return on assets positively impacts future stock returns by 0.091, suggesting that banks with higher profitability are likely to see an increase in future stock returns. Investors who assess banks based on strong profitability indicators are more inclined to retain or boost their investments, leading to higher stock returns in subsequent years. This research shows a clear link between a company's efficiency in turning assets into profits and its stock price. It implies that high returns on assets can signal promising stock returns. Additionally, this result challenges the Efficient Market Hypothesis (EMH) by indicating that profitability, as reflected in return on assets, is not fully captured in current stock prices.

The research aligns with previous studies by Kurniati (2019) and Moradi (2020). Alwathainani (2009) in Kurniati (2019) supports the idea that consistent growth in a company's financial performance can predict future returns, reinforcing signaling theory. This theory posits that strong financial performance serves as a positive signal about a company's future prospects, potentially enhancing future returns. Furthermore, evidence suggests that profitability information is a significant determinant of stock returns, especially over extended periods, aligning with the EMH that stock prices reflect all available information, including past financial performance. However, this finding contrasts with studies by Ricardianto et al. (2023), Trisnowati et al. (2022), and Razak et al. (2020), which found no impact of ROA on stock returns. Nevertheless, a high ROA indicates superior profitability and operational efficiency, likely boosting investor confidence and driving future stock prices higher.

The Influence of NIM (Net Interest Margin) on Future Stock Returns

NIM (net interest margin) does not significantly impact future stock returns and actually shows a negative effect of -0.074. This suggests that a high NIM in banks does not influence future stock returns positively, and if it does have an effect, it is likely to cause a decrease in future returns. This could be due to other factors affecting NIM. The result implies that NIM does not play a significant role in predicting future stock performance, indicating that investors might prioritize other factors over NIM when evaluating a company's future prospects. Investors may believe that NIM is not a reliable indicator for future stock returns. Consequently, concerns such as credit risk or other elements impacting a bank's profitability might overshadow the effect of NIM, making it insufficient to drive up stock prices. Additionally, the market may have already incorporated NIM information into stock prices.

This finding aligns with previous research by Lesmono et al. (2022) and Salam et al. (2020), which also found that NIM does not significantly affect stock prices, suggesting that annual NIM data does not provide meaningful signals for investment decisions (Yapi, 2014; Alifah, 2017; Jatmika & Andarwati, 2019 in Lesmono et al., 2022). According to signaling theory, companies with strong performance, indicated by high NIM, should convey positive signals through various financial metrics. However, if NIM does not impact stock prices, these signals are ineffective. In an efficient market, all available information, including NIM, would already be reflected in stock prices, meaning changes in NIM would not significantly alter stock prices. This contradicts the findings of Astohar & Pratiwi (2021), Hidayah & Latif (2022), and Iskandar (2020), which reported a positive effect of NIM on stock returns.

The Influence of NIM (Net Interest Margin) on ROA (Return on Assets)

NIM (Net Interest Margin) positively impacts ROA (Return on Assets) by 0.212, indicating that an increase in net interest margin will lead to a higher return on assets during that period. This suggests that banks with a higher net interest margin become more efficient in generating net profit, thereby boosting their total assets. A higher net interest margin reflects the bank's effective management of productive assets, which directly contributes to an increase in return on assets. This finding supports the Efficient Market Hypothesis (EMH), as an efficient market responds positively to enhanced profitability, evidenced by an increased return on assets. Thus, the positive correlation between net interest margin and return on assets highlights the significance of efficient asset management for achieving sustainable profitability, aligning with signaling and market efficiency dynamics.

This research aligns with previous studies by Sanny & Dewi (2020), Korompis et al. (2020), Ramadanti & Setyowati (2022), Setyarini (2019), and Susilawati & Nurulrahmatiah (2021). A higher net

interest margin is associated with better bank performance, leading to increased profits. According to Sanny & Dewi (2020), rising company profits are expected to enhance the return on assets. Korompis et al. (2020) also noted that higher net interest margin improves interest income from productive assets, resulting in higher return on assets and better financial performance. Additionally, an increase in net interest margin can serve as a positive market signal about the bank's profitability, attracting more investors and improving return on assets. However, this contradicts findings by Rembet & Baramuli (2020) and Ramadanti & Setyowati (2022), which reported no impact of net interest margin on return on assets.

Conclusion

This study explores how stock returns affect future profitability and profitability factors affect future stock returns, specifically looking at banking companies listed on IDX Finance from 2020 to 2023. The findings reveal that profitability, as indicated by Return on Assets (ROA), positively influences future stock returns, suggesting that banks with higher profitability are likely to offer better returns to investors. Additionally, the study shows that past stock performance positively affects the Net Interest Margin (NIM), which subsequently enhances ROA. These results highlight the significance of effective management of interest income and overall profitability for achieving strong stock performance. However, the study also indicates that past stock performance does not have a direct impact on ROA, and NIM does not directly influence future stock returns, suggesting that other factors also contribute to stock performance. Overall, the study offers valuable insights into how profitability and stock returns are interconnected within the Indonesian banking sector, aiding investors and bank management in making strategic decisions. Future research could broaden the analysis by incorporating additional variables, such as company size, capital structure, and macroeconomic factors. Moreover, studies could extend the time frame or compare results between conventional and Islamic banking institutions. Different analytical methods, such as multiple regression or panel data analysis, could also be used to provide a more detailed understanding of the relationship between profitability and stock returns.

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