The Influence Of ROA, EPS, Car, Inflation, Bi Rate On Stock Returns With Stock Beta As An Intervening Variable In Banking Companies Lq-45

NOVITA SARI

Master of Management, Faculty of Economics and Business, Mulawarman University, Indonesia

ARDI PAMINTO

Master of Management, Faculty of Economics and Business, Mulawarman University, Indonesia

YANA ULFAH

Master of Management, Faculty of Economics and Business, Mulawarman University, Indonesia

ABSTRACT: The aim of this research is to determine ROA, EPS, CAR, Inflation and BI Rate on stock returns with Beta Stock as an intervening variable in shares of banking companies listed on the 2017-2021 Lq-45 index. This research method is causal in nature which can measure causal relationships between variables. In this research, ROA, EPS, CAR, Inflation and BI Rate are the cause, while returns are the effect. This research uses statistical analysis tools with the help of Smart PLS 4.0 software to determine the influence and relationship of each variable. From the results of statistical testing, it can be seen that ROA, EPS, CAR have a positive and significant effect on stock returns, while Inflation, BI rate have a positive and less significant effect on stock beta mediation, while Inflation, Bi Rate have a less significant effect on stock returns with the help of stock beta mediation. Meanwhile, stock beta itself has a positive and significant influence on stock returns.

Keywords: ROA, EPS, CAR, Inflation, Bi Rate, Stock Beta, Stock Return.

Date of Submission: 06-11-2024

Date of acceptance: 18-11-2024

I. INTRODUCTION

Most countries in the world have capital markets, except for countries that are experiencing economic problems so that they cannot operate the capital market according to their government expectations. One of the factors that can hinder the existence of the capital market in a country is usually unstable political conditions, which results in investors being reluctant to invest their capital there. Investment is a commitment to sacrifice a certain amount of funds now in the hope of obtaining returns in the future. For an investor, investing has a goal that goes beyond just making a profit, which is to improve monetary well-being that can be measured from current and future income. Every company needs funds to operate its business and achieve its goals. If the need for funds increases but internal sources of funds have been exhausted, companies must look for external sources of funds such as issuing shares or going into debt. On the other hand, the public as investors want to make profitable investments in the future. Therefore, the capital market is formed as a place for supply and demand transactions of shares from companies that require capital injection.

According to Noviansyah and Nyi Mas Rizky (2018), the share price of a company that goes public is influenced by investors' responses to the information they obtain. As in the law of supply and demand, if investor demand for a company's stock increases or a major investor makes a purchase, the company's share price will rise. Conversely, if investor demand decreases or the main investor makes a sale, the stock price will fall. The decision to buy or sell by investors depends on the information they receive, both related to the company's performance and the country's economic conditions that affect the stock price owned by the investor.

The return of shares of banking companies included in the LQ45 index in the 2017-2021 period usually shows significant fluctuations. Banking is often one of the most monitored sectors in the capital market due to its sensitivity to economic policies, interest rates, and macroeconomic conditions in general. In these years, banking stocks can experience a period of sharp gains when economic conditions improve and interest rates are stable, but they can also fall sharply when there is economic uncertainty or global financial market turmoil. The LQ45 Index itself includes large companies that are liquid and selected based on their market capitalization and stock trading

liquidity, so the stock returns in this index reflect the relative performance of the most influential companies in the stock exchange.

According to Ardianto and Agil (2020), Return On Asset (ROA) is a financial ratio that measures a company's profitability by assessing the company's ability to generate profits compared to certain levels of income, assets, and share capital. EPS (Earning per Share) or earnings per share, on the other hand, indicates the company's ability to generate net profit per share outstanding in the market. EPS is calculated by dividing the profit available to common shareholders by the average number of common shares outstanding. Based on the results of Firnanti's (2019) research, it was found that return on asset, return on equity, quick ratio, earnings per share, net profit margin, residual income, firm size, price earnings ratio, and debt to equity ratio have no effect on stock returns. The macroeconomic environment, which can affect a company's day-to-day operations, is crucial for an investor to understand and predict before making profitable investment decisions. Economic factors relevant to the capital market include inflation, BI rate, exchange rate, and Gross Domestic Product (GDP).

Inflation is a general and sustained increase in prices, which can trigger a broad increase in the price of goods, usually measured by the government every month in the form of a percentage (%). The BI Rate is an interest rate policy that reflects the monetary policy stance set by Bank Indonesia and publicly announced as a reference for the benchmark lending rate, announced monthly by the Board of Governors of Bank Indonesia. Return is the rate of return from investment or investment activities, which can be influenced by micro and macroeconomic factors. Stock beta, or systematic risk, is an indicator that measures a stock's sensitivity to overall market movements (Nidianti, 2013).

Stock returns need to be mediated by systematic risk variables because systematic risk, measured by beta, reflects the sensitivity of stock returns to overall market movements. Systematic risk is a risk that cannot be eliminated through diversification, such as changes in interest rates, inflation, or global economic conditions. When measuring stock returns, understanding systematic risk is essential because the returns expected by investors should reflect compensation for the risks they are taking. By including systematic risk as a mediating variable, the analysis becomes more comprehensive, showing how market risk affects the relationship between a company's fundamental factors (such as profitability or liquidity) and stock returns. This helps in identifying whether the returns generated by the company are commensurate with the market risks faced, providing a clearer picture of investment performance from an integrated risk and return perspective.

Based on the background that has been explained above, the formulation of the problem can be described as follows: (1) What is ROA directly affect Stock Returns?; (2) What is EPS directly affect Stock Returns?; (3) What is CAR directly affect Stock Returns?; (4) What is Inflation directly affect Stock Returns?; (5) What is Interest Rate directly affect Stock Returns?; (6) What is ROA indirectly affect Stock Return through the Stock Beta intervening variable?; (8) What is the CAR variable indirectly affect the Stock Return through the Stock Beta intervening variable?; (9) What is Inflation indirectly affect Stock Return through the Intervening Variable Beta Shares?; (10) What is Interest Rate indirectly affect Stock Return through the Intervening Variable of Stock Beta?; and (11) What is Stock Beta affect stock returns?.

Return on Shares

II. LITERATURE REVIEW

According to Suteja and Gunardi in the book Venture and Portfolio (2016: 21), return is one of the factors that encourages financial backers to contribute and is a compensation for the speculation risk they bear. Meanwhile, stock return is a measure that investors pay attention to when investing in a company. The concept of return refers to the level of profit received by investors for the investment made. That is, the return on shares reflects the income received by shareholders as a result of their investment in a particular company. Thus, it can be concluded that stock returns are the results obtained from investments, reflecting the level of profit enjoyed by investors (Christine et al., 2023). Then, according to Jogiyanto (2013:235), there are two types of stock returns, namely realized returns and expected returns. Realized return is a return that has occurred. Return realization is calculated using historical data. Return realization is important because it is used as one of the measures of company performance. Realized returns are also useful in determining expected returns and future risks. Meanwhile, expected returns are returns that are expected to get investors in the future. Compared to the realization return that has already occurred, the expected return has not yet occurred. The formula for calculating stock returns according to Jogiyanto (2013:236-237) is as follows.

 $Return = \frac{P_t - P_{t-1}}{P_{t-1}}$ $Return \text{ on Shares} = \frac{P_t - P_{t-1} + D_t}{P_{t-1}}$ [1]

Return on Assets (ROA)

ROA is one of the elements in the profitability ratio analysis. By definition, ROA is a tool used to measure how effectively a company manages its assets to earn net profit (Putri & Syaichu, 2023). ROA This ratio assesses the company's ability to generate profits by paying attention to total existing assets. In other words, ROA shows how effectively all of a company's assets contribute to profit generation (Jaya et al., 2023). The main purpose of ROA is to evaluate the return on investment generated from all the assets used by the company. Based on Bank Indonesia Regulation No. 13/1/PBI/2011, the ideal ROA value is more than 1.5%. A higher ratio value indicates that the company's performance is getting better (Jaya et al., 2023). In this context, the greater the ROA obtained, the greater the profit generated by the company. Conversely, if the ROA shows a downward trend, the company risks losses (Dewi etal., 2022). Here is the formula used to calculate ROA in this study.

 $ROA = \frac{Net Profit}{\text{Total asset}} x \ 100\%$ [3]

Earning Pershare (EPS)

EPS is revenue per share outstanding, used to analyze a company's income level (Subianto, 2022). EPS describes how much profit is generated per share owned. EPS is often used in publications to assess a company's ability to offer its shares to the public, as this ratio reflects the revenue generated per share invested. The amount of EPS depends on the net profit earned by the company and the number of shares outstanding (Febrianti et al., 2023). EPS is an important component of business analysis. When the company earns higher profits, the resulting EPS value will also increase, and vice versa (Dewi et al., 2022). A high EPS indicates that the company's profit is relatively better compared to a low EPS. In other words, companies that have a high EPS value can provide greater profits to each shareholder. However, in practice, potential investors do not only rely on EPS value analysis to make stock purchase decisions. This is because the EPS value could decrease if the number of outstanding shares increases. Here is the formula used to calculate EPS in this study.

 $EPS = \frac{\text{Net Profit}}{\text{Number of shares outstanding}} \qquad [4]$

Capital Adequacy Ratio (CAR)

CAR is a ratio that shows the extent to which all bank assets that contain risk, such as credits, inclusions, securities, and bills on other banks, are financed from the bank's own capital funds. In addition, banks also obtain funds from external sources, such as public funds and loans (Sari et al., 2021). The CAR ratio serves as a measuring tool to determine whether the bank's capital is sufficient to support its operational activities. The CAR ratio is very important because a high CAR value (at least 8%, in accordance with PBI No. 15/12/PBI/2013 which refers to the Bank for International Settlements - BIS standard) protects the interests of customers and maintains overall financial stability. This increase in the ratio shows that banks are better able to bear the risk of loss, which has a positive impact on the increase in bank profits.

Generally, banks with high CAR are considered safe and tend to be able to meet their financial obligations. The higher the CAR value, the more likely it is that the bank will withstand other unexpected losses. Therefore, Bank Indonesia requires each commercial bank to provide a minimum capital of 8% of total risk-weighted assets (ATMR). Based on BI SE No. 13/24/DPNP dated October 25, 2011, the assessment of capital factors includes the level of capital adequacy and capital management of banks, which can be measured using CAR (Fatihah et al., 2022; Sari et al., 2021). Here is the formula used to calculate CAR in this study.

 $CAR = \frac{Equity}{\text{Risk Weighted Assets}} x \ 100\% \quad \dots \quad [5]$

Inflation

Inflation refers to an increase in the price of goods and services over a certain period, which has an impact on a decrease in people's buying interest. It is the process by which the overall tariff of goods experiences an increase in the economy (Febrianti et al., 2023). In this context, inflation occurs when demand for products exceeds supply capacity, which causes prices to tend to rise (Mappadang, 2021). Inflation can also be seen as a tendency for prices to increase in general and continuously, reflecting the process of increasing prices in an economy (Christine et al., 2023).

According to Rachmawati (2018), inflation is an important economic indicator that shows an increase in the price of goods and services in a period. High inflation can lead to an increase in production costs. Based on its severity, inflation can be grouped into four categories: 1) Light inflation ($\leq 10\%$ per year), 2) Moderate inflation (between 10%-30% per year), 3) Severe inflation (between 30%-100% per year), and 4) Hyperinflation ($\geq 100\%$ per year) (Rachmawati, Yuni, 2018). Here is the formula used to calculate inflation in this study (Christine et al., 2023).

Information:

 I_t = Inflation rate for period t IHK_t = Consumer price index for period t IHK_{t-1} = Consumer price index for the period t-1

Interest Rate (BI Rate)

Interest is a reward given by a borrower to a lender as compensation for the use of borrowed capital over a certain period of time. The interest rate, which reflects the amount of return to the owner of the capital, is usually expressed as a percentage of the amount of capital involved in the borrowing-borrowing transaction. Interest rates are applied to a variety of financial instruments, including savings, loans, investments, insurance, and pension funds (Christine et al., 2023). The interest rate also shows the fees that borrowers must pay lenders to gain access to funds over a given period, as well as the current value of the use of the money that will be returned in the future (Febrianti et al., 2023). According to Eduardus (2010:343), changes in interest rates can affect the variation in the returns of an investment. The relationship between interest rates and stock prices is inverse; If interest rates increase, stock prices tend to fall, and conversely, if interest rates decrease, stock prices will usually rise. This phenomenon occurs because an increase in interest rates will also cause the yield of related investment instruments, such as deposits, to increase, thus attracting investors to move funds from stocks to deposits.

Systematic Risk (Beta Stocks)

Systematic risk refers to the type of risk that affects all investments and cannot be reduced or eliminated through diversification. This risk arises as a result of the influence of economic, political, and socio-cultural conditions that have a wide impact. Within these risk categories, it includes market risk, interest rate risk, and purchasing power risk. Systematic risk is also known as indivertible risk (Mappadang, 2021). Further, systematic risk is a risk that cannot be diversified or avoided, and is often referred to as market or beta risk. These risks relate to the prevailing circumstances in the market in general, including changes in the macroeconomy, interest rate risk, political risk, inflation risk, exchange rate risk, and market risk itself. This risk affects all companies and cannot be eliminated through diversification. The parameter used to measure systematic risk is the beta of the stock (Tampi et al., 2022). A stock beta is a measure that indicates the volatility or systematic risk of a security or portfolio when compared to the market as a whole. In the context of investing and trading stocks on the exchange, stock beta serves as an indicator that reflects the level of risk contained in a stock against market risk. By knowing the beta value of a stock, investors can assess how sensitive the stock is to existing market risks (Mappadang, 2021). Here is the formula used to calculate the stock beta in this study.

 $\beta = \frac{\Sigma_{t=1}^{n} (Rit - \overline{Rit})(RMt - \overline{RMt})}{\Sigma_{t=i}^{n} (RMt - \overline{RMt})^{2}}$ Information: Ri = Return of the Company's shares t RM = Market return t = Time Rit = Average return of shares RMt = Average market return

Meanwhile, the formula for calculating monthly market returns is as follows.

 $R_{mt} = \frac{\text{IHSGt} - \text{IHSGt} - 1}{\text{IHSGt} - 1}$ [8]

Information:

Rmt= Monthly Stock Market ReturnJCI= Monthly JCIt= time period

Relationship Between Variables Relationship between ROA and Stock Return

ROA is a measure used to assess income in the context of the health of commercial banks, indicating the return to be earned for each rupiah invested (Jati & Fachrurrozie, 2021). According to the signal theory, an increase in ROA serves as a positive signal for investors, as bank management leverages its assets to achieve higher returns. Investors' interest in allocating their funds can have an impact on price fluctuations and stock returns (Putri &

Syaichu, 2023). The increase in ROA reflects that the company's performance is getting better, which means investors can enjoy benefits in the form of dividends or capital gains (Jati & Fachrurrozie, 2021). An improving company performance and a gradual increase in the value of the company will give hope for an increase in the stock price in the company, which in turn has an impact on stock returns. Therefore, ROA is an important indicator for investors in making stock investment decisions, because ROA reflects the company's efficiency in using assets to generate profits (Putri & Syaichu, 2023). The effect of ROA on stock returns is evidenced by the research of Fahmi, et al. (2017), Ayem & Wahyu (2017), Mahandari & Wira ma (2018).

The Relationship between EPS and Stock Return

EPS is an indicator that describes the potential earnings, showing the net profit that the company earns for each share invested (Jati & Fachrurrozie, 2021). The increase in EPS indicates that the company is in a growth phase, with improved financial conditions in line with the increase in sales and profit. In other words, the higher the EPS indicates the company's ability to generate net profit per share (Tampi et al., 2022). A high EPS can contribute to increased profits, which in turn will result in higher returns. Investors tend to view high EPS as a positive signal from the company, which can stimulate demand for stocks and lead to stock price increases as well as stock returns. This shows that EPS has a positive impact on stock returns (Jati & Fachrurrozie, 2021). The effect of EPS on stock returns is evidenced by the research of Hermawan (2012), Bukit & Anggono (2012), Idawati & Wahyudi (2015).

The Relationship between CAR and Stock Return

CAR is included in the health indicators of commercial banks that serve as an assessment of capital. CAR reflects the company's ability to protect itself from risks that may occur. A high or low CAR level indicates how well a company is able to manage the capital and reserves needed to support operations. A good company's performance, reflected in a high CAR, can increase investors' interest in investing. This is because investors see a high CAR as a positive signal, in accordance with signal theory, which states that financial information such as CAR can give investors a good signal regarding the condition of the company. In other words, a high CAR signals that the company is in a healthy financial condition, which ultimately increases the company's stock price and earnings (Jati & Fachrurrozie, 2021). CAR's effect on stock returns is evidenced by the research of Ayem & Wahyu (2017), Khairani & Dillak (2018), and Mahandari & Wirama (2018).

The Relationship between Inflation and Stock Returns

Inflation refers to an increase in the price of goods and services in a certain period. The increase in inflation is often caused by high demand for products, while people's purchasing power tends to decrease. This makes it difficult for many people to buy the goods they need. As a result, the company experienced constraints in production due to rising costs and unaffordable selling prices by consumers, which could lead to a decrease in total sales as well as profits. However, if the increase in production costs is lower than the increase in selling prices, then the company's profit can increase. Fluctuations in the company's profits have the potential to affect the value of the stock as well as investors' interest in investing (Febrianti et al., 2023). Based on signal theory, high inflation can be interpreted as a negative signal for issuers, because the increase in raw material prices will increase production costs. When production costs rise, a company's sales can decrease, which in turn can depress the stock price. The decline in stock prices will have an impact on reducing the returns received by shareholders (Christine et al., 2023). The effect of inflation on stock returns is proven by research Christine et al. (2023), Febrianti et al. (2023).

The Relationship between BI Rate and Stock Return

The interest rate reflects the cost of using money over a certain period, i.e. the value of the money borrowed and will be returned in the future. High interest rates can affect investment decisions, whether in the form of stocks, bonds, or deposits. When the expected return is not in line with its realization, investors tend to prefer to keep their funds in savings or deposits rather than investing them in stocks. This decision has the potential to cause a decline in stock prices, which is further followed by a decrease in stock returns (Febrianti et al., 2023). Riantani and Tambunan (2013) stated that the increase in borrowing costs will have an impact on the increase in interest costs and capital expenditures, which in turn reduces the company's profits. This decrease in profits can hamper the rate of stock returns, because the projected cost of the company's offering in the capital market is getting lower. Conversely, a decrease in funding costs can increase individuals' interest in investing their money in the capital market, potentially increasing stock returns. The effect of interest rates/BI Rate on stock returns is proven by research Sari et al. (2021), Febrianti et al. (2023), Christine et al. (2023).

The Relationship between ROA and Stock Return through Stock Beta

Stock beta functions as an intervening variable that connects ROA with stock returns. ROA refers to a ratio that measures how effective a company is in generating profits from its assets. When ROA increases, it is expected that the returns obtained will also increase. However, along with the increase in returns, the level of risk faced by companies also tends to increase (Laraswati et al., 2018). In addition, the greater the beta value of the stock, the greater the risk inherent in the stock, because the beta shows the sensitivity of the stock to market changes (Astuti & Wahyudi, 2018). Market movements in general can affect variations in returns in investments. This change in return is reflected through fluctuations in stock market indices. When market trends improve, investors tend to choose stocks that have high sensitivity to market changes. Stocks with high beta will typically experience sharper price increases, providing greater profit potential. However, if the market index falls, stocks with high beta will also experience a larger decline. Thus, the higher risk is usually accompanied by greater opportunities for return (Astuti & Wahyudi, 2018).

The Relationship between EPS and Stock Return through Beta Shares

Stock beta functions as an intervening variable that connects EPS with stock returns. When EPS increases, it shows that the company is becoming more efficient in generating net profit, which is generally considered a positive signal by investors. An increase in EPS can attract more investors, thereby increasing demand for shares and potentially increasing stock prices. If a stock has a high beta, it indicates that the stock is more volatile than the market, so the stock price movement is greater, both up and down. In concept *high risk high return*, investors tend to expect higher returns as compensation for the systematic risks they take. Therefore, if the EPS is high and the beta is also high, investors will feel more confident to invest, which can lead to increased stock returns. In other words, stock beta strengthens the relationship between EPS and stock returns, where an increase in EPS can trigger an increase in stock prices, especially in stocks with high beta, thus providing higher returns to investors (Tampi et al., 2022).

The Relationship between CAR and Stock Return through Stock Beta

Stock beta functions as an intervening variable that connects CAR with stock returns. CAR, which reflects the strength of a bank's capital, is perceived as an indicator of a bank's financial security. Banks with high CARs are often considered safer by investors, thus sparking their interest in investing. However, CAR is not a static value, and its fluctuations depend on the amount of Third Party Funds (DPK) collected by the bank. If the deposit increases, the bank's assets also increase, which can lower the CAR. Therefore, keeping CAR in a healthy range is essential to maintain investor interest, which ultimately impacts the stock price (Pebriyanti, 2015). Stock beta measures the sensitivity of a stock to overall market movements. When a stock has a high beta, it tends to have a higher risk, but it also offers greater opportunities for returns, especially when the market is rising. Conversely, if the market declines, stocks with high beta will be more affected. Therefore, stock betas play a role in strengthening the relationship between CAR and stock returns, as investors are more interested in stocks with high beta when they see the capital stability shown by CAR, which contributes to the expectation of greater returns in the market (Pebriyanti, 2015; Soenarso, 2022).

The Relationship between Inflation and Stock Return through Stock Beta

Stock beta functions as an intervening variable that links the influence of inflation to stock returns. High inflation has the potential to increase systemic risk, where this condition is a negative signal for investors, as it can lower real income from investments and create uncertainty in the economy. As inflation increases, production costs also rise, leading to a reduction in corporate profits. As a result, investors may avoid stocks of companies that are considered high-risk, causing the stock beta to increase (Apiun et al., 2024). A high stock beta reflects greater volatility against market movements; This means that the stock is more sensitive to price fluctuations. When inflation creates uncertainty, this systematic risk can cause stock prices to fall, resulting in a decrease in stock returns (Purwanto & Astuti, 2021). Therefore, stock betas play an important role in mediating the impact of inflation on stock returns, where high inflation and increased systemic risk will lead to lower return expectations for high-beta stocks.

The Relationship between BI Rate and Stock Return through Stock Beta

Stock beta functions as an intervening variable that links the influence of inflation to stock returns. According to signal theory, relevant information, such as changes in interest rates, can influence investment decisions. In this context, the APT approach explains that interest rates and systematic risk are interrelated, where changes in interest rates can be one of the systematic risk factors. When interest rates rise, this can result in an increase in systemic risk, which is reflected in the stock's beta rise. This happens because rising interest rates will increase the cost of capital that companies must bear, reduce net profit, and suppress stock prices (Purwanto &

Astuti, 2021; Apiun et al., 2024). According to Apiun et al. (2024), there are two main ways how interest rate hikes impact stock returns. First, the rising cost of capital reduces the company's profits, which in turn can reduce the attractiveness of the stock for investors. Second, when interest rates are high, production costs increase, and consumers may choose to postpone purchases, leading to a decline in sales and corporate profits. This decline will add pressure to the stock price, making investors more likely to sell their shares, thus increasing volatility in the market.

The Relationship Stock Beta with Stock Return

Stock beta has a significant influence on stock returns, where the beta coefficient measures a stock's sensitivity to market changes. The higher the beta value, the greater the potential return that investors can get. According to Putri & Syaichu (2023), there is a direct relationship between beta and stock return; When the beta goes up, the return also tends to increase. Beta reflects the risks inherent in stocks. (Mappadang, 2021) states that stocks with high beta offer higher yields in accordance with the principle of "*high risk, high return.*" In contrast, low-beta stocks are attractive to investors who are more focused on security. As such, investors should consider the risks they are willing to take in choosing investments, as beta increases indicate greater opportunities for returns, but with higher risks. The effect of stock beta on stock returns is evidenced by Payamta et al., (2018), Nurfadillah (2018), Nofitasari et al., (2021).

Research Conceptual Framework





Hypothesis

- H1 : ROA has a direct influence on Stock Returns.
- H2 : EPS has a direct influence on Return on Shares.
- H3 : CAR has a direct influence on Stock Returns.
- H4 : Inflation has a direct effect on Stock Returns.
- H5 : BI Rate has a direct influence on Return on Shares.
- H6 : ROA indirectly has an influence on Stock Return through the Intervening Variable of Stock Beta.
- H7 : EPS indirectly affects Stock Return through the Intervening Variable Beta Stock.
- H8 : CAR indirectly has an influence on Stock Return through the Intervening Variable Stock Beta.
- H9 : Inflation has an indirect effect on Stock Return through the Intervening Variable Beta Stock.
- H10 : BI Rate indirectly affects Stock Return through the Intervening Variable Beta Shares.
- H11 : Stock Beta affects Stock Return

III. RESEARCH METHOD

Operational Definition

1. Dependent Variables

Dependent variables are variables whose changes are influenced by other variables or variables that change in response to other variables (Hasan, 2020). The dependent variables in this study are Return on shares, which is the return obtained from the investment, reflects the level of profit enjoyed by the financier (Christine et al., 2023).

2. Independent Variables

Independent variables are variables whose changes affect other variables (dependent variables), both positive and negative influences(Hasan, 2020). The following are the independent variables in this study.

a. ROA is a tool used to measure how effectively a company manages its assets to earn a net profit (Putri & Syaichu, 2023).

b. EPS describes how much profit is generated per share owned (Febrianti et al., 2023).

c. CAR is a ratio that shows the extent to which all bank assets that contain risk, such as credits, inclusions, securities, and bills at other banks, are financed from the bank's own capital funds (Sari et al., 2021).

d. Inflation is defined as the tendency of prices to increase in general and continuously, reflecting the process of increasing prices in an economy (Christine et al., 2023).

e. The BI Rate reflects the monetary policy direction set by Bank Indonesia and announced to the public (Christine et al., 2023). These variables include the fees the borrower pays for access to funds and reflect the value of the use of the money that will be returned in the future (Febrianti et al., 2023).

3. Intervening Variables

Intervening Variable (Between). It is a variable that connects independent variables with dependent variables that can strengthen or weaken the relationship but cannot be observed or measured (Pasaribu et al., 2022). The intervening variable in this study is the stock beta, which is a measure that indicates the volatility or systematic risk of a security or portfolio when compared to the market as a whole (Mappadang, 2021).

Table 1. Variable Operational Definition				
Variable	Proxy	Indicators	Scale	
Return on Shares (Y)	RS	$\frac{P_t - P_{t-1}}{P_{t-1}}$	Ratio	
Return on Assets (X1)	ROA	$\frac{\text{Laba bersih}}{\text{Total asset}} x \ 100\%$	Ratio	
Earnings Per Share (x2)	EPS	Laba Bersih Jumlah Saham Beredar	Ratio	
Capital Adequacy Ratio (X3)	CAR	Modal Aktiva Tertimbang Menurut Resiko	Ratio	
Inflation (X ₄)	Less	$\frac{IHK_{t}-IHK_{t-1}}{IHK_{t-1}}$	Ratio	
BI Rate (x5)	BR	Average BI Rate per year	Ratio	
Beta Stock (Z)	β	$\frac{\sum_{t=1}^{n} (Rit - \overline{Rit})(RMt - \overline{RMt})}{\sum_{t=i}^{n} (RMt - \overline{RMt})^2}$	Ratio	

Source: Data processed (2024)

Population & Sample

The population for this study is all the listed stocks in the LQ-45 stock index for the 2017-2021 research period, namely there are 69 companies with a list of companies attached. The criteria in the sample in this study are that a number of stocks in the banking sector are consistently categorized on the LQ-45 index during the 2017-2021 period. Based on the criteria that have been set, a research sample of five companies in the banking sector was obtained, which are as follows.

ladie 2. Research Sample				
NO.	Code	Stock Name		
1	BBCA	Bank Central Asia Tbk.		
2	BBNI	Bank Negara Indonesia (Persero) Tbk.		
3	BBRI	Bank Rakyat Indonesia (Persero) Tbk.		
4	BBTN	Bank Tabungan Negara (Persero) Tbk.		
5	BMRI	Bank Mandiri (Persero) Tbk.		

Source: Data processed (2024)

Analysis Method

Data analysis in this study used Structural Equation Modeling (SEM) with the help of Partial Least Square (PLS) Software. Structural Equation Modeling (SEM) is a very effective multivariate statistical analysis technique, which combines factor analysis with multiple regression analysis. With this technique, researchers can analyze the relationship between latent constructs simultaneously in one model, thus providing a more comprehensive insight into the relationship between variables. This latent construct is measured through various items contained in the questionnaire used in the study (Rahadi, 2023).

IV. ANALYSIS AND DISCUSSION

Descriptive Statistics

Descriptive statistics describe the sample data used in this study to find out the maximum value, minimum value, mean value and standard deviation of each variable, namely Return on Asset (ROA), Earning Per Share (EPS), Capital Adequacy Ratio (CAR), Inflation, BI Rate, Stock Beta, and Stock Return.

Table 5. Descriptive Statistics				
Variable	Mean	Maximum	Minimum	Std. Deviation
ROA	5,21	5,15	0,13	1,06
EPS	466,64	1030,43	20	276,18
CAR	0,20	25,80	14,20	0,03
INFLATION	0,04	6,97	1,56	0,02
BIRATE	5,49	7,54	3,52	1,30
BETA	1,33	3,24	0,00	0,58
Return	0,01	0,06	-0,04	0,02

Table 3. Descriptive Statistics

Source: Smart-PLS Data Processing Results

The analysis of the descriptive statistical results of Return on Asset (ROA), Earning Per Share (EPS), Capital Adequacy Ratio (CAR), Inflation, BI Rate, Stock Beta, and Stock Return is as follows:

a. Return on Asset (ROA) (X1). The results of this descriptive statistical analysis show that the average score is 5.21. As for the minimum and maximum values of 0.13 and 5.15. As for the standard deviation of 1.06. The standard deviation value of the Return on Asset (ROA) variable is greater than the average value, so it can be interpreted that Return on Asset (ROA) has a high level of data variation.

b. Earnings Per Share (EPS) (X2). The results of this descriptive statistical analysis show that the average score is 446.64. As for the minimum and maximum values of 20 and 1030.43. Meanwhile, the standard deviation is 276.18. The standard deviation value of the Earning Per Share (EPS) variable is smaller than the average value, so it can be interpreted that Earning Per Share (EPS) has a low level of data variation.

c. Capital Adequacy Ratio (CAR) (X3). The results of this descriptive statistical analysis show that the average score is 0.20. As for the minimum and maximum values of 14.20 and 25.80. As for the standard deviation of 0.03. The standard deviation value of the Capital Adequacy Ratio (CAR) variable is smaller than the average value, so it can be interpreted that the Capital Adequacy Ratio (CAR) has a low level of data variation.

d. Inflation (X4). The results of this descriptive statistical analysis show that the average score is 0.04. As for the minimum and maximum values of 1.56 and 6.97. As for the standard deviation of 17,099. The standard deviation value of the Inflation variable is smaller than the average value, so it can be interpreted that Inflation has a low level of data variation.

e. BI Rate (X5). The results of this descriptive statistical analysis show that the average score is 5.49. As for the minimum and maximum values of 3.52 and 7.54. As for the standard deviation of 1.30. The standard deviation value of the BI Rate variable is smaller than the average value, so it can be interpreted that the BI Rate has a low level of data variation.

f. Beta Stock (Z). The results of this descriptive statistical analysis show that the average score is 1.33. As for the minimum and maximum values of 0.00 and 3.24. As for the standard deviation of 0.58. The standard deviation value of the Beta Saham variable is smaller than the average value, so it can be interpreted that the Beta Saham has a low level of data variation.

g. Return on Shares (Y). The results of this descriptive statistical analysis show that the average value is 0.01. As for the minimum and maximum values -0.04 and 0.06. As for the standard deviation of 0.02. The standard deviation value of the Stock Return variable is greater than the average value, so it can be interpreted that the Stock Return has a high level of data variation.

Hypothesis Testing or Proposition Development

The data analysis method in this study uses SEM based on Partial Least Squares (PLS), using SmartPLS software. The two sub-models contained in the SEM-PLS analysis are the measurement model (outer model) and the structural model (inner model). The measurement model is a model that shows an observed variable in representing the latent variable to be measured, while the structural model shows the estimation power between latent variables.

Measurement Model Evaluation (Outer Model)

Evaluation of the measurement model (outer model) is carried out to assess the validity and reliability of the model. The outer model in the study with reflexive indicators is evaluated through convergent validity and discriminant validity of latent construct-forming indicators, while to assess the reliability of the model through composite reliability and cronbach alpha for the indicator blocks. In this evaluation, model measurements (Outer Model) will be carried out using Second Order.



Figure 2. Measurement results of the Outer Model (Measurement Model)

Source: Smart-PLS Data Processing Results

1. Convergent Validity

The convergent validity evaluation begins by looking at the reliability items (validity indicators) indicated by the loading factor value. Loading factor is a number that shows the correlation between the score of a question item and the score of the variable indicator that measures the variable. The value of the loading factor > 0.7 is said to be valid. The rule of thumb that is usually used for the initial examination of the factor matrix is that \pm 0.3 is considered to have met the minimum level, and for a loading factor \pm 0.4 is considered better, and for a loading factor >0.5 is generally considered significant.

	Outer Loading	Information
X1	1,000	Valid
X2	1,000	Valid
X3	1,000	Valid
X4	1,000	Valid
X5	1,000	Valid
Z	1,000	Valid
Y	1,000	Valid

able	4.	Convergent	Validity
anc	т.	Convergent	vanuity

Source: Smart-PLS Data Processing Results

Based on the table above, the results of the test in the second stage show that all the values of the loadings factor for each indicator show a value of more than 0.70 so that it can be concluded that the indicator is convergent validity.

2. Discriminant Validity

In addition to observing the Cross Loadings value, discriminant validity can also be known through other methods, namely by looking at the avarage variant extracted (AVE) value for each indicator, the value must be > 0.5 for a good model.

Table 5. Discriminant validity				
	Average Extracted Variance (AVE)			
ROA	1,000			
EPS	1,000			
CAR	1,000			
INFLATION	1,000			
BI RATE	1,000			
STOCK BETA	1,000			
RETURN ON SHARES	1,000			

Source: Smart-PLS Data Processing Results

Based on the table above, it can be seen that each indicator has an AVE value of > 0.50, so the indicator is said to be valid for measuring other variables that are appropriate.

Composite Reliability 3.

Reliability can be measured by looking at Cronbach's alpha and composite reliability. Cronbach's alpha is a reliability coefficient that indicates how well items in a set positively correlate with each other. The value of Cronbach's alpha and composite reliability for all constructs is above 0.7.

Table 6. Composite Reliability				
	Composite Reliability			
ROA	1,000			
EPS	1,000			
CAR	1,000			
INFLATION	1,000			
BI RATE	1,000			
STOCK BETA	1,000			
RETURN ON SHARES	1,000			

Table 6.	Composite	Reliability
----------	-----------	-------------

Source: Smart-PLS Data Processing Results

Based on the table above, the output results of Composite Reliability and Cronbach's Alpha on all constructs are also above 0.70, which means that all constructs have good reliability.

Structural Model Evaluation (Inner Model)

The structural model (Inner Model) in PLS can be seen from R-Squares for each endogenous latent variable as the predictive power of the structural model. Changes in the R-Squares value can be used to explain the influence of certain exogenous latent variables on endogenous latent variables whether they have a substantive influence. The R-Squares value is 0.75 then the model is strong, 0.50 is the moderate model, and 0.25 is the weak model.

Table	7.	R	Square	Test	Results
-------	----	---	--------	------	---------

	R Square	Adjusted R Square
STOCK BETA	0,758	0,734
RETURN ON SHARES	0,963	0,959

Source: Smart-PLS Data Processing Results

Measurement of the value structural model is used to measure the degree of variation in the change of independent variables to dependent variables. The higher the value means the better the prediction model of the research model. The Adjusted R Square value on the Stock Return of 0.959 means that the influence of the independent variable on the dependent is 0.959 or 95.9%, and the remaining 4.1% is influenced by other variables outside this research model. Meanwhile, the Adjusted R Square value in the Stock Beta of 0.734 means that the influence of independent variables on intervening variables is 0.734 or 73.4%, and the remaining 26.6% is influenced by other variables outside this research model.R²R²

Hypothesis Test

Hypothesis testing is carried out through testing the structural model (inner model) by looking at the R-Square value. Another test is to look at the path coefficients in the Bootstrapping method. The path coefficients show the value of the parameter coefficient and the value of the t-statistical significance. The criteria for accepting or rejecting a hypothesis of P-Values value. The following are the results of hypothesis testing:

Table 8.	Hypothesis	Test Results
Lable 0.	in pouncoio	I COU ICOUICO

	Original Sample (O)	Average Sample (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
ROA -> RETURN ON SHARES	-0,097	-0,100	0,043	2,274	0,023
EPS -> RETURN ON SHARES	-0,035	-0,022	0,059	0,592	0,554
CAR -> RETURN ON SHARES	-0,008	-0,005	0,036	0,217	0,828
INFLATION -> STOCK RETURNS	-0,027	-0,033	0,055	0,497	0,619
BI RATE -> RETURN ON STOCKS	-0,036	-0,031	0,053	0,670	0,503
ROA -> BETA STOCK -> RETURN ON SHARES	0,428	0,413	0,130	3,283	0,001

EPS -> BETA STOCK -> RETURN ON SHARES	0,449	0,462	0,121	3,708	0,000
CAR -> BETA STOCK -> RETURN STOCK	0,376	0,370	0,081	4,650	0,000
INFLATION -> BETA STOCKS -> STOCK RETURNS	-0,084	-0,088	0,109	0,766	0,444
BI RATE -> BETA STOCKS -> RETURN SHARES	0,063	0,058	0,113	0,559	0,576
STOCK BETA -> STOCK RETURN	1,063	1,057	0,055	19,503	0,000

Source: Smart-PLS Data Processing Results

Based on the results of calculations using the Partial Least Square (PLS) approach, the results of hypothesis testing are obtained as presented as follows:

a. The P Values of the relationship between the Return on Asset (ROA) and Stock Return variables are 0.023 or less than 0.05 so that it can be concluded that the Return on Asset (ROA) variable has a positive and significant effect on the Return on Shares, or H1 is accepted.

b. The P Values of the relationship between the Earning Per Share (EPS) and Stock Return variables are 0.554 or more than 0.05 so that it can be concluded that the Earning Per Share (EPS) variable has a positive and insignificant effect on the Stock Return, or H2 is rejected.

c. The P Values of the relationship between the Capital Adequacy Ratio (CAR) variable and the Stock Return are 0.828 or more than 0.05 so that it can be concluded that the Capital Adequacy Ratio (CAR) variable has a positive and insignificant effect on the Stock Return, or H3 is rejected.

d. The P Values of the relationship between the Inflation variable and the Stock Return are 0.619 or more than 0.05 so that it can be concluded that the Inflation variable has a positive and insignificant effect on the Stock Return, or H4 is rejected.

e. The P Values of the relationship between the BI Rate variable and the Stock Return are 0.503 or more than 0.05 so that it can be concluded that the BI Rate variable has a positive and insignificant effect on the Stock Return, or H5 is rejected.

f. The P Values of Stock Beta in mediating the relationship between Return on Asset (ROA) and Stock Return is 0.001 or less than 0.05 so that it can be concluded that the Stock Beta variable is able to mediate the relationship between Return on Asset (ROA) and Stock Return with a positive influence direction, or H6 is accepted.

g. The P Values of Stock Beta in mediating the relationship between Earning Per Share (EPS) and Stock Return is 0.000 or less than 0.05 so that it can be concluded that the Stock Beta variable is able to mediate the relationship between Earning Per Share (EPS) and Stock Return with a positive influence direction, or H7 is accepted.

h. The P Values of Stock Beta in mediating the relationship between Capital Adequacy Ratio (CAR) and Stock Return is 0.000 or less than 0.05 so that it can be concluded that the Stock Beta variable is able to mediate the relationship between Capital Adequacy Ratio (CAR) and Stock Return with a positive influence direction, or H8 is accepted.

i. The P Values of Beta Stocks in mediating the relationship between Inflation and Stock Return are 0.444 or more than 0.05 so it can be concluded that the Beta Stocks variable is not able to mediate the relationship between Inflation and Stock Returns, or H9 is rejected.

j. The P Values of Beta Stocks in mediating the relationship between BI Rate and Stock Return are 0.576 or more than 0.05 so it can be concluded that the Beta Stocks variable is not able to mediate the relationship between BI Rate and Stock Return, or H10 is rejected.

k. The P Values of the relationship between the Beta Shares variable and the Return of Shares are 0.000 or less than 0.05 so that it can be concluded that the Beta Shares variable has a positive and significant effect on the Return of Shares, or H11 is accepted.

V. Discussion

1. The Influence of ROA on Stock Return

The results of the study showed that the P value of 0.021, which was at 0.05, showed that Return on Asset (ROA) had a positive effect on Stock Return (H1 received). ROA, which is the profitability ratio, reflects the company's ability to generate profits from its resources. According to Suci (2022), ROA provides a clear picture of the company's financial performance in creating value for stakeholders. The results of this study indicate that the higher the ROA, the higher the Return on Shares obtained by investors. In other words, a company that is able to effectively generate profits from its assets will attract the attention of investors, potentially increasing the value of the stock. Signal theory explains that the information published by a company serves as a signal to investors about the company's prospects. In this context, ROA serves as a positive indicator of a company's financial health.

When a company reports a high ROA, it can be seen as a positive signal by investors, which then drives their investment decisions. (Putri & Svaichu, 2023). With a high ROA, the company is performing well, and this has the potential to lower the risk perception, which in turn can increase the value of the stock in the market (Mappadang, 2021). Previous research, such as that conducted by Suci (2022), supports these findings by showing that ROA has a significant influence on Return on Shares, reflecting the company's productivity and welfare level. However, the results of this study are not entirely in line with the findings of Nurazizah et al. (2022) and Valentina (2023), which show that fluctuations in the Composite Stock Price Index (JCI) can obscure the influence ofh ROA on Return on Shares. They note that in an unstable economic situation, investors may not pay attention to ROA as a determining factor in investment decisions, highlighting the complexity of the relationship between a company's financial performance and stock market behavior. risk perception, which in turn can increase the value of stocks in the market (Mappadang, 2021). Previous research, such as that conducted by Suci (2022), supports these findings by showing that ROA has a significant influence on Return on Shares, reflecting the company's productivity and welfare level. However, the results of this study are not entirely in line with the findings of Nurazizah et al. (2022) and Valentina (2023), which show that fluctuations in the Composite Stock Price Index (JCI) can obscure the effect of ROA on Stock Returns. They note that in an unstable economic situation, investors may not pay attention to ROA as a determining factor in investment decisions, highlighting the complexity of the relationship between a company's financial performance and stock market behavior.

2. The Influence of EPS on Stock Return

The results showed that the P value was 0.554, which was higher than 0.05, so the hypothesis H_2 which states that Earnings Per Share (EPS) has an effect on Stock Return is rejected. In other words, no significant influence was found between EPS and Return on Shares. Although EPS is theoretically considered a strong indicator to assess a company's financial health and potential return on investment, in the results of this study, the EPS variable does not necessarily have a direct impact on Return on Shares. Signal theory explains that EPS serves as a signal that communicates information about the company's future prospects to investors. A high EPS is usually considered a positive signal about a company's financial performance and attracts attention (Jati & Fachrurrozie, 2021). However, in this case, EPS does not give a strong signal to the market so it does not affect the stock return significantly. The rejection of this hypothesis is not in line with previous studies that show that EPS does not always have an effect on Stock Returns. For example, research conducted by Bukit & Anggono (2012), Hermaan (2012), and Idaati & ahyudi (2015), which shows that EPS has an influence on Stock Returns. Thus, although EPS does not always have a direct impact on stock returns in the stock market.

3. The Influence of CAR on Stock Return

The results show that the P Values have a value of 0.828 or more than 0.05, while it can be concluded if the CAR (Capital Adequacy Ratio) variable has a positive and insignificant influence on Stock Returns, or H3 is rejected. In other words, no significant influence was found between CAR and Stock Return. Although CAR is theoretically considered a strong indicator to assess the financial health of a company and its earnings, in the results of this study, the CAR variable does not always have a direct impact on Stock Returns. The explanation of the influence of this relationship also leads to the fact that investors do not always view CAR as the main factor in determining investment decisions, especially in the midst of capital market dynamics that are more responsive to other external variables. Although CAR shows how strong a company is able to bear financial risk (Jati & Fachrurrozie, 2021), these results show that CAR is considered less important in determining the value of a company's shares in the short term. These findings are not in line with signal theory that explains how the information provided by companies, such as financial statements that include CARs, serves as a signal to investors about the company's future financial prospects (Putri & Syaichu, 2023). A high CAR ratio should signal that the company has a strong ability to bear risk and maintain financial stability. This can be considered a positive signal by investors that the company is in a healthy financial condition and can attract investors to buy its shares (Tampi et al., 2022). This research is not in line with the research conducted by Ayem & ahyuni (2017), Khairani & Dillak (2018), and Mahandari & rhythm (2018) which supports the conclusion that CAR affects Stock Returns.

4. The Influence of Inflation on Stock Returns

The results of the study show that the P Values are valued at 0.619 or exceed 0.05, so it can be concluded if the Inflation variable has a positive and insignificant influence on Stock Returns, or H4 is rejected. The effect of inflation on this insignificant stock return can be explained by the fact that although inflation can affect people's purchasing power and production costs, the market does not always respond to changes in inflation directly. Thus, the results of this study show that inflation does not always have a direct impact on Stock Returns. According to signal theory, high inflation can be considered a negative signal by investors because it can lead to an increase in production costs and a decrease in the company's sales. As inflation increases, the cost of raw materials and

operations also rises, which has the potential to reduce a company's profit margin and affect investors' interest in investing. However, in this study, the impact of inflation on stock returns was not significant, which could be due to market expectations that companies could absorb rising costs or shift most of the cost burden to consumers. The results of this study are not in line with the research conducted , Christine et al. (2023) and Febrianti et al. (2023) which supports the conclusion that inflation affects Stock Returns.

5. The Influence of BI Rate on Stock Returns

The results of the study show that the P Values are valued at 0.503 or exceed 0.05, so it can be concluded if the BI Rate variable has an influence on the Return of Shares, or H5 is rejected. This means that changes in the BI Rate do not directly affect the Stock Return in this observation period. Although in theory interest rates can influence investment decisions in the stock market, these findings suggest that other factors may have a more dominant influence in determining stock returns during the study period. The influence of the relationship between BI Rate and Stock Return should be seen from how high interest rates usually increase borrowing costs and affect the profitability of companies. However, in this case, the influence does not appear to be strong enough to reduce investor interest in stocks, which could be due to more complex capital market dynamics, including other external factors. According to APT theory, stock returns are influenced by various risk factors, not just beta or one single factor. In this case, APT can explain that the insignificant effect of the BI Rate may be due to the influence of other larger risk factors, such as inflation, global economic conditions, or political stability. Empirically, the research conducted by Sari et al. (2021), Christine et al. (2023), and Febrianti et al. (2023) supporting the influence of the BI Rate on returns. However, the results of this study are different from previous studies because the BI Rate has been proven to have no effect on Stock Returns.

6. The Influence of ROA on Stock Return through Stock Beta

The results showed that the P Values were valued at 0.001 or 0.05, which showed that the stock beta variable was able to intervene in the relationship between ROA and Stock Return with a positive influence, so that the hypothesis (H6) was accepted. These findings indicate that an increase in ROA indicating better financial performance of the company also increases stock returns, but this relationship is also influenced by the beta of the stock, which reflects the risk level of the company's stock. The higher the ROA, the better the company's performance in utilizing assets to generate profits. On the other hand, stock beta shows how sensitive the stock is to market movements, where the higher the beta, the greater the risk faced, but with greater potential returns. Therefore, the positive influence of ROA on stock returns is getting stronger with the presence of stock beta as an intervening variable. These findings are in line with Signal Theory confirming that information published by a company, such as good financial performance (high ROA), serves as a positive signal to investors regarding the company's future prospects (Putri & Svaichu, 2023). With a high ROA, the company shows a greater ability to generate profits from its assets, giving a signal that the company is in good shape. Investors will see this as a "good thing" that encourages them to invest, thereby increasing stock returns. In addition, CAPM is relevant in explaining the role of stock beta in connecting ROA and stock returns. CAPM explains that the return of an asset is only affected by systematic risk, which is measured through beta (Mappadang, 2021). Stock beta describes the sensitivity of a stock's return to overall market movements. Thus, a high ROA signals that the company has a higher potential return, but the systematic risk measured by beta is also an important factor that investors should consider.

7. The Influence of EPS on Stock Return through Stock Beta

The results of the study show that the P Values are valued at 0.000 or 0.05, which means that the Stock Beta can mediate the relationship between Earnings Per Share (EPS) and Stock Return with a positive influence direction (H7 is accepted). This means that when EPS increases, the Stock Beta strengthens the influence of EPS on Stock Returns. The increase in EPS indicates the company's ability to generate higher net earnings per share, which is considered a positive signal by investors. This increase can increase investor confidence in the company's performance, thereby increasing stock demand and leading to an increase in stock prices. Therefore, Beta Stocks reinforce this relationship, where an increase in EPS will result in higher returns on stocks with high betas. In general, this study confirms that more volatile stocks (having a high beta) provide higher returns when the company's EPS is also high. This is in line with the principle of high risk high return, where investors who take greater risks expect higher returns. This discovery is in line with Signal Theory, which explains that companies need to provide relevant information to the public to reduce information asymmetry between management and investors. The increased EPS serves as a positive signal for investors, signaling the company's strong financial performance. According to Putri & Syaichu (2023), information published by the company, such as financial statements, can be analyzed by investors to assess the company's future prospects. In this context, an increase in EPS provides a positive signal that attracts investors, which in turn increases the stock price and share returns. In addition, CAPM is also relevant in explaining this relationship. CAPM correlates expected returns with systematic risk measured through beta. Stocks with high beta tend to be more volatile than the market, so investors expect greater returns to compensate for higher risk. As a company's EPS increases, the stock beta strengthens this relationship by increasing the returns expected by investors (Mappadang, 2021). The results of this study are not in line with the research Tampi et al. (2022) which revealed that EPS did not have a significant effect on Systematic Risk and on Stock Returns.

8. The Influence of CAR on Stock Return through Stock Beta

The results showed that the P Values were valued at 0.000 or at 0.05, which showed that the Beta Stocks variable could mediate the relationship between CAR and Stock Return with a positive influence. Thus, the H8 hypothesis is accepted. This shows that a higher CAR has a tendency to increase Stock Returns, and this effect is amplified through the role of Stock Beta as an intervening variable. CAR reflects the bank's ability to maintain its financial security, while Beta Shares provide information regarding the sensitivity of stocks to market movements. This combination creates opportunities for investors to earn greater returns, especially when a high stock beta shows a higher profit potential in a favorable market situation. These findings are in line with Signal Theory, which explains how the information a company provides, such as CAR, can serve as a signal to investors regarding a company's financial health (Putri & Syaichu, 2023). In this case, a high CAR is a positive signal that indicates the company's capital strength and long-term stability, which attracts investors' attention. Information about a high CAR signals that the company is able to meet its financial obligations, and thus, investors expect better returns from the stock. In addition, CAPM is also relevant here, as it relates the expected return of a security to the systematic risk measured through the Stock Beta (Mappadang, 2021). Higher stock beta increases the sensitivity of stock returns to market movements, marking greater opportunities for returns in a bullish market situation. The combination of the financial stability provided by CAR and the risk and return opportunities measured through Beta Stocks provides a solid basis for investors to make investment decisions.

9. The Influence Inflation on Stock Returns through Stock Beta

The results showed that the P Values were valued at 0.444 or more than 0.05, which means that the Stock Beta was unable to mediate the relationship between Inflation and Stock Returns, so the H9 hypothesis was rejected. These findings indicate that while inflation tends to affect the level of risk measured through Stock Beta, its effect on Stock Returns is not significant through this path. Signal theory explains how economic information such as inflation affects investor perceptions. In this context, rising inflation gives a negative signal to investors as it creates uncertainty about the economic outlook and profitability of companies. However, since inflation may not always be perceived as an immediate threat to a company's performance in the short term, this negative signal does not always translate into significant changes in Stock Returns through Stock Beta. In addition, CAPM provides additional perspective on the relationship between systematic risk and expected returns. CAPM explained that the return of an asset is influenced by systematic risk (beta). However, in this case, although inflation has the potential to increase systemic risk, the results show that this effect is not strong enough to affect stock returns through stock beta. The findings of this study are not in line with previous research that reveals that inflation affects systemic risk (Apiun et al., 2024), which in turn has an impact on stock returns (Nofitasari & Di, 2021; Nurfadilah, 2018; Payamta & Astuti, 2018).

10. The Influence of BI Rate on Stock Return through Stock Beta

The results of the study show that the P Values are valued at 0.576 or more than 0.05, so it can be concluded that the Beta Shares are not able to mediate the relationship between the BI Rate and the Return of Shares. Thus, the H10 hypothesis was rejected. This means that changes in the BI Rate do not have a significant effect on Stock Returns through Beta Shares. The inability of the stock beta to be a mediating variable suggests that the systematic risk reflected through beta is not strong enough to explain this relationship. Whereas according to signal theory, relevant information, such as interest rate changes, can provide important signals to investors regarding the company's future financial prospects (Putri & Syaichu, 2023). The increase in the BI Rate, for example, can be seen as a negative signal (bad nes) that indicates an increase in the company's borrowing costs, which can reduce the company's profit and affect its stock price. In addition, APT also provides a perspective on interest rates, as one of the risk factors that play an important role in influencing returns. However, the results of this study show that changes in the BI Rate do not directly affect Stock Returns through Beta Shares. The findings of this study are not in line with previous studies that reveal that interest rates affect systemic risk (Apiun et al., 2024), which in turn has an impact on stock returns (Nofitasari & Di, 2021; Nurfadilah, 2018; Payamta & Astuti, 2018).

11. The Influence of Stock Beta on Stock Return

The results of the study showed that the P Values were 0.000 or divided by 0.05, confirming that the Stock Beta had a significant effect on the Stock Return (H11 received). The beta of a stock, which measures the sensitivity of stock price changes to market changes, shows that the higher the beta value, the greater the potential return that

investors can get. This is in line with the principle of "high risk, high return," which states that stocks with higher risk have the potential to provide greater returns (Mappadang, 2021). This finding shows the importance of investors considering the risks they are willing to take in choosing investments, especially when dealing with stocks that have high beta. Signaling Theory is relevant in this context, as it illustrates how information about stock beta can signal investors about risk and potential returns. When a company reports a high beta, it sends a positive signal to investors that there is a potential for higher returns, albeit accompanied by greater risk (Putri & Syaichu, 2023). In addition, CAPM supports this relationship by associating the systematic risk measured through beta with the expected rate of return. According to CAPM, investors expect higher returns to bear higher risks (Mappadang, 2021). In this context, stock beta is an important indicator in investment decision-making, with investors choosing stocks based on a risk profile that suits their investment goals. Previous research also supports these findings, showing that Stock Beta has a significant effect on Stock Returns. Research by Payamta & Astuti (2018). Nurfadilah (2018) and Nofitasari et al. (2021) found empirical evidence consistent with the results of this study, which shows that stocks with high beta tend to market higher returns.

VI. CLOSING

Conclusion and Recommendation Conclusion

1. The P Values of the relationship between the Return on Asset (ROA) and Stock Return variables are 0.023 or less than 0.05 so that it can be concluded that the Return on Asset (ROA) variable has a positive and significant effect on the Return on Shares, or H1 received.

2. The P Values of the relationship between the Earning Per Share (EPS) and Stock Return variables are 0.554 or more than 0.05 so that it can be concluded that the Earning Per Share (EPS) variable has a positive and insignificant effect on the Stock Return, or H2 is rejected.

3. The P Values of the relationship between the Capital Adequacy Ratio (CAR) variable and the Stock Return are 0.828 or more than 0.05 so it can be concluded that the Capital Adequacy Ratio (CAR) variable has a positive and insignificant effect on the Stock Return, or H3 is rejected.

4. The P Values of the relationship between the Inflation variable and the Stock Return are 0.619 or more than 0.05 so that it can be concluded that the Inflation variable has a positive and insignificant effect on the Stock Return, or H4 is rejected.

5. The P Values of the relationship between the BI Rate variable and the Stock Return are 0.503 or more than 0.05 so that it can be concluded that the BI Rate variable has a positive and insignificant effect on the Stock Return, or H5 is rejected.

6. The P Values of Stock Beta in mediating the relationship between Return on Asset (ROA) and Stock Return is 0.001 or less than 0.05 so that it can be concluded that the Stock Beta variable is able to mediate the relationship between Return on Asset (ROA) and Stock Return with a positive influence direction, or H6 is accepted.

7. The P Values of Stock Beta in mediating the relationship between Earning Per Share (EPS) and Stock Return is 0.001 or less than 0.05 so it can be concluded that the Stock Beta variable is able to mediate the relationship between Earning Per Share (EPS) and Stock Return with a positive influence, or H7 is accepted.

8. The P Values of Stock Beta in mediating the relationship between Capital Adequacy Ratio (CAR) and Stock Return is 0.001 or less than 0.05 so that it can be concluded that the Stock Beta variable is able to mediate the relationship between Capital Adequacy Ratio (CAR) and Stock Return with a positive influence direction, or H8 is accepted.

9. The P Values of Beta Stocks in mediating the relationship between Inflation and Stock Return are 0.444 or more than 0.05 so it can be concluded that the Beta Stocks variable is not able to mediate the relationship between Inflation and Stock Returns, or H9 is rejected.

10. The P Values of Beta Shares in mediating the relationship between BI Rate and Stock Return is 0.576 or more than 0.05 so it can be concluded that the Beta Shares variable is not able to mediate the relationship between BI Rate and Stock Return, or H10 is rejected.

11. The P Values of the relationship between the Beta Shares variable and the Return of Shares is 0.000 or less than 0.05 so that it can be concluded that the Beta Shares variable has a positive and significant effect on the Return of Shares, or H11 received.

Recommendation

1. For Practitioners

a. Companies are advised to be more careful in making decisions regarding Return on Shares which will later have an impact on the company's value.

b. Further analysis of the Stock Return variable is needed to find out its relationship with the company's performance and its influence on the company's image.

2. For Academics/Theorists

a. For the next researcher, it is hoped that the researcher can expand the research by adding research samples, for example, adding the category of companies listed on the Indonesia Stock Exchange.

b. For the next researcher, it is hoped that other variables can be added that are able to affect Stock Returns.

c. Further testing was carried out using other types of data processing software such as STATA.

ACKNOLEDGEMENT

I am very grateful to Ardi Paminto and Yana Ulfah as supervising lecturers at Mulaarman University, Samarinda, East Kalimantan Province.

REFERENCES

- [1]. Abdullah, K., Jannah, M., Aiman, U., Hasda, S., Fadilla, Z., Taqin, N., Masita, Ardiaan, K. N., & Sari, M. E. (2022). Quantitative Research Methodology. Muhammad Zaini Publisher Foundation.
- [2]. Christine, D., Apriandi, & Rachmat Hidayat. (2023). The Effect of Inflation, Interest Rates and Exchange Rates on Stock Returns. Journal of Equillomy, 5(2), 237–244. https://doi.org/10.36985/ekuilnomi.v5i2.713
- [3]. Darin, M., Mamondol, M. R., Sormin, S. A., Nurhayati, Y., Tambunan, H., Sylvia, D., Adnyana, I. M. D. M., Prasetiyo, B., Vianitati, P., & Gebang, A. A. (2020). Quantitative Approach Research Method. Indonesian Science Media.
- [4]. Febrianti, P. D., Hermaan, D., Syarief, M. E., & Amailiya, L. (2023). The Influence of Fundamental Factors on the Return of Shares of Jakarta Islamic Index Category Companies on the Indonesia Stock Exchange. Journal of Applied Islamic Economics and Finance, 3(2), 403–413. https://doi.org/10.35313/jaief.v3i2.3815
- [5]. Hasan, F. (2020). Business Research Methods. UTM Press.
- [6]. Hazriyanto. (2020). Reference Book for SmartPLS SEM Application and CFA Research Data Analysis (Easy & Fast). Batam Publisher.
- [7]. Jati, D. K., & Fachrurrozie. (2021). The Determinants of Banking Stock Returns in Indonesia Using Intervalling Method. Accounting Analysis Journal, 10(2), 124–130. https://doi.org/10.15294/aaj.v10i2.48753
- [8]. Jaya, A., Kusandi, S., Prasetyandari, C., Baidloi, I., Mardiana, Ardana, Y., Sunandes, A., Nurlina, Palnus, & Muchsidin, M. (2023). Financial Management. PT Global Executive Technology.
- Khairani, R. D., & Dillak, V. J. (2018). The Effect of Risk Profile, Good Corporate Governance, Earnings and Capital (RGEC) on Stock Returns. E-Proceedings of Management, 5(1), 811–819.
- [10]. Kurniaan, A. ., & Puspitaningtyas, Z. (2023). Quantitative Research Methods. Our Writing Foundation.
- [11]. Mappadang, A. (2021). Investment & Portfolio Management Textbook. CV. Pena Persada.
- [12]. Nurazizah, D. R., Hermuningsih, S., & Maulida, A. (2022). The effect of profitability, liquidity, and solvency on stock returns in
- banking companies listed on the Indonesia Stock Exchange. Performance, 19(2), 327–337. https://doi.org/10.30872/jkin.v19i2.10960
 [13]. Pasaribu, B., Heraati, A., Utomo, K. ., & Aji, R. H. S. (2022). Research Methodology For Economics and Business. Media Edu Pustaka
- [14]. Rahadi, D. R. (2023). Introduction to Partial Least Squares Structural Equation Modeling (Pls-Sem). Lentara Ilmu Madani.
- [15]. Rosalina, L., & Oktarina, R. (2023). Textbook of Satistika. CV. Muharika Scientific House.
- [16]. Sari, L., Mary, H., Elfisandi, E., Zefriyenni, Z., & Lusiana, L. (2021). Company performance and BI Rate on the return of SOE Bank shares. Journal of Information Systems Management Economics, 2(4), 544–555. https://doi.org/10.31933/jemsi.v2i4.543
- [17]. Holy. (2022). The Effect of Return on Assets and Return on Equity on Stock Returns.... Mirai Management Journal The Effect of Return on Assets and Return on Equity on Sacred Stock Return 1 □. Journal of Mirai Management, 7(2), 147–162. https://doi.org/10.37531/mirai.v7i2.2014
- [18]. Tampi, I. G., Mangantar, M., & Maramis, J. (2022). The Effect of Asset Groth, Debt to Equity Ratio and Earning Per Share on Systematic Risk and Stock Return in Banks Going Public in 2014-2018. EMBA Journal : Journal of Economics, Management, Business and Accounting Research, 10(3), 204–214. https://doi.org/10.35794/emba.v10i3.42079
- [19]. Valentina, L. (2023). Analysis of Financial Performance on Stock Returns in the Banking Sector Before and During the Covid-19 Pandemic. Indonesian Accounting and Taxation Media, 4(2), 185–200. https://doi.org/10.37715/mapi.v4i2.3714
- [20]. Zulfikar, R., Sari, F. P., Fatmayati, A., andini, K., Haryati, T., Jumini, S., Nurjanah, Annisa, S., Kusumaardhani, O. B., Mutiah, R., Linggi, A. I., & Fadilah, H. (2024). Quantitative Research Methods (Theory, Methods and Practice). idina Media Main.