



The Effect of Profitability, Liquidity, and Leverage on Stock Returns with Inflation and Interest Rates as Moderating Variables in Energy Sector Companies Listed on the Indonesia Stock Exchange for the Period 2018 - 2023

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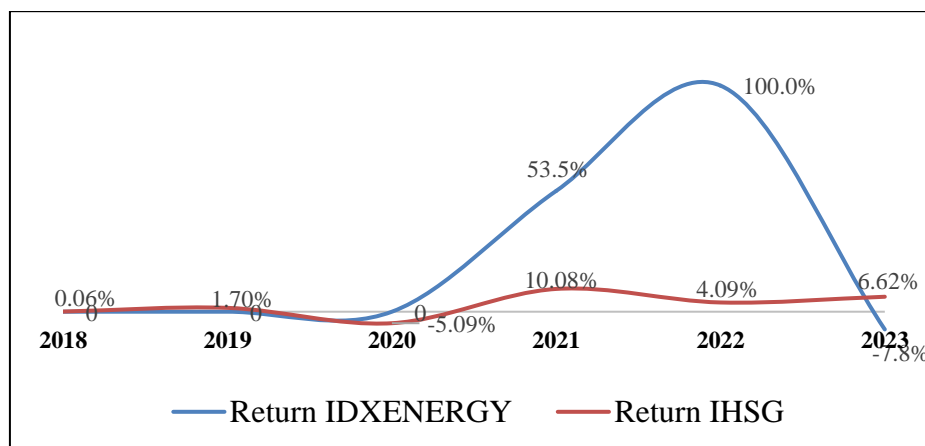
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ABSTRACT: The purpose of this study is to examine and analyze whether profitability, liquidity, and leverage affect stock returns with inflation and interest rates as moderating variables in energy sector companies listed on the Indonesia Stock Exchange for the 2018-2023 period. This study was conducted based on information obtained at the Indonesia Stock Exchange. The sampling technique used purposive sampling. The population in this study were 87 energy companies listed on the Indonesia Stock Exchange for the 2018-2023 period, with a sample size of 55 companies and 330 observations. Hypothesis testing uses pooled data regression analysis using the EViews application. The results of this study indicate that profitability has a positive effect on stock returns, liquidity has no effect on stock returns. While leverage has a negative effect on stock returns. Inflation is able to moderate the effect of profitability on stock returns, but is unable to moderate the effect of liquidity on stock returns. Interest rates are able to moderate the effect of leverage on stock returns.

KEYWORDS: Inflation, Interest Rate, Liquidity, Leverage, Profitability, Stock Return.

INTRODUCTION

The capital market plays an important role in the country's economy with two main functions: economic function and financial function. The economic function connects investors with companies to meet capital needs through the issuance of shares. The financial function provides investors with rewards in the form of profits to maximize wealth. Rewards are the main motivation for investors, reflected in changes in stock prices. High stock returns create a positive image for the company and indicate good performance. However, investment also faces risks and uncertainties, due to rapid stock price fluctuations. Stocks with high returns usually have greater risks. Investors must be careful to make optimal investment decisions, by considering the returns derived from capital gains, which is the difference between the selling price and the purchase price of shares. Energy companies, which require large capital to process natural resources, are important in the Indonesian economy. They should enter the capital market to strengthen their financial position.



Picture 1 Movement of Stock Returns of Energy Sector Companies in the Period 2018-2023
Source: IDX (2024)



The data shows that energy companies' stock returns increased significantly in 2022, despite fluctuations in stock prices. Several stock return phenomena from 2018 to 2023 show that there are companies that can increase their stock prices even though market conditions are not supportive. Conversely, some companies do not experience an increase in stock prices when market conditions are good, thus presenting challenges for companies and investors in determining stock values. Investors need information from financial statements to make the right investment decisions. Financial ratios that affect stock returns include profitability, liquidity, and leverage. Profitability reflects the company's performance and can attract investor interest. A high level of profitability is expected to increase demand for shares, which in turn increases stock prices and potential capital gains (Chauhan, 2023). Liquidity, measuring a company's ability to meet short-term obligations, is also important (Fachrudin & Ihsan, 2021). A good level of liquidity gives a positive signal to investors. When a company has high liquidity, investors tend to be interested in buying shares, which increases stock prices and returns. Leverage is related to company risk. A high debt ratio can indicate a company's dependence on external financing, which can be risky for investors (Zaini, Sadalia, & Fachrudin, 2018). Information from financial statements helps investors assess this risk and their investment decisions. Macroeconomic conditions, such as inflation and interest rates, also affect investment in the energy sector (Aynuola, 2023; Egbunike & Okerekeoti, 2018). Inflation can reduce purchasing power and if companies are unable to adjust selling prices, profits can fall. High interest rates increase borrowing costs, negatively impacting stock returns. Data from 2018 to 2023 show that inflation, interest rates, and IHSR returns move in the same direction. Increases in inflation and interest rates often cause IHSR returns to increase, conversely, decreases in inflation and interest rates often reduce IHSR returns. The market tends to respond positively to good information and negatively to bad information, making investors avoid risk. This is in line with the Efficiency Market Hypothesis theory which predicts that there is a tendency for the market to show positive responses to good information and provide negative responses to bad information. This causes investors to tend to be risk averse, which is an attitude that avoids risk or uncertainty in investment decisions. In this study, inflation and interest rates are used as moderating variables. Inflation can moderate the effect of profitability on stock returns, inflation can moderate the effect of liquidity on stock returns, and interest rates can moderate the effect of leverage on stock returns (Millenia, 2022). This study re-examines the effect of profitability, liquidity, and leverage on stock returns with inflation and interest rates as moderating variables for energy sector companies listed on the Indonesia Stock Exchange from 2018 to 2023.

THEORETICAL BASE

Signaling theory

Signaling theory was first introduced by Spence in 1973 who stated that a signal gives a signal, the sender (information owner) tries to provide a piece of relevant information that can be used by the recipient. Signaling theory is useful for describing behavior when two parties (individuals or organizations) have access to the same information (Connelly, Certo, Ireland, & Reutzel, 2010). Signaling theory provides the argument that a company's condition can be influenced by the perspective of external parties to the company. There are two types of signals in signaling theory, namely positive signals and negative signals. A positive signal will motivate investor interest in a company so that investors will make a decision to buy shares in a company. The more investors buy shares in a company, the higher the price will be. Conversely, if there is a negative signal, investors will choose to sell shares in a company. The more investors sell shares in a company, the lower the price will be.

Efficient Market Hypothesis Theory

The efficient market hypothesis was popularized by Eugene Fama in 1970. The efficient market hypothesis is based on the assumption that the prices of securities in the capital market fully reflect all available information (Umoru, Udobi-Owoloja, Nzekwe, Iyiegboniwe, & Ezike, 2020). The efficient market hypothesis theory shows how stock returns derived from a company's stock price reflect the results of investor responses to information related to the company. Information such as changes in profitability, liquidity, leverage, in a company as well as inflation, and interest rates play a role in shaping the company's stock returns which are reflected in changes in the issuer's stock price.

Stock Return

In the stock market, investors make money by realizing capital gains from fluctuations in stock market returns (Ruhani & Junoh, 2023). Stock prices reflect investors' collective assessment of current stock returns and company prospects. Stocks are ownership by certain parties in an issuer. Meanwhile, stock returns can be interpreted as the benefits received by shareholders for their actions in



investing. Stock returns can generally be interpreted as the results obtained by investors from investments made and can be viewed as added value (profit) or even reduced value (loss) where both concepts are based on market conditions. Stock returns are the returns received by shareholders due to their investment activities. There are two types of stock returns, namely actual returns or realized returns and expected returns (Bodie, Kane, & Marcus, 2021). In this study, this study uses realized returns. As for measuring realized returns, you can use the formula below.

$$\text{Total return} = \frac{\text{Closing price of shares for period } t - \text{previous stock closing price}}{\text{previous stock closing price}}$$

Profitability

Profitability is used to determine how far a company is able to generate profits or a measure of the effectiveness of company management (Chauhan, 2023). The ability to generate profits can be measured from equity or all funds invested in the company. Profitability in this study is proxied by Return on Assets (ROA). The higher the ROA, it can be interpreted that a company is more effective in utilizing its assets to generate net profit after tax, with increasing ROA, the company's profitability is getting better so that it gets a large return. As for measuring ROA, you can use the formula below.

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Ttotal assets}}$$

The relationship between signal theory and profitability on stock returns, describes an action taken by a company to show investors how management can increase the company's opportunities in the future and can be seen from the financial report information that lists the company's profit as a form of company performance so that investors are more confident that management has realized the wishes of investors.

This is in line with the research results of Zaini, Sadalia, & Fachrudin (2018), Millenia (2022), Suhadak, Mangesti, & Handayani (2019), and Endri, Dermawan, Abidin, & Riyanto (2019) which state that the higher the level of company profitability, the higher the stock returns obtained by investors. Thus, based on this description, the following hypothesis can be formulated.

H₁: profitability has a positive and significant effect on stock returns.

Liquidity

Liquidity measures a company's short-term ability by looking at the company's current assets against current liabilities (Pratiwi & Sucipto, 2023). The Current Ratio (CR) which is a proxy for liquidity shows the extent to which current assets cover current liabilities. A CR that is too high is considered not good because it indicates a lot of idle funds and can ultimately reduce the company's profits, likewise if the CR is low it is usually considered to indicate a problem with liquidity (Kasmir, 2012). The better the CR reflects the more liquid the company is, so that the company has the ability to meet its short-term capabilities well and this will increase the credibility of the company in the eyes of investors so that it can increase its stock returns. As for measuring CR, you can use the formula below.

$$\text{CR} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The relationship between signal theory and liquidity on stock returns, investors who see companies with good liquidity levels will give a positive signal to the company. Where companies that have high liquidity, the company is not at high risk, because all current assets owned by the company can cover its current liabilities.

This is in line with the research results of Zaini, Sadalia, & Fachrudin (2018) which state that the higher the level of company liquidity, the higher the stock returns obtained by investors. Thus, based on this description, the following hypothesis can be formulated.

H₂: liquidity has a positive and significant effect on stock returns.

Leverage

Leverage is the relationship between a company's debt to capital or assets. Debt to Equity Ratio (DER) is a ratio that compares total debt to total equity (Amin & Mollick, 2022). The greater the DER, the greater the company's burden on external parties, either in



the form of principal or interest on loans, and the greater the risk borne by the company. If the company's burden is heavier, the company's performance will worsen and have an impact on the stock returns obtained. Likewise, the higher the risk a company has, the more investors will tend to avoid investing in the company. To measure DER, you can use the formula below.

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

The relationship between signal theory and leverage on stock returns, the management of the company will provide signals to interested parties through information related to the amount of assets and the amount of debt of the company. The information received related to the amount of assets and the amount of debt will be used by investors for consideration in decision making. A high leverage ratio indicates a company's increasingly poor performance, because the level of dependence of the company's capital on external parties is increasing, and the company also has a high risk as indicated by the high component of the company's debt in the balance sheet. Thus, if the company's Debt to Equity Ratio (DER) is high, the company's stock price will be low because if the company makes a profit, the company is required to use the profit to pay its debts first compared to distributing dividends.

This is in line with the research results of Millenia (2022) and Damanik, Sadalia, & Silalahi (2019) which state that the higher the level of company leverage, the lower the stock returns obtained by investors. Thus, based on this description, the following hypothesis can be formulated.

H₃: leverage has a negative and significant effect on stock returns

Inflation

As an indicator that reflects changes in prices, inflation based on the IHK (Indeks Harga Konsumen) is a general and sustained increase in the price of goods and services in a country over a certain period of time. While profitability refers to a company's ability to generate profits from its operations. Inflation can affect a company's profitability in a significant way, and its impact can make investors less interested in a particular company's stock. Inflation can cause an increase in operating costs for a company, such as raw material costs, labor wages, and property rents can increase. If a company cannot adjust the selling price of its products or services quickly, this can reduce profit margins, and on the other hand inflation can reduce consumer purchasing power due to higher prices for goods and services. Declining profit margins can be an indicator of a company's lack of efficiency or difficulty in managing costs, which can make investors less interested which can result in a decrease in the stock price of a particular company so that it will have an impact on the returns that investors will get.

The relationship between the Efficiency Market Hypothesis theory and inflation moderating the effect of profitability on stock returns can be explained by the instability of inflation can affect investor expectations and change demand for stocks so that the stock price formed is a reflection of all available information, both fundamentals plus inflation.

This is in line with the research results of Millenia (2022) which state that inflation can weaken the positive effect of profitability on stock returns. Thus, based on this description, the following hypothesis can be formulated.

H₄: inflation can weaken the positive effect of profitability on stock returns.

Based on the Efficiency Market Hypothesis theory, inflation can moderate the effect of liquidity on stock returns, stock prices that reflect all information, including changes in interest rates can affect investor perceptions of economic prospects and companies that have a certain level of liquidity that has an impact on a company's stock returns.

This is in line with the research results of Purnamasari & Japlani (2021) and Putri (2022) which state that higher inflation can increase the liquidity risk of a company which has an impact on decreasing the company's stock returns. This indicates that inflation can weaken the positive effect of liquidity on stock returns. Thus, based on this description, the following hypothesis can be formulated.

H₅: inflation can weaken the positive effect of liquidity on stock returns.

Interest Rate

In this study, the interest rate used is the BI Rate. The BI Rate is a policy interest rate that reflects the attitude or stance of monetary policy taken by Bank Indonesia and announced to the public, while leverage refers to the ratio between a company's debt and equity. High leverage (high debt) can increase the risk of bankruptcy if the company has difficulty paying its debts. Interest rates play an important role in moderating the effect of leverage on stock returns. An increase in the published BI rate can have a negative impact on the company, such as higher borrowing costs, which will encourage the company to pay more interest on their loans. Higher



borrowing costs can increase the company's financial burden, especially if the company has significant debt that can reduce net income due to higher interest costs. If the company's profits decline, this can negatively affect the stock price, because investors may see the company's prospects as less profitable. Thus, this will encourage investors to move their assets from risky stocks, namely those with high leverage, to more profitable stocks, such as deposits, which will have an impact on stock prices in the market which will ultimately have an impact on a company's stock returns. The relationship between the Efficiency Market Hypothesis theory and the hypothesis that interest rates moderate the effect of leverage on stock returns can be explained by stock prices that reflect all information, including changes in interest rates that can affect investor perceptions of economic prospects and companies that have a certain level of leverage that has an impact on a company's stock returns.

This is in line with the research results of Millenia (2022) which state that interest rates can strengthen the negative effect of leverage on stock returns. Thus, based on this description, the following hypothesis can be formulated.

H₆: interest rates can strengthen the negative effect of leverage on stock returns

RESEARCH METHODS

In this research, the population used is energy sector companies listed on the Indonesia Stock Exchange in the 2018-2023 period. The sampling technique used in this research was purposive sampling. The sampling criteria used in this research are as follows: (1) Energy sector companies listed on the Indonesia Stock Exchange consecutively during 2018-2023. (2) The company provides complete data. Therefore, there are 55 companies which used as samples. The secondary data collected in this research will be analyzed with the help of the E-Views program.

To see the influence of the independent variables studied on stock return, researchers used pooled data regression analysis with the following regression equation:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \mu_{it}$$

Information:

i = 1, 2, n (cross section (firm))

t = 1, 2, n (time series (years))

α = intercept coefficient which is a scalar

$\beta = 1, 2, \dots, n$ (regression coefficient)

Y = stock return

X₁ = independent variable (profitability)

X₂ = independent variable (liquidity)

X₃ = moderating variable (leverage)

μ = error term

To see the influence of the moderating variable (earnings management) moderates leverage and related party transactions on ETR, researchers used Moderated Regression Analysis (MRA) with the following regression equation:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 Z_{1it} + \beta_5 Z_{2it} + \beta_6 X_{1it} * Z_{1it} + \beta_7 X_{2it} * Z_{1it} + \beta_8 X_{3it} * Z_{2it} + \mu_{it}$$

Information:

i = 1, 2, 3, n (cross section (companies))

t = 1, 2, 3, n (times series (years))

α = intercept coefficient which is a scalar

$\beta = 1, 2, 3, \dots, n$ (regression coefficient)

Y = dependent variable (stock return)

X₁ = independent variable (profitability)

X₂ = independent variable (liquidity)

X₃ = independent variable (leverage)

Z₁ = moderating variable (inflation)

Z₂ = moderating variable (interest rate)

μ = error term



RESEARCH RESULT

The research sample obtained the results of the number of observations from 2018-2023 as many as 30 observations. The description of variables in this study includes mean, median, standard deviation, minimum, maximum.

Descriptive Statistical Analysis

Table 1 Descriptive Statistics Results

Variable	Maksimum	Minimum	Average	Std. Dev.
Stock Return	6.778	-0.958	0.162	0.867
Profitability	0.651	-1.122	0.032	0.174
Liquidity	146.130	0.013	2.600	10.169
Leverage	34.056	-134.313	0.941	8.931
Inflation	5.510	1.680	2.920	1.262
Interest Rate	6.000	3.500	4.958	1.006

Model Specification Testing

Data processing uses the E-Views application. Estimation of the three types of CEM, FEM and REM models is carried out and then the best model is selected from the three models. Based on the results of the Chow test and Lagrange Multiplier test to determine the best model to use in this research. Statistical results show that the REM model is better used in regression. Therefore, the model applied in this research is the Fixed Effect Model (REM).

Classical Assumption Test

The classical assumption test is a statistical requirement that must be met in multiple linear regression analysis based on ordinary least square (OLS). Some types of assumption tests that are commonly used are Multicollinearity test, Heteroscedasticity test, Normality test, Linearity test, Autocorrelation test. However, in pooled data regression analysis, not all of the classical assumption tests mentioned are required. This is because the type of pooled data is a combination of time series and cross section data. However, in this study, multicollinearity testing is still needed. The multicollinearity test aims to test whether a high or perfect correlation is found in the regression model between independent variables (Ghozali & Ratmono, 2017). A good regression model should not have a correlation between independent variables. If there is a correlation coefficient greater than 0.8, there are symptoms of multicollinearity. The following are the output results in the regression equation.

Table 2 Multicollinearity Test Results

	X1	X2	X3
X1	1.0000000	-0.1252842	0.2036677
X2	-0.1252842	1.0000000	0.0114645
X3	0.2036677	0.0114645	1.0000000

Based on the test results on the correlation coefficient value in the random effect model, each variable has a coefficient value <0.8, so it can be concluded that the model does not experience multicollinearity problems.

Hypothesis Test Results

Based on the model specification test, the regression model with the Random Effect Model approach has passed the classical assumption test. Therefore, the estimation results are consistent and unbiased. The estimation results of the pooled data regression model are as follows:



Table 3 Hypothesis Test Results

Dependent Variable: Y				
Method: Panel EGLS (Cross-section random effects)				
Date: 10/06/24 Time: 15:37				
Sample: 2018 2023				
Periods included: 6				
Cross-sections included: 55				
Total panel (balanced) observations: 330				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.151390	0.050773	2.981719	0.0031
X1	0.783433	0.282970	2.768611	0.0060
X2	0.000550	0.004775	0.115106	0.9084
X3	-0.016614	0.004023	-4.129344	0.0000
Effects Specification			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.873641	1.0000
Weighted Statistics				
R-squared	0.066442	Mean dependent var	0.165424	
Adjusted R-squared	0.057851	S.D. dependent var	0.867584	
S.E. of regression	0.842115	Sum squared resid	231.1852	
F-statistic	7.733877	Durbin-Watson stat	2.535911	
Prob(F-statistic)	0.000053			

Based on the table above, it is known that X1 (profitability) has a Prob. value of 0.0060 which is smaller than 0.05, which means that profitability has a positive effect on stock returns with a coefficient value of 0.7834. Then, X2 (liquidity) has a Prob. value of 0.9084 which is greater than 0.05, which means that liquidity does not affect stock returns with a coefficient value of 0.0005. On the other hand, X3 (leverage) has a Prob. value of 0.0000 which is smaller than 0.05, which means that leverage has a negative effect on stock returns with a coefficient value of -0.0166.

it is known that the R-squared value is 0.0664, while the Adjusted R-squared value in the panel data regression equation model is 0.0578. Thus, the Adjusted R-squared value of 0.0578 means that all independent variables, namely profitability, liquidity, and leverage, have an influence of 5.78% on the dependent variable, namely stock returns in energy sector companies listed on the Indonesia Stock Exchange in the period 2018 to 2023, and the rest is influenced by other variables, namely 94.22% which were not examined in this study. This indicates that there are still too many factors or variables that can affect stock returns that were not examined in this study. A very low Adjusted R-squared can be caused by outliers or extreme values that do not match the general pattern of the data, such as in variables X2 and X3, namely the distance between the minimum and maximum values is too far which can be seen in the descriptive analysis table.

The Moderated Regression Analysis (MRA) test is used to determine whether the moderating variable can strengthen or weaken the relationship between the independent variable and the dependent variable. Based on the model specification test, the pooled data regression model should use estimates using the Random Effect Model (FEM). The estimation results of the pooled data regression model are as follows.



Table 4 Hypothesis Test MRA Results

Dependent Variable: Y				
Method: Panel EGLS (Cross-section random effects)				
Date: 10/06/24 Time: 16:04				
Sample: 2018 2023				
Periods included: 6				
Cross-sections included: 55				
Total panel (balanced) observations: 330				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.534283	0.246433	2.168067	0.0309
X1	2.256501	0.383229	5.888121	0.0000
X2	0.016297	0.041185	0.395695	0.6926
X3	-0.069312	0.027177	-2.550432	0.0112
Z1	-0.124488	0.052596	-2.366886	0.0185
Z2	0.005220	0.058091	0.089868	0.9284
X1_Z1	-0.503462	0.097482	-5.164654	0.0000
X2_Z1	-0.005688	0.014271	-0.398573	0.6905
X3_Z2	0.011115	0.005099	2.179747	0.0300
Effects Specification			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.802698	1.0000
Weighted Statistics				
R-squared	0.209661	Mean dependent var	0.165424	
Adjusted R-squared	0.189965	S.D. dependent var	0.867584	
S.E. of regression	0.780842	Sum squared resid	195.7185	
F-statistic	10.64438	Durbin-Watson stat	2.447235	
Prob(F-statistic)	0.000000			

Based on the results of the MRA test regression in the table above, it shows that the interaction of inflation in moderating the effect of profitability on stock returns has a Prob. of 0.0000, which is less than 0.05, so inflation can weaken the effect of profitability on stock returns. Then, the interaction of inflation in moderating the effect of liquidity on stock returns has a Prob. of 0.6905, which is greater than 0.05, so inflation cannot moderate the effect of liquidity on stock returns. On the other hand, the interaction of interest rates in moderating the effect of leverage on stock returns has a Prob. of 0.0300, which is less than 0.05, so interest rates can strengthen the effect of leverage on stock returns. Thus, the type of moderation (inflation) in this study is a pseudo-moderation variable (quasi moderator). Pseudo-moderation is a variable that moderates the relationship between the independent variable and the dependent variable which is also an independent variable (Erlina, Atmanegara, & Nasution, 2023). Meanwhile, the type of moderation (interest rate) in this study is a pure moderation variable. Pure moderation is a variable that moderates the relationship between the independent variable and the dependent variable but is not able to become an independent variable (Erlina, Atmanegara, & Nasution, 2023).



DISCUSSION

The effect of profitability on stock returns

Based on the results of the regression and significance tests that have been carried out, it is known that profitability has a positive and significant effect on stock returns. The higher the profitability ratio of a company, the higher the stock returns of a company in the future. Likewise, the lower the profitability ratio of a company, the lower the stock returns of a company in the future. When an energy sector company shows high profitability, it indicates that the company is able to generate significant profits from its operational activities. This tends to increase investor confidence and attract more investors to buy shares, so that stock prices rise and stock returns become higher.

Investors are optimistic about profitable companies because profit is a clear indicator of the company's ability to generate revenue and maintain operations. Energy sector companies in Indonesia can carry out various types of business activities that can increase the level of profitability compared to other sectors, such as energy production, energy distribution, energy sales, energy equipment installation, provision of energy sector consulting services, construction, operation and maintenance of energy equipment, energy research and development, and sales of energy equipment. High profitability can indicate strong management conditions, a viable business model, and good growth potential. This can convince investors that the company can provide a return on their investment, either through stock price appreciation. When investor sentiment is positive, investors will buy more shares, which drives up the share price. The higher the share price, the higher the return on investment. Thus, the relationship between profitability and stock returns is unidirectional.

This finding is in line with signaling theory and the research results of Zaini, Sadalia, & Fachrudin (2018), Millenia (2022), Suhadak, Mangesti, & Handayani (2019), and Endri, Dermawan, Abidin, & Riyanto (2019) which state that the higher the level of company profitability, the higher the stock returns obtained by investors. However, this study is not in line with the research of Pratiwi & Sucipto (2023) and Sulastri, Tarmed, Widjajanta, & Panjaitan (2024) which state that the higher the level of company profitability, the lower the company's stock returns.

The effect of liquidity on stock returns

Based on the results of the regression and significance tests that have been carried out, it is known that liquidity does not affect stock returns. In this study, liquidity as measured by the current ratio is unable to explain stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2018-2023 period. This indicates that an increase or decrease in the company's current ratio will not affect the stock price of a company. Liquidity has no effect on stock returns, which means that the company's ability to meet its short-term obligations (liquidity) does not affect the profits obtained by investors from the company's shares.

This can be caused by the views of investors who are often more interested in other factors such as long-term growth prospects, profitability, and operational stability. Low liquidity can indicate the risk of inability to meet short-term obligations, while liquidity that is too high can indicate that the company is not utilizing its assets effectively for growth or expansion. Therefore, to assess the company's long-term performance and sustainability, the company needs to consider macroeconomic factors and commodity price movements which are often the main considerations for investment in the energy sector.

The energy sector companies that were used as the objects of this study were dominated by current assets that were twice as large as current liabilities. The energy sector usually requires large current assets to support daily operations, investment in large projects, and ensure financial stability to face fluctuations in commodity prices. This allows companies to run large projects and ensure business sustainability amid market uncertainty. Therefore, the market tends not to react to the company's liquidity level in making investment decisions. Many energy companies are involved in large-scale sales to various customers, both domestically and internationally, resulting in significant accounts receivable, such as PT Petrosea Tbk, and PT. Elnusa Tbk., which have a larger nominal receivable than their cash and cash equivalents and inventory. The high accounts receivable reflects increased sales, which means the company has succeeded in attracting many customers, and by providing credit, the company can expand its market share and reach more customers who may not be able to make cash purchases. However, on the other hand, high accounts receivable can increase the risk of bad debts, where customers may default and will have an impact on the company's financial losses. Thus, investors are careful in looking at liquidity, it is important to look at the composition and quality of current assets to truly assess the health and prospects of the company. This finding is not in line with the signal theory which explains that investors who see companies with good levels of liquidity will give a positive signal to the company. However, the findings of this study can be supported by agency theory which explains that there are differences in the availability of information and interests between



management as agents and shareholders as principals. Liquidity that is too high can indicate that the company is holding too many liquid assets that could be invested in growth or expansion. This study is in line with the research of Surjandari, Nurlaelawati, & Soma (2020), Barua (2020), Pratiwi & Sucipto (2023) and Millenia (2022) which state that the high or low level of company liquidity is unable to affect the level of a company's stock returns. However, this study is not in line with the research of Fachrudin & Ihsan (2021) which states that the higher the level of company liquidity, the higher the stock return, as well as the research results of Zaini, Sadalia, & Fachrudin (2018) which concluded that the higher the level of liquidity, the lower the stock return of a company.

The effect of leverage on stock returns

Based on the results of the regression and significance tests that have been carried out, it is known that leverage has a negative effect on stock returns. In this study, leverage is calculated by the debt to equity ratio which can negatively affect the stock returns of energy sector companies listed on the Indonesia Stock Exchange in the 2018-2023 period. The greater the leverage ratio of a company, the smaller the stock returns of a company in the future. This is because when leverage is high, the company has more debt, which increases stock price volatility because investors are more aware of credit risk and potential bankruptcy. Likewise, the smaller the leverage ratio of a company, the greater the stock returns of a company in the future. This is because when leverage is low, the company is considered more stable, so that stock prices tend to be more stable.

High profitability can help companies manage their debt more effectively (Chauhan, 2023). With large profits, companies can pay interest and principal more easily, which can lower the leverage ratio. This is in line with the average energy sector company which has a downward trend in the leverage ratio in the last 3 years, such as PT. Petrosea Tbk. and PT. Bumi Resources Tbk. This condition triggers a positive response from investors which has an impact on increasing stock prices. In Kim's research (2021) found that companies with less leverage tend to have high stock returns. This is due to the company's financial flexibility in returning the rate of return to investors. Energy sector companies generally require large amounts of debt due to the large investments required for energy exploration, development, and distribution projects. In addition, high operating costs and the need to update infrastructure also contribute to large debts. Thus, it is important for companies to be careful in deciding the proportional combination of debt and equity to finance operations. Managing capital structure properly is not only a matter of financial mathematics, but also about building trust and credibility in the eyes of investors. This can increase investor confidence and the attractiveness of the company's shares in the market.

The results of this study are in line with the signal theory and research by Damanik, Sadalia, & Silalahi, (2019), Endri, Dermawan, Abidin, & Riyanto (2019), and Millenia (2022) which state that the lower the company's leverage level, the higher the stock return, and vice versa. However, the effect of leverage on stock prices is not always linear. There are other factors that influence stock prices, such as the company's growth prospects, market conditions, and investor sentiment as in the research of Pratiwi & Sucipto (2023) and Hapsoro & Syahriar (2021), concluding that the level of leverage does not affect the company's stock return.

The ability of inflation to moderate profitability on stock returns

Based on the hypothesis decision in the Moderated Regression Analysis test that has been carried out, it is known that profitability proxied by the return on asset inflation ratio is able to weaken the positive effect of profitability on stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2018-2023 period. The higher the inflation rate, the more it will be able to weaken the positive effect of the company's profitability on stock returns. This is because when inflation is high, the purchasing power of money decreases and production costs become higher, which can reduce the company's net profit (Egbunike & Okerekeoti, 2018). Although the company may remain profitable, inflation can reduce the investment value and stock returns because investors tend to be more aware of financial risks and high inflation and decreased income influence investors to think that the company's shares are less competitive. In Zreik (2022) found that stock price volatility increased due to inflation in the Lebanese capital market, making it difficult for investors to make long-term plans. Therefore, experts argue that the stock market becomes restless when the inflation rate rises. Inflation is the main focus of investors when investing in the energy sector. Energy sector companies with high operating costs tend to be vulnerable to inflation. Rising costs of raw materials, labor, and transportation increase the company's burden. This puts pressure on profit margins and makes investors concerned about long-term profitability, so investors tend to look for companies that are able to manage costs and increase efficiency even when facing unstable economic conditions. In a study by Hapsoro & Syahriar (2021), it was stated that investors are not interested in companies that have low profits. Companies that are



able to innovate with new technologies, renewable energy sources, or effective cost management strategies tend to be more in demand, because they are considered more able to survive and thrive amid inflation.

The results of this study are in line with the EMH theory and research by Millenia (2022) which states that inflation can weaken the positive effect of profitability on stock returns. However, the results of this study are not in line with Hughen (2013) which states that inflation can strengthen the positive effect of profitability on stock returns, due to an increase in the discount rate.

The ability of inflation to moderate liquidity on stock returns

Based on the hypothesis decision in the Moderated Regression Analysis test that has been conducted, it is known that liquidity proxied by the current ratio, inflation is unable to strengthen/weaken the effect of liquidity on stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2018-2023 period. This shows that inflation tends to affect aspects such as purchasing power and profit margins more than liquidity, which focuses on the company's ability to meet short-term obligations. The effect of inflation on stock prices is usually through profitability and operating costs, not liquidity. Therefore, inflation does not directly strengthen or weaken the effect of liquidity on stock prices in energy sector companies listed on the Indonesia Stock Exchange for the 2018-2023 period. This is in line with the findings of Kongsilp & Mateus (2017) who found that liquidity did not affect the Bear and Bull markets amid the financial crisis that occurred on the American Stock Exchange and the Chicago Board Options Exchange from January 2001 to December 2010. It was noted that the majority of energy sector companies in the 2018-2023 period had liquidity movements that were not in line with stock price movements, especially in fluctuating inflation. In fluctuating inflation conditions, investors tend to focus more on profitability, growth, and the company's ability to adjust the prices of their products or services to inflation. Liquidity remains important, but the main focus is usually on how the company can maintain its profit margins and competitiveness amidst economic changes. On the other hand, short-term investors usually focus more on the potential for quick profits based on historical price data and trading volume, not on the company's liquidity level. They look for price fluctuations that can be used for quick profits. In situations of high or low inflation, their attention remains on market trends and sentiments that can provide short-term benefits. This is in accordance with the research results of Flees & Mouselli (2023) which explains that investors can use technical analysis to gain short-term profits in the market amidst unstable economic conditions. This finding can also be explained by the unstable state of the world economy due to the COVID-19 pandemic (Subramaniam & Chakraborty, 2021), so that stock volatility is unstoppable. High stock price fluctuations make investors feel uncertain about the direction of the market in the future. Many companies are unable to maintain or even achieve good company performance. Farhang, Kamran-Disfani, & Zadeh (2023) explain that during the COVID-19 pandemic crisis, only companies with well-known brands can survive the crisis. Thus, investors do not only look at the level of liquidity as a reference in making investment decisions.

The results of this study are in line with the results of the study states that inflation is unable to strengthen or weaken the negative effect of liquidity on a company's stock returns. However, the results of this study are not in line with the results of the research by Purnamasari & Japlani (2021) and Putri (2022) which stated that higher inflation can increase the liquidity risk of a company which has an impact on decreasing the company's stock returns. This indicates that inflation can weaken the positive effect of liquidity on stock returns.

The ability of interest rates to moderate leverage on stock returns

Based on the hypothesis decision in the Moderated Regression Analysis test that has been conducted, it is known that interest rates (BI rates) are able to strengthen the negative effect of leverage on stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2018-2023 period. When interest rates rise, borrowing costs will also increase, which can worsen the financial condition of companies with high leverage. This will make investors more careful and even less interested in investing, so that stock returns will decrease more drastically.

The increasing DER value represents a fairly higher company risk, because the company is obliged to pay interest on its debt, especially when interest rates are rising, the company's profits will decrease and investors will most likely avoid stocks with high DER. The increasing leverage ratio can increase the risk that the company must bear and the possibility of default. In Chiang (2019) stated that investors often use interest rates as a reference to assess market conditions and make investment decisions because investors avoid extreme risks. This is in line with the movement of interest rates in line with the leverage value of the majority of energy sector companies for the 2018-2023 period. It is noted that during the COVID-19 pandemic, Bank Indonesia (BI) actively lowered the BI-Rate (reference interest rate) to 3.5% to help prevent an economic crisis and encourage recovery. The decrease in



the BI-Rate during the COVID-19 pandemic can reduce the company's borrowing costs, this is reflected in the leverage value of the majority of energy sector companies which decreased during COVID-19. Low interest rates make borrowing costs cheaper, so that energy sector companies can more easily access funds for operations and investment. This condition tends to make the company more attractive to investors because it shows wise management and the ability to survive in crisis conditions and is important in the economy, so that the rate of return on investment of energy sector companies has good prospects.

The results of this study are in line with the EMH theory and the research results of Zaini, Sadalia, & Fachrudin (2018), Hughen (2013), and Fahlevi (2019) which state that interest rates can strengthen the negative effect of leverage on stock returns. Meanwhile, the results of this study are not in line with the results of the study by Priyambudi & Thamrin (2021) which stated that higher interest rates have a positive impact on stocks because the dominant influence is on dividends.

CONCLUSION

The results of this study indicate that profitability has a positive effect on stock returns, liquidity has no effect on stock returns. While leverage has a negative effect on stock returns. Inflation is able to moderate the effect of profitability on stock returns, but is unable to moderate the effect of liquidity on stock returns. Interest rates are able to moderate the effect of leverage on stock returns in Energy companies listed on the BEI for the 2018-2023 period.

IMPLICATION

The results of this research imply several suggestions for practical and theoretical parties. First, theoretically for further researchers, it is expected to be a reference, reference material, and increase knowledge for further researchers in developing research, such as adding types of measurements or dimensions of stock returns (calculating dividends, market fluctuations and measuring risk), expanding the variables studied, research years and research samples. Second, practically for companies, namely in order to increase stock prices optimally, companies should focus on optimizing the management of company assets and investing in productive assets and be careful in using debt in the capital structure in unstable economic conditions. When a company can show a consistent growth trend, especially in revenue and net profit, it can provide confidence about the company's future prospects. The income generated can be reinvested in the company to purchase new assets, such as additional equipment, technology, or property, which in turn can be used to increase future income. The greater the assets owned by a company, the more flexibility the company has so that it can increase the value of the company to improve the welfare of shareholders. This will have an impact on positive sentiment in the market, and in turn will increase the company's stock returns. In practice, for investors and potential investors, investors do not need to assess the company's performance through the company's ability to meet its current liabilities or liquidity ratio. This is because the high or low liquidity ratio does not reflect the company's good prospects in the future. Liquidity ratios, such as the current ratio, provide a short-term view. To assess long-term performance and sustainability, investors need to look at other indicators such as profitability, capital structure, and economic conditions (interest rates and inflation) in determining investment decisions.

REFERENCES

1. Amin, M. R., & Mollick, A. (2022). Stock returns, oil prices and leverage: evidence from US firms. *International Journal of Managerial Finance*, 18(5), 785-811. doi:10.1108/IJMF-06-2021-0257
2. Ayinuola, T. F. (2023). Investigating the Impact of Inflation and Other Macroeconomic Variables on Stock Returns in Nigeria. *Asian Journal of Economics, Business and Accounting*, 23(14), 8-26. doi:10.9734/ajeba/2023/v23i141001
3. Barua, S. (2020). Firm Level Characteristics and Stock Returns: Evidence From Selected Insurance Companies Listed on the Dhaka Stock Exchange. *Asian Economic and Financial Review*, 10(12), 1356-1365. doi:10.18488/journal.aefr.2020.1012.1356.1365
4. Bodie, Z., Kane, A., & Marcus, A. (2021). *Investments* 12th edition. New York: McGraw-Hill Education
5. Chauhan, G. S. (2023). Mediating role of profitability relating financial leverage and stock returns. *International Journal of Emerging Markets*, 1746-8809. doi:10.1108/IJOEM-04-2022-0557
6. Chiang, T. (2019). Economic policy uncertainty, risk and stock returns: Evidence from G7 stock markets. *Finance Research Letters*, 29, 41-49
7. Connelly, B., Certo, S., Ireland, R., & Reutzel, C. (2010). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39-67. doi:10.1177/0149206310388419



8. Damanik, V., Sadalia, I., & Silalahi, A. (2019, July). Analysis on Stock Return in Coal Mining Companies Listed in BEI (Indonesia Stock Exchange). *International Journal of Research & Review*, 6(7), 398-406. doi:10.52403/ijrr.20210855
9. Egbunike, C. F., & Okerekeoti, C. U. (2018). Macroeconomic factors, firm characteristics and financial performance: A study of selected quoted manufacturing firms in Nigeria. *Asian Journal of Accounting Research*, 3(2), 142-168. doi:10.1108/AJAR-09-2018-0029
10. Endri, E., Dermawan, D., Abidin, Z., & Riyanto, S. (2019). Effect of Financial Performance on Stock Return: Evidence from the Food and Beverages Sector. *International Journal of Innovation, Creativity and Change.*, 9(10).
11. Erlina, Atmanegara, A. W., & Nasution, M. I. (2023). *Metodologi Penelitian*. Medan: Al-Hayat
12. Fachrudin, K., & Ihsan, M. (2021). The effect of financial distress probability, firm size and liquidity on stock return of energy users companies in Indonesia. *International Journal of Energy Economics and Policy*, 11(3), 296-300.
13. Fahlevi, M. (2019). The Influence of Exchange Rate, Interest Rate and Inflation on Stock Price of LQ45 Index in Indonesia. *Advances in Social Science, Education and Humanities Research*, 343, 157-163. Retrieved from creativecommons.org/licenses/by-nc/4.0
14. Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383-417. doi:10.2307/2325486
15. Farhang, M., Kamran-Disfani, O., & Zadeh, A. H. (2023). Brand Equity and Stock Performance in Time of Crisis: Evidence from the COVID-19 Pandemic. *Journal of Product & Brand Management*, 32(3), 420-435. doi:10/1108/JBPM-01-2022-3830
16. Flees, R. B., & Mouselli, S. (2023). The impact of qualified audit opinion on stock returns: an empirical study at Amman stock exchange. *Financial Reporting and Accounting*, 21(3), 633-653. doi:10.1108/JFRA-02-2021-0056
17. Ghozali, I., & Ratmono, D. (2017). *Analisis Multivariat dan Ekonometrika: Teori, Konsep, dan Aplikasi dengan Eviews 10*. Semarang: Badan Penerbit Universitas Diponegoro.
18. Hapsoro, D., & Syahriar, A.-i. (2021, January - June). Does economic growth moderate the effect of fundamental values on the stock return of Indonesian infrastructure companies? *The Indonesian Accounting Review*, 11(1), 47 - 59.
19. Hughen, J. C. (2013). Stock Returns and the U.S Dollar: The Importance of Monetary Policy. *SSRN Electronic Journal*. doi:10.2139/ssrn.2286437
20. IDX. (2024). Ringkasan Indeks. Retrieved from <https://www.idx.co.id/id>
21. Kasmir. (2012). *Analisis Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada.
22. Kongsilp, W., & Mateus, C. (2017). Volatility Risk and Stock Return Predictability on Global Financial Crises. *China Finance Review International*, 7(1), 33-66. doi:10.1108/CFRI-04-2016-0021
23. Millenia, L. (2022). Faktor-Faktor Yang Mempengaruhi Return Saham Dengan Dimoderasi Inflasi dan Suku Bunga. *Jurnal Multiparadigma Akuntan*, 4(3), 1055-1064. doi:10.24912/jpa.v4i3.19730
24. Pratiwi, A. S., & Sucipto, A. (2023). Analisis Pengaruh Likuiditas, Profitabilitas Dan Leverage Terhadap Return Saham Dengan Nilai Perusahaan Sebagai Variabel Moderasi (Studi Pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2016-2021). *Jurnal Analisis, Prediksi, dan Informasi*, 24(1), 56-71.
25. Priyambudi, A. H., & Thamrin, H. (2021, August). Analysis of the Effect of Macroeconomics and Firm Value on Consumer Goods Stock Returns. *International Journal of Innovative Science and Research Technology*, 6(8).
26. Purnamasari, E., & Japlani, A. (2021). Analisa Kinerja Keuangan Terhadap Return Saham dengan Inflasi Sebagai Variabel Moderasi Pada Industri Consumer Goods Yang Terdaftar Dalam Indeks Saham Syariah Indonesia (ISSI) Periode 2014-2018. *Jurnal Fidusia*, 3(2), 111-127. doi:10.24127/JF.V3I2.534
27. Putri, N. A. (2022). Pengaruh Rasio Profitabilitas Dan Likuiditas Terhadap Return Saham Dengan Inflasi Sebagai Variabel Moderasi. *Jurnal Ilmu Manajemen*, 10(2), 675-684.
28. Ruhani, F., & Junoh, M. (2023). Are stock market returns affected by financial market variables? Evidence from Bursa Malaysia by panel generalized method of moments. *International Journal of Ethics and Systems*, 39(3), 576-593. doi:10.1108/IJOES-11-2021-0201
29. Subramaniam, S., & Chakraborty, M. (2021). COVID-19 fear index: does it matter for stock market returns? *Review of Behavioral Finance*, 13(1), 40-50. doi:10.1108/RBF-08-2020-0215



30. Suhadak, S., Mangesti, S. M., & Handayani, S. R. (2019). GCG, financial architecture on stock return, financial performance and corporate value. *International Journal of Productivity and Performance Management*, 69(9), 1813-1831. doi:10.1108/IJPPM-09-2017-0224
31. Sulastri, Tarmedi, E., Widjajanta, B., & Panjaitan, A. (2024). The Effect of Profitability on Stock Return (Study on Financial Technology Companies Listed on NASDAQ). *Advances in Economics, Business and Management Research*, 274–282. doi:10.2991/978-94-6463-234-7_26
32. Surjandari, D. A., Nurlaelawati, L., & Soma, A. M. (2020). Asset, Capital Structure, Liquidity, Firm Size's Impact on Stock Return. *International Journal of Commerce and Finance*, 6(2), 81-91. Retrieved from <https://www.proquest.com/docview/2449678656/abstract/9401CF19E884855PQ/1?accountid=50257>
33. Umoru, B., Udobi-Owoloja, P. I., Nzekwe, G. U., Iyiegbuniwe, W. C., & Ezike, J. E. (2020). Are Stock Returns Predictable? The Myth of Efficient Market Hypothesis and Random Walk Theory Using Nigerian Market Data. *International Journal of Economics, Business and Management Research*, 4(7).
34. Ahmad, M., Maochun, Z., & Sattar, A. (2019). Impact of Interest Rate and Exchange Rate on Stock Returns. *Agathos*, 10(1), 259-266.
35. Ajija, S. R., Sari, D. W., Rahmat, S. H., & Primanti, M. R. (2011). *Cara Cerdas Menguasai Eviews*. Jakarta: Salemba Empat.
36. Amin, M. R., & Mollick, A. (2022). Stock returns, oil prices and leverage: evidence from US firms. *International Journal of Managerial Finance*, 18(5), 785-811. doi:10.1108/IJMF-06-2021-0257
37. Ayinuola, T. F. (2023). Investigating the Impact of Inflation and Other Macroeconomic Variables on Stock Returns in Nigeria. *Asian Journal of Economics, Business and Accounting*, 23(14), 8-26. doi:10.9734/ajeba/2023/v23i141001
38. Bafera, J., & Kleinert, S. (2022). Signaling Theory in Entrepreneurship Research: A Systematic Review and Research Agenda. *Entrepreneurship Theory and Practice*, 1-46. doi:10.1177/10422587221138489
39. Balcilar, M., Gupta, R., Kim, W. J., & Kyei, C. (2018). The role of economic policy uncertainties in predicting stock returns and their volatility for Hong Kong, Malaysia and South Korea. *International Review of Economics & Finance*. doi:10.1016/j.iref.2018.08.016
40. Barua, S. (2020). Firm Level Characteristics and Stock Returns: Evidence From Selected Insurance Companies Listed on the Dhaka Stock Exchange. *Asian Economic and Financial Review*, 10(12), 1356-1365. doi:10.18488/journal.aefr.2020.1012.1356.1365
41. Basuki, A. T., & Prawoto, N. (2016). *Analisis Regresi dalam Penelitian Ekonomi dan Bisnis*. Yogyakarta: RajaGrafindo Persada
42. Bodie, Z., Kane, A., & Marcus, A. (2021). *Investments 12th edition*. New York: McGraw-Hill Education.
43. Born, B., & Breitung, J. (2010). Testing for Serial Correlation in Fixed-Effects Panel Data Models. *Beiträge zur Jahrestagung des Vereins für Socialpolitik*, 15(2). doi:10.1080/07474938.2014.976524
44. Chauhan, G. S. (2023). Mediating role of profitability relating financial leverage and stock returns. *International Journal of Emerging Markets*, 1746-8809. doi:10.1108/IJOEM-04-2022-0557
45. Chiang, T. (2019). Economic policy uncertainty, risk and stock returns: Evidence from G7 stock markets. *Finance Research Letters*, 29, 41–49.
46. Chowdhury, J., Sonaer, G., & Celiker, U. (2017). Market Share Growth and Stock Returns. *Accounting & Finance*, 1-33. doi:10.1111/acfi.12300
47. Connelly, B., Certo, S., Ireland, R., & Reutzel, C. (2010). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39-67. doi:10.1177/0149206310388419
48. Cooper, I., & Maio, P. (2019). Asset Growth, Profitability, and Investment Opportunities. *Management Science*, 65(9), 3988-4010. doi:10.1287/mnsc.2018.3036
49. Damanik, V., Sadalia, I., & Silalahi, A. (2019, July). Analysis on Stock Return in Coal Mining Companies Listed in BEI (Indonesia Stock Exchange). *International Journal of Research & Review*, 6(7), 398-406. doi:10.52403/ijrr.20210855
50. Egbunike, C. F., & Okerekeoti, C. U. (2018). Macroeconomic factors, firm characteristics and financial performance: A study of selected quoted manufacturing firms in Nigeria. *Asian Journal of Accounting Research*, 3(2), 142-168. doi:10.1108/AJAR-09-2018-0029



51. Endri, E., Dermawan, D., Abidin, Z., & Riyanto, S. (2019). Effect of Financial Performance on Stock Return: Evidence from the Food and Beverages Sector. *International Journal of Innovation, Creativity and Change.*, 9(10).
52. Erlina, Atmanegara, A. W., & Nasution, M. I. (2023). *Metodologi Penelitian*. Medan: Al-Hayat.
53. Fachrudin, K., & Ihsan, M. (2021). The effect of financial distress probability, firm size and liquidity on stock return of energy users companies in Indonesia. *International Journal of Energy Economics and Policy*, 11(3), 296-300.
54. Fahlevi, M. (2019). The Influence of Exchange Rate, Interest Rate and Inflation on Stock Price of LQ45 Index in Indonesia. *Advances in Social Science, Education and Humanities Research*, 343, 157-163. Retrieved from creativecommons.org/licenses/by-nc/4.0
55. Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383-417. doi:10.2307/2325486
56. Farhang, M., Kamran-Disfani, O., & Zadeh, A. H. (2023). Brand Equity and Stock Performance in Time of Crisis: Evidence from the COVID-19 Pandemic. *Journal of Product & Brand Management*, 32(3), 420-435. doi:10.1108/JPBM-01-2022-3830
57. Flees, R. B., & Mouselli, S. (2023). The impact of qualified audit opinion on stock returns: an empirical study at Amman stock exchange. *Financial Reporting and Accounting*, 21(3), 633-653. doi:10.1108/JFRA-02-2021-0056
58. Ghozali, I., & Ratmono, D. (2017). *Analisis Multivariat dan Ekonometrika: Teori, Konsep, dan Aplikasi dengan Eviews 10*. Semarang: Badan Penerbit Universitas Diponegoro.
59. Goncalves-Pinto, L., Grundy, B. D., Hameed, A., Heijden, T. V., & Zhu, Y. (2020). Why Do Option Prices Predict Stock Returns? The Role of Price Pressure in the Stock Market. *Management Science*. doi:10.1287/mnsc.2019.3398
60. Hapsoro, D., & Syahriar, A.-i. (2021, January - June). Does economic growth moderate the effect of fundamental values on the stock return of Indonesian infrastructure companies? *The Indonesian Accounting Review*, 11(1), 47 - 59.
61. Hughen, J. C. (2013). Stock Returns and the U.S Dollar: The Importance of Monetary Policy. *SSRN Electronic Journal*. doi:10.2139/ssrn.2286437
62. IDX. (2024). Ringkasan Indeks. Retrieved from <https://www.idx.co.id/id>
63. Jogiyanto, H. M. (2010). *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BPF.
64. Karlsson, J. (2021). Firm Size and Growth Barriers: A Data-Driven Approach. *Small Bus Econ*, 57, 1319–1338. doi:10.1007/s11187-020-00350-y
65. Kasmir. (2012). *Analisis Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada.
66. Kim, R. (2021). Dividend Reputation, Dividend Yield and Stock Returns in Korea. *Journal of Derivatives and Quantitative Studies: 선물연구*, 29(1), 73-99. doi:10.1108/JDQS-09-2020-0023
67. Kongsilp, W., & Mateus, C. (2017). Volatility Risk and Stock Return Predictability on Global Financial Crises. *China Finance Review International*, 7(1), 33-66. doi:10.1108/CFRI-04-2016-0021
68. Mazur, M., Dang, M., & Vo, T. (2020). Dividend Policy and the COVID-19 Crisis. *Social Science Research Network*. doi:10.2139/ssrn.3723790
69. Millenia, L. (2022). Faktor-Faktor Yang Mempengaruhi Return Saham Dengan Dimoderasi Inflasi dan Suku Bunga. *Jurnal Multiparadigma Akuntan*, 4(3), 1055-1064. doi:10.24912/jpa.v4i3.19730
70. Osborne, J. W., & Overbay, A. (2004). The Power of Outliers (and Why Researchers Should Always Check for Them). *Practical Assessment, Research, and Evaluation*, 9(6), <http://pareonline.net/getvn.asp?v=9&n=6>
71. Pratiwi, A. S., & Sucipto, A. (2023). Analisis Pengaruh Likuiditas, Profitabilitas Dan Leverage Terhadap Return Saham Dengan Nilai Perusahaan Sebagai Variabel Moderasi (Studi Pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2016-2021). *Jurnal Analisis, Prediksi, dan Informasi*, 24(1), 56-71.
72. Priyambudi, A. H., & Thamrin, H. (2021, August). Analysis of the Effect of Macroeconomics and Firm Value on Consumer Goods Stock Returns. *International Journal of Innovative Science and Research Technology*, 6(8).
73. Purnamasari, E., & Japlani, A. (2021). Analisa Kinerja Keuangan Terhadap Return Saham dengan Inflasi Sebagai Variabel Moderasi Pada Industri Consumer Goods Yang Terdaftar Dalam Indeks Saham Syariah Indonesia (ISSI) Periode 2014-2018. *Jurnal Fidusia*, 3(2), 111-127. doi:10.24127/JF.V3I2.534



74. Putri, N. A. (2022). Pengaruh Rasio Profitabilitas Dan Likuiditas Terhadap Return Saham Dengan Inflasi Sebagai Variabel Moderasi. *Jurnal Ilmu Manajemen*, 10(2), 675-684.
75. Ruhani, F., & Junoh, M. (2023). Are stock market returns affected by financial market variables? Evidence from Bursa Malaysia by panel generalized method of moments. *International Journal of Ethics and Systems*, 39(3), 576-593. doi:10.1108/IJOES-11-2021-0201
76. Shakatreh, M. (2020). The Effect of Liquidity Risks on the Relationship between Earnings and Stock Return on Jordanian Public Shareholding Industrial Companies. *Journal of Asian Finance, Economics and Business*, 7(4), 21 - 28. doi:10.13106/jafeb.2020.vol7.no4.21
77. Subramaniam, S., & Chakraborty, M. (2021). COVID-19 fear index: does it matter for stock market returns? *Review of Behavioral Finance*, 13(1), 40-50. doi:10.1108/RBF-08-2020-0215
78. Suhadak, S., Mangesti, S. M., & Handayani, S. R. (2019). GCG, financial architecture on stock return, financial performance and corporate value. *International Journal of Productivity and Performance Management*, 69(9), 1813-1831. doi:10.1108/IJPPM-09-2017-0224
79. Sulastri, Tarmedi, E., Widjajanta, B., & Panjaitan, A. (2024). The Effect of Profitability on Stock Return (Study on Financial Technology Companies Listed on NASDAQ). *Advances in Economics, Business and Management Research*, 274-282. doi:10.2991/978-94-6463-234-7_26
80. Surjandari, D. A., Nurlaelawati, L., & Soma, A. M. (2020). Asset, Capital Structure, Liquidity, Firm Size's Impact on Stock Return. *International Journal of Commerce and Finance*, 6(2), 81-91. Retrieved from <https://www.proquest.com/docview/2449678656/abstract/9401CF19E884855PQ/1?accountid=50257>
81. Thampanya, N., Wu, J., Nasir, A. M., & Liu, J. (2020). Fundamental and behavioural determinants of stock return volatility in ASEAN-5 countries. *Journal of International Financial Markets, Institutions and Money*, 5. doi:10.1016/j.intfin.2020.101193
82. Tiryaki, A., Ceylan, R., & Erdoğan, L. (2018). Asymmetric effects of industrial production, money supply and exchange rate changes on stock returns in Turkey. *Applied Economics*, 1-12. doi:10.1080/00036846.2018.1540850
83. Umoru, B., Udobi-Owoloja, P. I., Nzekwe, G. U., Iyiegbuniwe, W. C., & Ezike, J. E. (2020). Are Stock Returns Predictable? The Myth of Efficient Market Hypothesis and Random Walk Theory Using Nigerian Market Data. *International Journal of Economics, Business and Management Research*, 4(7).
84. Yang, J. Y., Samitas, A., & Kampouris, I. (2021). Investor Behavior, Stock Returns and CDS Spreads: Evidence from Foreign and Domestic Investors in Korea. *International Journal of Managerial Finance*, 17(4), 497-521. doi:10.1108/IJMF-01-2020-0022
85. Zaini, V. I., Sadalia, I., & Fachrudin, K. A. (2018, September). The Effect Of External And Internal Factors On Stock Return With Price To Book Value As Moderation Variables In Banking Companies In Indonesia Stock Exchange. *International Journal Of Scientific & Technology Research*, 7(9).
86. Zreik, M. (2022). The Macroeconomic Determinants and its Impact on Stock Returns. *International Journal of Social and Humanities Sciences (IJSHS)*, 6(3), 37-52.

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