

PERFORMANCE AS THE ANCHOR: MITIGATING THE IMPACT OF FINANCIAL RISK AND DISTRESS ON LQ45 STOCK RETURNS IN INDONESIA

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Abstract: This research aims to analyze the influence of financial risk and financial distress on stock returns of companies indexed LQ45 on the Indonesia Stock Exchange during the 2019-2023 period, taking into account the moderation of company performance (ROA). This research uses three analysis models: a model without a moderating variable, a model with ROA as an independent variable, and a moderation model. Data was obtained from the LQ45 company's financial reports and analyzed using multiple regression. The research results show that interest rate risk has a significant positive effect on stock returns, while financial distress has a significant effect only in the model without moderation. The beta factor does not show a significant influence on stock returns in the three models. Company performance (ROA) does not moderate the influence of beta factors and interest rate risk on stock returns, but does moderate the influence of financial distress on stock returns. These findings provide practical implications for financial managers and investors to pay more attention to interest rate risks and financial distress conditions in making investment decisions. This research also adds theoretical insight into the role of company performance in moderating the influence of financial distress on stock returns. Suggestions for further research include expanding research variables, analysis in other sectors, and using different research methods for a more comprehensive understanding

Keywords: *interest rate risk, beta factor, financial distress, company performance, stock returns, LQ45*

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1. Introduction

The uncertain development of the Indonesian economy is influenced by various internal and external factors which are interrelated and influence each other (Basri, 2002 in (Herlina, 2020) . Internal factors such as political, social and cultural conditions have a significant impact on the economy. For example, stable political conditions support economic growth, while political conflict or social instability can discourage investment. External factors, such as global economic conditions and geopolitics, also play a large role in influencing Indonesia's exports and imports as well as the investment climate (Handoyo et al., 2020) . This uncertain economic development can pose various risks for companies. Financial risks can arise due to fluctuations in currency exchange rates, interest rates, or commodity prices (Bramantyo, 2008 in Tarigan et

al., 2020). Operational risks can arise from system failures or human error, while strategic risks relate to changes in the business environment. These risks can affect company performance, which is a measure of success in achieving its goals (Abdullah, 2014). Implementing a good strategy can improve financial performance, which in turn has a positive impact on stock returns.

Stock return performance is influenced by various factors, including the company's financial performance and stock market conditions. According to modern portfolio asset theory (CAPM), stock returns are influenced by risk and beta factors, which are measures of the systematic risk of a stock (Gunawan & Suyatmin, 2021; Kurniawan, 2015). Companies with good financial performance tend to have lower risk and higher beta factors, which increase stock returns. In addition, financial distress or company financial difficulties can reduce stock returns because they increase investor uncertainty and the cost of capital (Weston & Brigham, 2020). Macroeconomic conditions also influence stock returns. Good economic conditions increase demand for products and services, which benefits companies and improves their financial performance (Brigham & Daves, 2000 in (Juwita et al., 2022)). Conversely, poor economic conditions reduce demand and the company's financial performance. Good stock market conditions, such as the rising Composite Stock Price Index (IHSG), also increase stock demand and returns.

Companies listed in the LQ45 index are companies with the highest liquidity and market capitalization on the Indonesian Stock Exchange. The presence of these companies in the index indicates their important position in the Indonesian economy. However, as part of the financial markets, these companies are also exposed to financial risks that may affect their performance. Financial risks can come from various sources, including market fluctuations, changes in interest rates, and internal problems such as financial distress. Therefore, the management of LQ45 indexed companies needs to pay attention to and manage financial risks well in order to maintain their stability and growth in a competitive market. Effective financial risk management can help companies reduce risks and improve financial performance (Girling, 2022).

Previous research shows that financial risk has a positive effect on stock returns. Handoyo et al. (2020) found that financial risk has a positive effect on stock returns in companies listed on the IDX indexed LQ45. This research aims to analyze the influence of financial risk and financial distress on company stock returns, with company performance as a moderating variable, in companies listed on the IDX indexed LQ45. It is hoped that the research results will provide useful information for companies, investors and regulators in increasing financial risk and making investment decisions.

2. Literature Review

2.1. Beta Factor

In the Capital Asset Pricing Model (CAPM), the beta factor is one of the key concepts that measures the sensitivity of an asset to changes in market returns (Zhang, 2017). The beta factor (β_i) is used to assess how much an asset (i) will respond to changes in market returns (m). CAPM theory states that the expected return of an asset is equal to the risk-free rate plus the risk premium. A risk premium is the compensation given to investors for the risks they take. The risk considered in CAPM theory is systematic risk, namely risk that cannot be diversified. This systematic risk is also known as market risk. The risk premium is measured using the beta of the asset. Beta is a measure of the sensitivity of asset returns to market returns.

Beta can be calculated using the following formula (Zhang, 2017):

$$\beta_i = \frac{cov(r_i, r_m)}{Var(r_m)}$$

Where:

- β_i : Beta factor of asset i
- $cov(r_i, r_m)$: Correlation between return on asset i and market return
- $Var(r_m)$: Variance of market returns

A beta factor equals to 1 indicates that the asset has the same level of sensitivity as the market. If $\beta_i > 1$, the asset is considered more volatile than the market, whereas if $\beta_i < 1$ the asset is considered less volatile than the market.

2.2. Interest Rate Risk

Interest Rate Risk Theory in detail is the risk faced by companies due to changes in interest rates. Eugene Fama (1970) in (Campbell, 2014) defines interest rate risk as the impact arising from unexpected changes in interest rates. According to Fama, this risk can have the potential to have a negative impact on company value, triggering a decrease in revenue, an increase in costs, or even increasing the risk of default (Campbell, 2014). Robert Merton continued the development of the Interest Rate Risk theory by including the time dimension into his analysis.

$$\Delta P = \Delta P + \Delta P + \varepsilon$$

With:

ΔP : Closing Price

ε : BI-Rate

2.3. Financial Distress

Financial distress is a condition where a company experiences difficulty in fulfilling its obligations financially, which can lead to the risk of bankruptcy. According to Weston and Brigham (2020), this condition occurs when a company is unable to fulfill its obligations in a sustainable manner. Platt and Platt (2002) define financial distress as a stage of decline in financial conditions that occurs before bankruptcy or liquidation occurs. Smith and Smith (2005) state that financial distress is a situation where a company cannot generate sufficient cash flow to meet its short-term and long-term obligations.

Measuring financial distress using the Altman Z-Score involves five financial ratios which are calculated based on data from the company's financial reports. Altman Z-Score score can be calculated using the following formula (Altman, 1968):

$$Z_{score} = 1.2 \frac{WC}{TA} + 1.4 \frac{RE}{TA} + 3.3 \frac{EBIT}{TA} + 0.6 \frac{MVE}{TL} + 1.0 \frac{S}{TA}$$

A high WC/TA value indicates that the company has enough working capital to cover its short-term obligations. A high RE/TA indicates that the company has accumulated sufficient profits to support its assets. A high EBIT/TA value indicates that the company generates high operating profits compared to its total assets. A high MVE/TL value indicates that the market has a positive perception of the company. Meanwhile, a high S/TA value indicates that the company is able to generate high sales using relatively low total assets.

2.4. Company performance

Company performance is an evaluation of how well the company achieves its stated goals. This definition emphasizes the use of metrics and indicators to measure goal achievement, as expressed by Peter Drucker in (Ezilmez, 2020). Company performance is often measured through financial reports, which provide a comprehensive picture of the company's financial and operational health (Sitohang & Manik, 2021). Financial reports serve not only as financial documentation, but also as an important evaluation tool for understanding the extent to which a company is achieving its financial and operational goals.

$$= \frac{o-i}{o-l} 100\%$$

2.5. Stock returns

Stock return is the rate of return that investors obtain from their investment in shares. This definition emphasizes the aspect of the rate of return obtained, which can be measured using various metrics based on company financial information (Munawir, 2007; Cahyani et al., 2015; Dewi, 2019). Internal factors such as company performance which includes profitability, dividends distributed to shareholders, and financial policies such as debt policy, influence stock returns significantly (Munawir, 2015). On the other hand, external factors such as economic conditions, industrial competition and technological advances also play a role in determining stock prices and ultimately the stock returns obtained by investors (Munawir, 2015). The basic formula used is:

$$\text{Return realization} = \frac{\text{Final stock prices} - \text{Initial share price}}{\text{Initial share price}}$$

Based on theoretical studies and previous research, this research proposes six hypotheses to test the influence of financial risk management and company performance on stock returns of energy sector companies listed on the Indonesia Stock Exchange for the 2019-2023 period. The first hypothesis tests the effect of interest rate risk on stock returns, which is based on the Capital Asset Pricing Model (CAPM) theory which shows that changes in interest rates can affect expected stock returns. The second hypothesis states that the beta factor influences stock returns, with the beta factor measuring the stock's sensitivity to overall market changes. The third hypothesis investigates the effect of financial distress on stock returns, referring to the finding that companies in financial distress tend to have lower stock returns (Julini et al., 2018). The fourth to sixth hypotheses introduce a moderation dimension by company performance (ROA) on the relationship between interest rate risk, beta factor, and financial distress with stock returns. Jorion and Shiller (1995) in (Campbell, 2014) found that investors were more sensitive to the beta factor for companies with low ROA compared to companies with high ROA. Meanwhile, research by Nugroho et al. (2021) found that financial distress had a significant impact on stock returns with systematic risk and profitability variables taken into consideration. This shows that the relationship between financial distress and stock returns is influenced by the company's financial performance, which is a key component of company performance. Another study by Halimah (2017) investigated the share price performance of companies that had restructured their financial conditions after being classified as financially distressed. This study finds that there are large negative abnormal returns in the 200 days following the emergence of financial distress, meaning that a company's financial health at the time of restructuring plays an important role in determining its stock performance. In detail, the research hypothesis proposed in this study is as follows.

- H1: Interest rate risk influences stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2019 - 2023 period
- H2: the beta factor influences stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2019 - 2023 period
- H3: Financial Distress influences stock returns in energy sector companies listed on the Indonesia Stock Exchange for the 2019 - 2023 period
- H4: company performance (ROA) moderates the influence of interest rate risk on stock returns in LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019 - 2023 period
- H5: company performance (ROA) moderates the influence of the beta factor on stock returns in LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019 - 2023 period
- H6: company performance (ROA) moderates the effect of financial distress on stock returns in LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019 - 2023 period

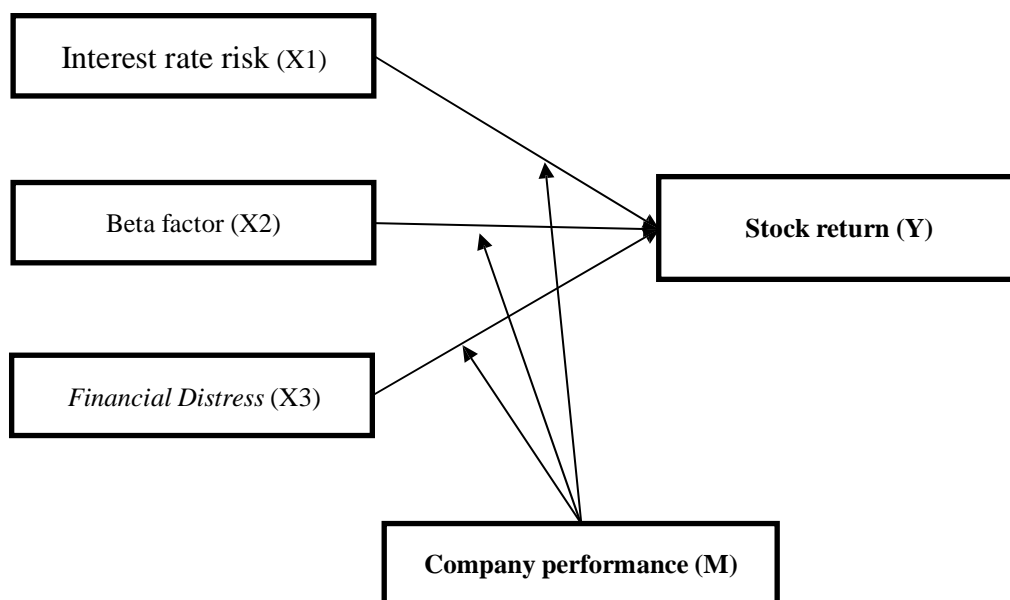


Figure 1. Research framework

3. Research Methods

This research uses a quantitative approach with an associative method. The quantitative approach is based on the philosophy of positivism, where researchers collect data using research instruments and analyze it statistically to test predetermined hypotheses. The association method is used to analyze the relationship between two or more variables, in this case the relationship between financial risk and company performance and stock returns.

The research was conducted on the Indonesian Stock Exchange (BEI) with data taken from the official BEI website (<http://www.idx.co.id/>). This location selection is based on the completeness and reliability of the required data. Data is downloaded according to research needs during the 2019-2023 period. The research population is 45 LQ45 indexed companies listed on the IDX in 2019-2023. The sample used in this research is a saturated sample, which means that all population units that meet the inclusion criteria have been included in this research. A saturated sample approach was chosen to ensure a comprehensive representation

of the population studied, in this case the LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019-2023 period.

The data used is secondary data in the form of financial reports taken from the official BEI website. The type of data used is quantitative data, which includes beta factors and interest rate risk as financial risk, Return on Assets (ROA), and stock returns. The data collection method used is documentation. The independent variables in this research include interest rate risk as measured by the sensitivity of the BI interest rate to closing stock prices (Az-Zahra & Pardistya, 2022), beta factor as a measure of systematic risk, and financial distress as measured by the Altman Z-Score. The dependent variable is stock return, measured by the percentage change in investment value in shares. Data analysis was carried out using multiple linear regression and moderated regression techniques, with the SPSS version 25.0 program for data processing.

Data analysis uses descriptive and inferential statistics. Descriptive statistics are used to describe data with measures such as mean, maximum, minimum, and standard deviation. Inferential statistics were carried out using multiple linear regression and moderation regression to test the relationship between independent and dependent variables. Classic assumption tests include normality tests, autocorrelation tests, multicollinearity tests, and heteroscedasticity tests to ensure that the regression model meets the specified criteria. The coefficient of determination and t test are used to test the significance of the influence of the independent variable on the dependent variable.

4. Results and Discussion

4.1. Results

Description of Research Variables

Table 1. Description of research variables

Variable	Minimum	Maximum	Mean	St Dev
Beta Factor (X1)	-0.410	0.608	0.026	0.148
Interest rate risk (X2)	-1,677	1,946	0.027	0.519
Financial Distress (X3)	-9,381	9,554	2,524	2,170
ROA (M)	-1,619	0.455	0.051	0.161
Stock Return (Y)	-0.768	0.913	-0.012	0.282

Based on the research variable description table, it can be observed that the Beta Factor (X1) has a minimum value of -0.410 and a maximum value of 0.608, with an average of 0.026 and a standard deviation of 0.148. This shows that there is quite large variation in the Beta Factor values between companies in the research sample. A negative minimum Beta Factor indicates that the company's share price movement is in the opposite direction to the JCI movement, while a positive maximum Beta Factor indicates that the company's share price movement is in the same direction as the IHSG movement. Interest Rate Risk (X2) has a minimum value of -1.677 and a maximum of 1.946, with an average of 0.027 and a standard deviation of 0.519. The variation in Interest Rate Risk values between companies in the research sample is also quite large. A negative minimum Interest Rate Risk value indicates that the company benefits from a decrease in interest rates, while a positive maximum Interest Rate Risk value indicates that the company is disadvantaged by an increase in interest rates. Financial Distress (X3) has a minimum value of -9.381 and a maximum of 9.554, with an average of 2.524 and a standard deviation of 2.170. The variation in Financial Distress scores between companies in the research sample is also quite large. A negative minimum Financial

Distress value indicates that the company is in a healthy financial condition, while a positive maximum Financial Distress value indicates that the company is in a high-risk financial condition. ROA (M) has a minimum value of -1.619 and a maximum of 0.455, with an average of 0.051 and a standard deviation of 0.161. Variations in ROA values between companies in the research sample are quite small. A negative minimum ROA value indicates that the company experienced a loss, while a positive maximum ROA value indicates that the company made a profit. Stock Return (Y) has a minimum value of -0.768 and a maximum of 0.913, with an average of -0.012 and a standard deviation of 0.282. The variation in stock return values between companies in the research sample is quite large. A negative minimum stock return value indicates that the company's share price has decreased, while a positive maximum stock return value indicates that the company's share price has increased.

Assumption testing

Table 2. Multicollinearity test

Variable	Collinearity Statistics	
	Tolerance	VIF
Beta Factor (X1)	0.962	1,040
Interest rate risk (X2)	0.991	1,009
Financial Distress (X3)	0.638	1,568
ROA (M)	0.655	1,527

Based on table 2, the results of the multicollinearity test show that the Tolerance value for all independent variables (X1, X2, X3, M) are also less than 10, namely 1.040, 1.009, 1.568, and 1.527. Based on the Tolerance and VIF values, it can be concluded that there is no significant multicollinearity between the independent variables in this regression model.

Table 3. Autocorrelation Test

Durbin Watson	dU	4-dU	Information
1,962	1.7 181	2,281	There is no autocorrelation

The results of the autocorrelation test using Durbin Watson (DW) show a DW value of 1.962. This value is between dU (1.7181) and 4-dU (2.281), which indicates that there is no autocorrelation in the regression model used. Thus, this model meets the assumption of no autocorrelation

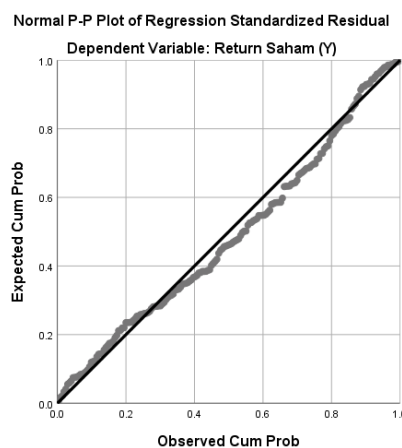


Figure 2. Normality Test

The normality test was carried out using the PP Plot graph. The results show that the observation points follow a diagonal line, which indicates that the residual distribution follows a normal distribution. This indicates that the normality assumption is met in this regression model.

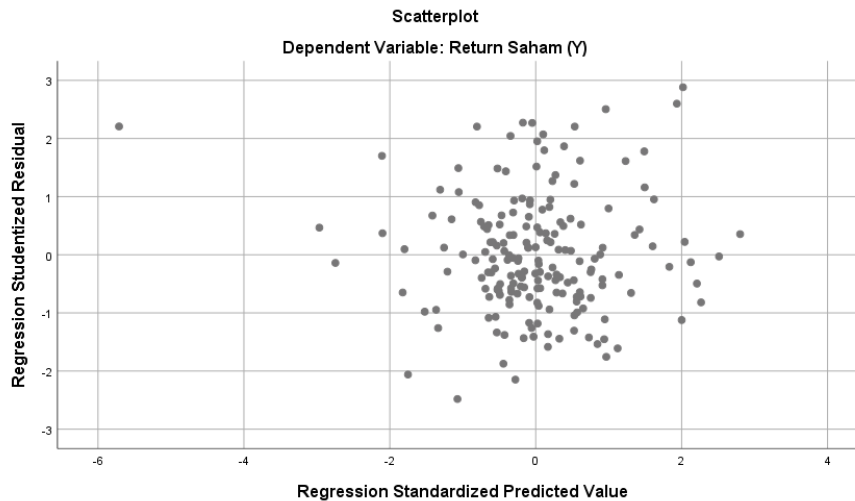


Figure 3. Heteroscedasticity test

The heteroscedasticity test was carried out using a scatter plot of standardized predictive value versus regression studentized residual. The results show that the observation points are distributed randomly, which indicates that there is no particular pattern. This means that the assumption of homoscedasticity is met, so that the residual variance is constant over the entire range of predicted values. By fulfilling all classical assumption tests (multicollinearity, autocorrelation, normality and heteroscedasticity), the regression model used can be considered valid and meets the required analysis criteria.

Hypothesis test

Table 4. Hypothesis testing results

Variable	Model 1		Model 2		Model 3	
	Coef.	S.E	Coef.	S.E	Coef.	S.E
Constant	-0.062**	0.031	-0.051	0.032	-0.066**	0.032
Beta Factor (X1)	0.115	0.138	0.115	0.138	0.252	0.181
Interest rate risk (X2)	0.111**	0.039	0.109**	0.038	0.093*	0.048
Financial Distress (X3)	0.018*	0.009	0.010	0.012	0.007	0.012
ROA (M)			0.182	0.154	0.374	0.177
X1 x M					-1,839	1,308
X2 x M					0.313	0.489
X3 x M					0.048**	0.021
F-Statistics	4,278**		3,565**		3,123**	
R Square	6.50%		7.20%		10.80%	

***significant at level $p < 0.01$; ** significant at level $p < 0.05$; * significant at level $p < 0.10$

Based on the results of hypothesis testing presented in Table 4, in Model 1 the results show that the Beta Factor (X1) and Financial Distress (X3) have coefficients of 0.115 and 0.018 respectively which are not significant, while Interest Rate Risk (X2) shows a coefficient of 0.111 which is significant at the 5% level ($p < 0.05$), indicating that an increase in interest rate risk is positively related to stock returns. Model 2 shows that the Beta (X1) and Financial Distress (X3) factors remain insignificant with coefficients of 0.115 and 0.010 respectively. Interest Rate Risk (X2) remains significant with a coefficient of 0.109 at the 5% level ($p < 0.05$). ROA itself has a coefficient of 0.182 which is not significant. In Model 3, the coefficient of the Beta Factor (X1) increases to 0.252 but is still not significant. Interest Rate Risk (X2) shows a coefficient decrease to 0.093 which is significant at the 10% level ($p < 0.10$), and Financial Distress (X3) becomes insignificant with a coefficient of 0.007. ROA in the moderation model has a coefficient of 0.374 which is not significant. From the interaction of variables, F-Statistics for all models show significant values at the 5% level ($p < 0.05$), indicating that the models used as a whole are significant. The R Square value increased from 6.50% in Model 1, to 7.20% in Model 2, and reached 10.80% in Model 3, indicating an increase in the model's ability to explain stock return variability with moderation in company performance. Overall, the results of this research show that interest rate risk and the interaction between financial distress and company performance have a significant influence on stock returns of companies indexed LQ45 on the Indonesia Stock Exchange.

Based on the results of hypothesis testing presented in Table 4, this analysis discusses the influence of beta factors, interest rate risk, financial distress, and the role of company performance (ROA) as moderating variables on stock returns of companies listed on the Indonesia Stock Exchange in the 2019-2023 period. H1 states that the beta factor influences stock returns. In the three models tested, the beta factor coefficient (X1) shows an insignificant value, with Models 1 and 2 having a coefficient of 0.115 and Model 3 increasing to 0.252. This indicates that the beta factor does not have a significant influence on stock returns in this research sample. H2 states that interest rate risk influences stock returns. The test results show that interest rate risk (X2) has a significant effect on Model 1 and Model 2, with coefficients of 0.111 and 0.109 respectively at the 5% significance level ($p < 0.05$). In Model 3, the effect of interest rate risk remains significant with a coefficient of 0.093 at the 10% significance level ($p < 0.10$), supporting the hypothesis H2 that interest rate risk has a positive influence on stock returns. H3 states that financial distress has an effect on stock returns. The test results show that financial distress (X3) is only significant in Model 1 with a coefficient of 0.018 at a significance level of 10% ($p < 0.10$). However, in Model 2 and Model 3, the financial distress coefficient is not significant. This shows that the influence of financial distress on stock returns is weak and inconsistent. H4 states that company performance (ROA) moderates the influence of the beta factor on stock returns. Model 3 test results show that the interaction between beta factors and ROA (X1 x M) is not significant with a coefficient of -1.839. Therefore, hypothesis H4 is not supported by the data. H5 states that company performance (ROA) moderates the influence of interest rate risk on stock returns. The test results show that the interaction between interest rate risk and ROA (X2 x M) is not significant with a coefficient of 0.313, so hypothesis H5 is not supported by the data. H6 states that company performance (ROA) moderates the effect of financial distress on stock returns. The test results in Model 3 show that the interaction between financial distress and ROA (X3 x M) is significant at the 5% level ($p < 0.05$) with a coefficient of 0.048. This indicates that company performance (ROA) strengthens the effect of financial distress on stock returns, supporting hypothesis H6. Overall, this research shows that interest rate risk has a significant influence on stock returns, while the moderating role of

company performance (ROA) is significant in strengthening the influence of financial distress on stock returns. However, the beta factor does not show a significant influence on stock returns, and company performance does not moderate the influence of the beta factor or interest rate risk on stock returns in this study.

4.2. Discussion

The first hypothesis (H1) which states that the beta factor influences stock returns in LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019-2023 period is not supported by the results of this research. These findings indicate that the beta factor, which is usually measured as the level of systematic risk of a stock relative to the market, does not have a significant influence on stock returns in the context of LQ45 companies during the research period. This is contrary to the classic portfolio theory put forward by Sharpe (1964), which states that beta is a risk indicator that influences expected stock returns. Apart from that, these results also contradict several previous studies such as research by Fama and (Utami et al., 2018) and (Ferdaous & Barua, 2020) which found that beta has a significant relationship with stock returns. These differences in findings may be caused by different market conditions, especially in the Indonesian market, which may be influenced by other factors such as liquidity and market sentiment which are not fully reflected in beta.

The second hypothesis (H2) which states that interest rate risk influences stock returns in LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019-2023 period is supported by the results of this research. The research results show that interest rate risk has a significant positive influence on stock returns. This finding is consistent with the financial management theory proposed by Modigliani and Miller (1958) in (Campbell, 2014), which states that changes in interest rates can affect the cost of capital and, ultimately, stock returns. In addition, this research is in line with research by (Budiman et al., 2023; Nurfadilah & Manda, 2021; Wahyudi & Buga, 2021) which found that interest rate risk is an important determinant in determining stock returns, especially in sensitive sectors. to changes in interest rates such as the financial and energy sectors.

The third hypothesis (H3) which states that financial distress has an effect on stock returns in LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019-2023 period is only supported in Model 1. The results show that financial distress has a significant effect at the 10% level ($p < 0.10$) in the model without moderation, but becomes insignificant in the model with moderation. This indicates that the influence of financial distress on stock returns is inconsistent and tends to be weak. Relevant (Paramita & Ramdani, 2022). Previous research by (Sunaryo et al., 2022) and (Baek et al., 2023) also found that companies with high levels of financial distress tend to have lower stock returns. However, in the context of this research, the insignificance of the moderation model could be caused by the influence of other factors such as risk management strategies and macroeconomic conditions which influence the relationship between financial distress and stock returns.

The fourth hypothesis (H4) which states that company performance (ROA) moderates the influence of the beta factor on stock returns is not supported by the results of this study. The interaction coefficient between beta and ROA factors in Model 3 shows an insignificant value. This shows that company performance, as measured by Return on Assets (ROA), does not strengthen or weaken the influence of the beta factor on stock returns. This finding contradicts the theory of Jensen & Meckling (1976) which states that company performance should influence stock risk and returns. Previous research by Noviyanti & Tullah (2022) and Bruno et al. (2022) found that company performance can moderate the relationship between systematic

risk and stock returns in developing markets, but this is not the case in this study. This difference could be caused by the characteristics of the Indonesian market which may have different dynamics compared to other markets.

The fifth hypothesis (H5) which states that company performance (ROA) moderates the influence of interest rate risk on stock returns is also not supported by the results of this study. The interaction coefficient between interest rate risk and ROA shows an insignificant value in Model 3. This indicates that company performance does not moderate the effect of interest rate risk on stock returns. This may be due to the fact that changes in interest rates have a direct and significant impact on stock returns that cannot be easily moderated by the company's internal performance. This finding can be explained by the view of the financial management theory proposed by Modigliani and Miller regarding *the irrelevance proposition*, which states that financial policy in a perfect market does not affect firm value (Modigliani & Miller, 1958). This insignificance indicates that in the context of LQ45 indexed companies in Indonesia, the influence of interest rate risk on stock returns may not be strong enough to be moderated by company performance as measured through ROA.

The sixth hypothesis (H6) which states that company performance (ROA) moderates the effect of financial distress on stock returns is supported by the results of this research. The interaction coefficient between financial distress and ROA in Model 3 shows a significant value, indicating that company performance can strengthen the effect of financial distress on stock returns. This finding is consistent with the theory put forward by Altman (1968) regarding the importance of company performance in the context of financial distress. This research is also in line with findings by (Herdyana et al., 2024) and (Triliana & Sutrisno, 2023) which state that companies with financial distress but having good operational performance can reduce the negative impact of this distress on stock returns. Thus, the results of this study support the view that good company performance can act as a buffer against the risks posed by financial distress, thus moderating its effect on stock returns.

5. Conclusion

Based on the results of this research, it can be concluded that interest rate risk and financial distress have a significant influence on stock returns of LQ45 indexed companies listed on the Indonesia Stock Exchange for the 2019-2023 period. Interest rate risk shows a significant positive effect, while the effect of financial distress is only significant in the model without moderation. The beta factor, on the other hand, does not show a significant influence on stock returns. In addition, company performance (ROA) does not moderate the influence of beta factors and interest rate risk on stock returns, but does moderate the influence of financial distress on stock returns. These results indicate that company performance can strengthen the influence of financial distress on stock returns.

The implications of this research include practical and theoretical aspects. From a practical perspective, financial managers and investors must pay more attention to interest rate risks and financial distress conditions when making investment decisions, considering that both have a significant impact on stock returns. In addition, the importance of company performance in moderating the influence of financial distress shows that companies must continue to improve their performance to reduce the negative impact of financial distress. From a theoretical perspective, this research adds insight into the moderating role of company performance in the relationship between financial distress and stock returns, as well as enriching literature related to market dynamics in Indonesia.

Future research is recommended to expand the scope of variables studied by including other factors such as liquidity, company size, and market volatility which may also influence stock returns. Additionally, future research could conduct analyzes on other sectors beyond LQ45 to see whether similar results can be found in different contexts. The use of different research methods such as panel data or qualitative approaches is also recommended to gain a more comprehensive understanding of the factors that influence stock returns. Finally, it is important to consider macroeconomic and monetary policy dynamics that may influence research outcomes over longer periods.

References

- Abdullah, M. M. (2014). Manajemen dan Evaluasi Kinerja Karyawan. In *Aswaja Pressindo*. www.aswajapressindo.co.id
- Az-Zahra, R., & Pardisty, I. Y. (2022). Analisis Pengaruh Risiko Suku Bunga Bank Indonesia dan Net Interest Margin terhadap Profitabilitas Bank Konvensional di Indonesia. *Jurnal Mirai Manajemen*, 7(1), 133–142.
- Baek, C., Baek, S., & Glambosky, M. (2023). Macroeconomic Impact and Stock Returns' Vulnerability by Size, Solvency, and Financial Distress. *Finance Research Letters*. <https://api.semanticscholar.org/CorpusID:265238597>
- Bruno, V., Shim, I., & Shin, H. S. (2022). *BIS Working Paper 1000: Dollar beta and stock returns. 1000*. www.bis.org
- Budiman, M., Premana, V., & Maryadi, A. (2023). Pengaruh Suku Bunga, Inflasi, dan Nilai Tukar Terhadap Return Saham. *Margin: Jurnal Lentera Manajemen Keuangan*, 1(01), 9–17. <https://doi.org/10.59422/margin.v1i01.32>
- Campbell, J. Y. (2014). Empirical Asset Pricing: Eugene Fama, Lars Peter Hansen, and Robert Shiller. *Scandinavian Journal of Economics*, 116(3), 593–634. <https://doi.org/10.1111/sjoe.12070>
- Ezilmez, B. (2020). DRUCKER AND THE SPIRIT OF MANAGEMENT. *Eurasian Journal of Researches in Social and Economics (EJRSE)*, 9, 210–221.
- Ferdaous, J., & Barua, S. (2020). Firm-specific factors and stock returns: Evidence from selected private commercial banks listed on the dhaka stock exchange. *Asian Economic and Financial Review*, 10(11), 1259–1268. <https://doi.org/10.18488/journal.aefr.2020.1011.1259.1268>
- Girling, P. X. (2022). *Operational Risk Management: A Complete Guide for Banking and Fintech*. John Wiley & Sons.
- Gunawan, Y. I., & Suyatmin, W. A. (2021). Analisis Pengaruh Kinerja Keuangan Terhadap Harga Saham Pada Perusahaan Yang Terdaftar Di BEI. *Prosiding Seminar Stiami*, 8(1), 32–36.
- Halimah, S. N. (2017). Analisis Pengaruh Kualitas Layanan dan Kepuasan Terhadap Loyalitas Pasien di Medical Center ITS dengan Metode Structural Equation Modeling Partial Least Square (SEM-PLS). 1–95.
- Handoyo, R. D., Erlando, A., & Septiyanto, I. (2020). Dampak Faktor Eksternal Terhadap Pertumbuhan Ekonomi Indonesia. *EcceS (Economics, Social, and Development Studies)*, 7(1), 1. <https://doi.org/10.24252/ecc.v7i1.13382>
- Herdy, D., Khalifah, A. M., Irfan Ibrahim, M., & Sunardi, N. (2024). Springate Analysis in Measuring Financial Distress on Company Performance in The Property and Real Estate Sector Listed on The Indonesia Stock Exchange Period 2018 - 2022. *Journal of Applied Business, Taxation and Economics Research*, 3(3), 240–245.

- <https://doi.org/10.54408/jabter.v3i3.254>
- Herlina, H. (2020). Perubahan Fluktuatif Struktur Ekonomi Indonesia Pada Masa Pandemi Covid-19. *Al-Mutharahah: Jurnal Penelitian Dan Kajian Sosial Keagamaan*, 17(2), 199–210. <https://doi.org/10.46781/al-mutharahah.v17i2.142>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Julini, D., Siahaan, Y., Sinaga, M., & Purba, R. (2018). Pengaruh Financial Distress (Altman Z-Score) Terhadap Return Saham Pada Perusahaan Sektor Aneka Industri Yang Terdaftar Di Bursa Efek Indonesia. *SULTANIST: Jurnal Manajemen Dan Keuangan*, 2(2), 47–52. <https://doi.org/10.37403/sultanist.v2i2.36>
- Juwita, R., Antoni, & Pandjaitan, S. S. P. (2022). Peran Tax Planning Sebagai Pemoderasi Determinan Nilai Perusahaan. *Jurnal Ilmiah Ekonomi Bisnis*, 27(3), 336–348. <https://doi.org/10.35760/eb.2022.v27i3.5856>
- Kurniawan, A. W. (2015). *Prediksi Risiko Investasi Saham*. 3(3), 69–70.
- Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3), 261–297. <http://www.jstor.org/stable/1809766>
- Noviyanti, F., & Sarifah Tullah, D. (2022). Factors That Affecting Stock Returns in LQ45 Companies on The Indonesia Stock Exchange. *JURNAL AKUNTANSI DAN BISNIS: Jurnal Program Studi Akuntansi*, 8(2), 142–149. <https://doi.org/10.31289/jab.v8i2.7577>
- Nugroho, M., Arif, D., & Halik, A. (2021). The effect of financial distress on stock returns, through systematic risk and profitability as mediator variables. *Accounting*, 7(7), 1717–1724. <https://doi.org/10.5267/j.ac.2021.4.026>
- Nurfadilah, D., & Manda, G. S. (2021). *Pengaruh Risiko Suku Bunga dan Inflasi Terhadap Return Saham Pada Perusahaan Telekomunikasi Yang Terdaftar Di Bursa Efek Indonesia Periode 2014-2019*. <https://api.semanticscholar.org/CorpusID:236750279>
- Paramita, Y., & Ramdani, D. (2022). Determinasi Financial Distress Terhadap Return Saham. *Jurnal Ilmu Manajemen Saburai (JIMS)*, 8(1), 29–38. <https://doi.org/10.24967/jmb.v8i1.1553>
- Sharpe, W. F. (1964). Capital Asset Prices: a Theory of Market Equilibrium Under Conditions of Risk. *The Journal of Finance*, 19(3), 425–442. <https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>
- Sitohang, D., & Manik, J. (2021). Pengaruh Modal Intelektual Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Intervening Pada Perusahaan Sub Sektor Real Estate Yang Terdaftar Di Bursa Efek Indonesia. *Jurakunman (Jurnal Akuntansi Dan Manajemen)*, 14(1), 54. <https://doi.org/10.48042/jurakunman.v14i1.74>
- Sunaryo, D., Lestari, E. P., Puryandani, S., & Hersugondo. (2022). Can Company Size and Financial Distress Moderate in Solve Stock Returns in Retail Sector Companies. *Proceeding of The International Conference on Economics and Business*, 1(2), 291–309. <https://doi.org/10.55606/iceb.v1i2.133>
- Triliana, S. P., & Sutrisno, S. (2023). Company Performance and Financial Distress in Automotive and Component Companies Listed on the Indonesia Stock Exchange. *International Journal of Multidisciplinary Research and Analysis*, 06(02), 699–

708. <https://doi.org/10.47191/ijmra/v6-i2-28>

- Utami, N. S., Isnurhadi, & Aj, U. H. (2018). Characteristics As Determinants of Lq45 Firm Stock. *Jurnal Ilmiah Manajemen Bisnis Dan Terapan*, 15(1), 9–22.
- Wahyudi, S. M., & Buga, N. L. P. (2021). Pengaruh Suku Bunga Kredit dan Risiko Kredit terhadap Return On Asset dengan Pendapatan Bunga sebagai Variabel Intervening. *Esensi: Jurnal Bisnis Dan Manajemen*, 10(2), 147–160.
<https://doi.org/10.15408/ess.v10i2.18910>