

The Effect of Market Risk and Company Size on Stock Returns, Especially on The Pefindo I-Grade Index

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ABSTRACT

The research approach used in this study is a quantitative method. This research is included in the type of explanatory research, namely the independent variable affects the existence or change of the dependent variable (Cooper and Schindler, 2017). This research was conducted on companies listed on the Pefindo Investment Grade Index with data collection including financial reports and stock price data. The data were obtained from official sources such as company annual reports, Pefindo publications, and related capital market platforms. The research was conducted in the period October 2024 to December 2024. The population in this study are all companies listed on the Pefindo Investment Grade Index. In this study, sampling was carried out using the *non-probability sampling method with purposive sampling technique*. Regression analysis was used in this study. The results showed that Market Risk had an effect on Stock Returns, Company Size had an effect on Stock Returns, Market Risk and Company Size together had an effect on Stock Returns.



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INTRODUCTION

The Indonesia Stock Exchange (IDX) as the organizer of the Indonesian Capital Market provides stock indices that can be used by all capital market players. One of the most phenomenal indices on the IDX today is the Pefindo i-Grade index. The Pefindo i-Grade index, hereinafter referred to as the i-Grade index, is an index that measures the stock price performance of 30 stocks that have received an investment grade rating (idBBB- to idAAA) from PT Pemeringkat Efek Indonesia (Pefindo) and with other criteria. legal, information related to unusual market activity (UMA) and suspension for the past 2 years are of concern. It is ensured that the selected members are primarily issuers who do not have records of both of these pieces of information. This study chooses PEFINDO i-Grade as a research sample compared to other indices because the PEFINDO i-Grade Index outperforms the Composite Stock Price Index (IHSG), LQ45, IDX30, and SRI-KEHATI index.

Stock returns that reflect stock prices are important for companies because they show how well the company is working and is responsible for improving its performance. To achieve this expectation, they must conduct an analysis to understand whether the stocks on the market show the true value of the stocks being marketed. One of the efforts made by investors is through an assessment of the company by observing how well the company that issued its shares is performing. So that every investor who invests in the capital market expects a high return on their investment in the future. Accounting information becomes something that is very important when investors decide to invest, such as information about the profitability, liquidity and solvency of a company.

However, to obtain maximum stock returns, it is necessary to analyze several factors, both internal and external factors, and investors are also required to be more critical and rational in conducting studies on the company's financial statements, because it is not enough for the company to be good in terms of profit bookkeeping, but the company must also have sufficient cash to have the ability to pay dividends, the company's operational activities.

Company size is a major factor for investors when buying stocks, investors also consider company size because it is considered that the size of the company has a greater possibility of generating profits, which makes it attractive for investors to buy stocks. Through a large increase in shares, the value of the shares will increase and of course the stock returns will also increase. The size of this study is expressed in the amount of assets owned by the company. The concept of (Dewi & Sudiarta, 2019) found a negative and significant correlation with company size and stock returns (Atidhira & Yustina, 2017). There are also studies that get a positive and significant correlation, namely in the study (Putri, 2016).

Then market risk is defined as the risk that arises due to movements or changes in interest rates, changes in exchange rates, commodity risk, and equity risk. Signal theory describes how a company should give signals to shareholders. With information obtained through financial reports, market players can analyze and examine financial information including as good information signals or bad information signals in order to make investment decisions. With the emergence of financial information regarding high market risk, it is feared that it will reduce the level of returns received by investors. This risk arises if the actual return value is smaller than the expected return to be obtained. According to Fauzan et al. (2022) market risk is one of the significant determinants of stock returns. Another study conducted by Windasari & Purwanto (2020) found that market risk had a negative effect on stock returns. Another study by Nugroho & Sukhemi (2015) regarding the effect of systematic risk where the risk was measured using stock beta resulted in the finding that systematic risk had a significant negative effect on stock returns in manufacturing companies listed on the Indonesia Stock Exchange. Research by Mwaurah et al., (2017) found that market risk has a significant negative correlation with stock returns.

LITERATURE REVIEW

Signaling Theory

The basic theory used to explain the research model is Signaling Theory. Signal theory explains that companies must send signals to potential investors. Signals contain information about what agents have done to achieve the desires of clients or investors. Investors can calculate the company's profit growth against the number of company shares through financial reports (Tandelilin, 2018).

Market Risk

Market risk arises from factors such as monetary policy, interest rate movements, and exchange rates that affect commodity prices in the financial market (Yoewono & Ariyanto, 2022). Market risk affects stock price movements and is measured by stock beta, which shows the sensitivity of stocks to changes in the overall market. Research by Fauzan et al. (2022) and Pasole et al. (2023) shows that market risk has a positive effect on stock returns. Market risk is measured by the stock beta model which connects the company's stock return (β_i) with the market return (R_m) through the formula:

$$Mr = \alpha + \beta_i (R_m) + e$$

Company Size

Company size refers to the scale of the company, which can be measured by total assets, total sales, or stock market value (Ibrahim & Yusman, 2018). Research by Adiwibowo (2018) and Windasari & Purwanto (2020) shows that company size affects stock returns and can moderate the effect of market risk on stock returns. Krismandiari & Amanah (2021) also found the effect of liquidity on stock returns. Company size is measured using the natural logarithm (Ln) of the company's total assets to reduce distortions due to differences in scale between large and small companies.

Stock Return

According to Jasman & Kasran (2017), return is a profit obtained from investment. The difference between the expected return and the return received is a risk that must always be considered in the investment process. Stock returns are the main goal of every investor in investing. Stock returns can be obtained by investors such as capital gains and dividends. Stock returns use a formula to measure the percentage change in stock prices from period e before to the current period. Calculated by subtracting

the current stock price from the previous period's stock price, then dividing it by the previous period's stock price. The following is the formula used to measure stock returns:

$$R_t = \frac{P_t - P_{t-1}}{P_{t-1}}$$

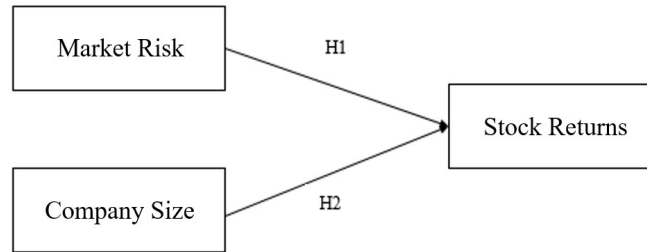


Figure 2. Framework

Hypothesis :

H1: Market Risk has an effect on Stock Returns

H2: Company Size Influences Stock Returns

RESEARCH METHODS

The research approach used in this study is a quantitative method. According to Malhotra (2015) quantitative research methods are research methodologies that attempt to measure data and usually apply several statistical analyzes. This research is included in the type of explanatory research, namely the independent variable affects the existence or change of the dependent variable (Cooper & Schindler, 2017). This research was conducted on companies listed on the Pefindo Investment Grade Index with data collection including financial reports and stock price data. The data was obtained from official sources such as company annual reports, Pefindo publications, and related capital market platforms. The research was conducted in the period October 2024 to December 2024. The population in this study are all companies listed on the Pefindo Investment Grade Index. In this study, sampling was done using the *non-probability sampling method* with the *purposive sampling technique*. In this study, the sample used Regression analysis.

RESULTS AND DISCUSSION

Normality Test

a. Normality Test

Decision making in the Kolmogorov-Smirnov test is obtained from the Sig. value of the Kolmogorov-Smirnov test, where if the sig. value is greater (>) 0.05 then the data distribution is declared normal. The results of the normality test can be seen in the following table:

Table 1. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		56
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.23191063
Most Extreme Differences	Absolute	.073
	Positive	.073
	Negative	-.056
Test Statistics		.073
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS Results

Based on the results above, it can be seen that the *Asymp. Sig value* of 0.200 is greater than 0.05, which means that it is normally distributed.

Hypothesis Testing

a. Partial Test Results (t-Test)

The t-statistic test is used to test the effect of independent variables in explaining the variance of dependent variables individually (Ghozali, 2018). The level of significance (α) used is 5% (0.05). The criteria for accepting and rejecting the hypothesis are based on the significance value of the p-value. If the probability > alpha (0.05), the research hypothesis is rejected; otherwise, the research hypothesis is accepted. The following is an explanation of the results of the hypothesis testing in the following table.

Table 2. Statistical Test Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-2,559	.353		-1,582	.012
Market risk	3.113	.005	.077	.571	.000
UK	2,331	.019	.218	1,622	.010

a. Dependent Variable: Mr

Source: SPSS Results

- Hypothesis 1 (H1)

The results of the first hypothesis test show that the significant value of 0.000 is smaller than the significant value of 0.05, which means that Market Risk has an effect on Stock Returns in companies registered with the Pefindo Investment Grade Index for the period January 2021 to December 2023.

- Hypothesis 2 (H2)

The results of the second hypothesis test show that the significant value of 0.010 is smaller than the significant value of 0.05, which means that Company Size has an effect on Stock Returns in companies that have been registered with the Pefindo Investment Grade Index for the period January 2021 to December 2023.

- Hypothesis 3 (H3)

The results of the third hypothesis test show that the significant value of 0.045 is smaller than the significant value of 0.05, which means that Market Risk and Company Size have an effect on Stock Returns in companies registered with the Pefindo Investment Grade Index for the period January 2021 to December 2023.

b. Test of Determination Coefficient

According to Ghozali (2018) The coefficient of determination (R^2) measures how well the model explains the influence of independent variables on the dependent variable. The coefficient of determination has a value between 0 and 1. A low R^2 value indicates that the capacity of the independent factors to explain the dependent variable is limited. A value close to one indicates that the independent variables provide almost all the information needed to predict the variance of the dependent variable. The following are the results of testing the coefficient of determination in this study:

Table 3. Results of Determination Coefficient Test
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.225 ^a	.551	.015	.23625

a. Predictors: (Constant), UK, Market Risk

Source: SPSS Results

Based on the analysis results, the Adjusted R-Square value in the four models shows the influence of variables on Stock Returns. The Adjusted R-Square value is 55.1%, which shows that together Market Risk and Company Size affect Stock Returns.

c. Simultaneous Test (F Test)

The F test is used to determine whether all independent factors used have a combined effect on the dependent variable. The results of the simultaneous test (F test) in this study are as follows:

Table 4. Simultaneous Test Results (F Test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.158	2	.079	1.415	.045 ^b
	Residual	2.958	53	.056		
	Total	3.116	55			

a. Dependent Variable: RS

b. Predictors: (Constant), UK, Market risk

Source: SPSS Results

Based on the results of the analysis, there is a significant value of 0.045 which indicates that the sig value is less than 0.05, meaning that Market Risk and Company Size together have an effect on Stock Returns in companies registered with the Pefindo Investment Grade Index for the period January 2021 to December 2023.

Discussion

The Influence of Market Risk on Stock Returns

The results of the first hypothesis test show that Market Risk affect Stock *Returns* in companies listed on the Pefindo Investment Grade Index for the period January 2021 to December 2023. This shows that even though these companies have good and relatively stable credit ratings, market fluctuations caused by external factors still affect their stock price performance. The significant influence of market risk on stock returns suggests that investors should pay attention to broader market dynamics and not just focus on the company's internal performance. Even though the company is listed on a highly rated index, there are still risks to consider. Investors need to diversify their portfolios and conduct a thorough macroeconomic analysis to reduce the impact of market fluctuations on their investments. The results of this test reinforce the understanding that although companies listed in the Pefindo Investment Grade Index tend to have a lower risk profile, the influence of external factors such as market risk still has a significant impact on their stock returns. Therefore, companies and investors need to manage market risk carefully through effective strategies to reduce its impact on investment performance. Research conducted by Fauzan et al., (2022) shows that market risk affects stock returns.

The Effect of Company Size on Stock Returns

The results of the second hypothesis test show that Company Size has an effect on Stock *Returns* in companies listed on the Pefindo Investment Grade Index for the period January 2021 to December 2023. This can be interpreted that investors are more likely to invest in large companies listed on the Pefindo Investment Grade Index because they consider these companies to have lower risks and greater profit potential. These results can also indicate that investors prefer the stability and security provided by large companies, especially in uncertain market conditions. The test results show that Company Size has a significant effect on Stock Returns, this can be interpreted that investors are more likely to invest in large companies listed on the Pefindo Investment Grade Index because they consider these companies to have lower risks and greater profit potential. These results can also indicate that investors prefer the stability and security provided by large companies, especially in uncertain market conditions. Based on the results of the second hypothesis test, it can be concluded that company size does affect stock returns in companies listed in the Pefindo Investment Grade Index for the period January 2021 to December 2023. Larger companies, with stronger financial stability, are more attractive to investors and tend to provide better stock returns. Research conducted by Safitri & Mujiyati, (2023) shows that market risk affects stock returns.

The Influence of Market Risk and Company Size on Stock Returns

The results of the third hypothesis test show that market risk and company size together affect Stock Returns in companies listed on the Pefindo Investment Grade Index for the period January 2021 to December 2023. This shows that both external factors (market risk) and internal factors (company size) must be considered by investors in making investment decisions. Good market risk management, especially by large companies, can help create more stable and profitable stock returns. Market risk can affect small and large companies differently. Large companies, which have more resources and stability, may be better able to manage the risks posed by market fluctuations. Conversely, small companies may be more vulnerable to the impact of market risk, which can lower their stock performance. Larger companies are often able to mitigate the negative impact of market risk. However, high market risk can affect the entire stock market, and even large companies can be affected, although to a lesser extent than smaller companies. Thus, although company size can provide stability and increase the ability to face risks, high market risk can still affect overall stock returns. Therefore, the joint influence of market risk and company size shows that these two factors interact with each other and strengthen their impact on stock returns. Research conducted by Fauzan et al. (2022) shows that market risk affects stock returns. Research conducted by Fauzan et al. (2022) shows that market risk affects stock returns.

Conclusion and Suggestions

Conclusion

The findings of this study are as follows:

1. Market Risk affects Stock Returns in companies registered with the Pefindo Investment Grade Index for the period January 2021 to December 2023.
2. Company Size affects Stock Returns in companies registered with the Pefindo Investment Grade Index for the period January 2021 to December 2023.
3. Market Risk and Company Size jointly affect Stock Returns in companies listed on the Pefindo Investment Grade Index for the period January 2021 to December 2023.

Suggestion

Companies should develop effective risk management strategies to deal with market uncertainty. This can include hedging against market risks, strengthening cash positions, and increasing the company's ability to withstand volatile market conditions. Good risk management can increase investor confidence and ultimately contribute to stock price stability. Large companies have a better chance of facing market risks and delivering better stock returns. Therefore, companies need to maintain growth and expansion through acquisitions, product diversification, or innovation to maintain or increase their size. In the long run, larger companies tend to be more attractive to investors. Given the market risk factors that can greatly affect stock performance, companies need to maintain open and transparent communication with investors regarding the steps taken to address external risks and maintain stable performance. This can increase investor confidence and have a positive impact on stock prices.

Further research can explore other factors that may affect stock returns, such as company financial performance, technological innovation, or specific industry conditions. More comprehensive research can provide a more complete picture of the factors that affect stock performance in the capital market. Given that the results of this study apply to companies listed in the Pefindo Investment Grade Index, further research can be conducted by comparing different industry sectors. This will help understand whether the effects of market risk and company size on stock returns vary across industry sectors, and provide more in-depth information for investors interested in a particular sector. Further research with a longer time span could provide deeper insights into how the relationship between market risk, firm size, and stock returns evolves in the long run. This is important for estimating future stock market performance and providing more accurate predictions for investors.

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