The Impact of Stock Liquidity, Market Value-Added, and Expected Return on Idiosyncratic Risk on SRI-KEHATI Index Stocks in The Indonesian Capital Market

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Abstract

This study aims to determine whether there is an effect of Stock Liquidity, Market Value Added, and Expected Return on Idiosyncratic Risk (non-systematic risk) in companies listed on the SRI-KEHATI Index in the Indonesian capital market. This type of research is quantitative. The data used is secondary data. The sample data obtained were 50 research data from 10 companies over a five-year period which was on the 2018-2022 SRI-KEHATI Index. The used methodology for data analysis is multiple linear regression analysis. The results of this study explain that the Market Value Added (MVA) variable supports idiosyncratic risk positively, the Stock Liquidity (LS) variable supports negatively towards idiosyncratic risk, and it can be concluded that the variable Expected Return does not support the variable Idiosyncratic Risk.

Keywords: Idiosyncratic Risk, Stock Liquidity, Market Value Added, Expected Return.

INTRODUCTION

The investment theory states that every security will generate returns and risks. Return is the result obtained from an investment while risk is the deviation of the expected return from the realized return of the security. Risk is one of the factors that investors pay attention to when carrying out an investment activity, in the CAPM when investing in stocks it can be classified into 2 (two) risk components, namely: unsystematic risk and systematic risk, the combination of the two risks constitutes the total investment risk. Based on the nature of each of these risks, unsystematic risk can be avoided by investors by making good diversification in making investments. However, diversified investors cannot easily avoid systematic risk because this risk is related to general market risk, the impact of which will affect all companies. (Gu and Kim 2003).

The existence of risks requires shareholders to always see the development and track record of the company. When a company experiences a problem condition, investors can immediately find a solution and a way out before facing this risk(Ali and Asri 2021). Investors should calculate risk by analyzing financial information so that investment decisions do not carry the risk of large losses. The quality of an issuer's financial performance is an important

part of the financial statements produced or issued by an issuer. This is because investors will invest their funds in the company.

An investor when he is going to carry out his investment activities will pay attention to a risk and when he is going to anticipate it, he can also analyze the risk by looking at the company's internal factors. (Damodaran 2008)stated that specific risks are important for companies because these risks affect the profitability and value of the company. If the company can minimize a specific risk, the company's performance will be maximized and this can increase the company's profitability. The existence of specific risks can measure the ability of internal management increasing value which is reflected through good risk management. Risk management is a step that must be taken to prevent things that can harm the company.

The Capital Asset Pricing Model (CAPM) is predicated on the assumption that investors are rational decision-makers operating within a single time period. It further assumes that these investors possess a uniform understanding of market conditions and are motivated to construct an optimum portfolio that maximizes the trade-off between expected returns and risk, as measured by variance (Sharpe 1964). The Capital Asset Pricing Model (CAPM) incorporates certain assumptions on the characteristics of an ideal stock market. These assumptions include the market's substantial size, the presence of price-taking investors, the absence of taxes and transaction fees, the public tradability of all assets, and the ability of investors to borrow or lend infinite amounts at a fixed interest rate devoid of risk (often referred to as a fixed rate) (Oktarina 2010).

This risk can have various aspects not only for the company's internal factors but also external factors that can be influenced to control the company. Many external controls cover the areas of ecological regulation and compliance. External factors can be the main reason why the company's performance changes(Syafarina 2016). The risk resulting from factors associated with a particular company or a particular sector is considered an unsystematic risk, and this risk is related to the environmental conditions in which the company operates. (2021 Romance).

Systematic and non-systematic risks are variables that must be considered by investors in making investment decisions. (Januardi and Afrianto 2017). Meanwhile, research on nonsystematic risk is also rarely carried out by researchers. This is because there is an assumption in the CAPM which states that all investors diversify properly so that non-systematic risk becomes a minimum. (Sharpe 1964). Even though the existing facts show that non-systematic risk makes up the majority of the risks that exist in the capital market. This is because there is no truly perfect market so non-systematic risk will always exist in every investment portfolio. Research on non-systematic risk has been widely carried out, especially in the United States, Japan, and South Korea. However, due to data limitations and several unique characteristics, the findings and research results vary. So there are still research gaps and gap phenomena in research regarding the effect of non-systematic risk.

The phenomenon of index development in the Indonesian capital market is growing rapidly. This is very interesting, so research related to non-systematic risks associated with the development of indices in the Indonesian capital market is also very interesting to investigate further. One of the index references that is now very attractive to investors is the SRI-KEHATI index. This index was published by the SRI-KEHATI Foundation on June 8, 2009, this index is often called the Green Index because this index refers to the Sustainable and Responsible Investment Stock Index. with reference to the United Nations' Principles for Responsible Investment (PRI). This index is published in collaboration with the Indonesia Stock Exchange (IDX), with company selection standards that apply Sustainable Responsible Investment (SRI) principles, as well as environmental, social, and good governance (ESG) principles, currently, the SRI-KEHATI Index is the only reference for investment principles that focus on ESG issues

in the Indonesian capital market. Through the SRI-KEHATI index, KEHATI seeks to create mutualism between the world of conservation and the business sector. The graphic below is the development of the SRI-KEHATI index in the Indonesian capital market.



SRI-KEHATI Index Performance, IDX 30 and LQ45

Figure 1 Graph of the performance of the SRI-KEHATI, IDX30, and LQ45 indexs

From what has been explained above, it is very interesting to be able to further research this index, so we formulate the research questions as follows:

Does Stock Liquidity, Market Value Added, and Expected Return have an influence on Idiosyncratic Risk (non-systematic risk) in companies listed on the SRI-KEHATI Index in the Indonesian capital market?

This article is organized into the following sections: In the second part, we analyze the relevant literature. The third part of the research methodology, construct variables, and analytical methodology is investigated. The fourth section concludes and briefly discusses the implications of our research results.

LITERATURE REVIEWS

Idiosyncratic Risk

The inquiry into whether there exists a correlation between idiosyncratic risk and return on assets has garnered significant scholarly interest within the realm of finance (Huang et al. 2010). According to the Capital Asset Pricing Model (CAPM), the compensation for idiosyncratic risk is not warranted since it may be effectively mitigated via the process of diversification. Work done in theory by Mertons (1987) suggests that there is a positive link between individual risk and stock returns as long as buyers don't fully spread their holdings because of flaws in the market. So far, other real-world effects have been mixed. For example, Chua, Goh, and Zhang (2010); AndFu (2009) conditional preferred volatility can be estimated by using monthly returns to find a positive link at the company or portfolio level. Idiosyncratic risk is the risk that exists in securities caused by several events or incidents contained within the company/issuer. (Darmawan 2018). Idiosyncratic risk is defined in general as the uncertainty of investment returns to investors from investment portfolios that lead to diversification or hedging to reduce and avoid these risks.(Al Shubiri and Jamil 2018). Idiosyncratic Risk is a special risk that exists in each company, this non-systematic risk can be eliminated by diversification. This risk can be regarded as a relevant indicator for investors in general(Sales 2021). Idiosyncratic Risk can be measured by CAPM(Murhadi, 2013). Then Idiosyncratic Risk Volatility (IVOL) will be measured by the Volatility of Idiosyncratic Risk obtained from the residual standard deviation of Idiosyncratic Risk(Bali and Cakici 2006).

Stock Liquidity

Liquidity is a benchmark used to measure how capable an issuer or company is when it comes to paying off its short-term debt. Share liquidity reflects the transaction costs associated with buying and selling shares and is a key concern for equity investors(Shang 2020). According to the Indonesia Stock Exchange, stock liquidity is smoothindicating convenienceinvested capital can be disbursed. The movement of the price of a company's stock can be influenced by stock liquidity which is one of the factors. Stock liquidity can be calculated by Trading Volume Activity(Wardhani et al. 2022).

(Beaver et al. 2016)said that liquid assets have lower return volatility than illiquid assets, he even added that cash is a risk-free asset. Liquidity and risk are one of the main factors that investors consider when investing. Liquidity in this study will use stock liquidity. Thus, the higher the stock liquidity of a company, the smaller the risk borne by the company.

H1: Liquidity negatively supports Idiosyncratic Risk.

Market Value Added(MVA)

Accounting data may be skewed in a number of ways, making it difficult to compare businesses over time. Value-based performance measurements aim to rectify this problem (Bayrakdaroglu, et al., 2012). Market Valueadded (MVA) is the total value given by the exchange for all investment instruments or means what investors will get if they sell all their shares minus the funds they have invested. A positive MVA indicates that the performance of the company is good because management can increase the wealth of the company. MVA is a ratio that can be used to measure a company's success in optimizing investor wealth by distributing it to the right sources. MVA can be calculated by multiplying the number of shares outstanding by the share price minus the total equity(Brigham and Houston 2001). Market Value Added(MVA) is the total value given by the exchange for all investment instruments or means what investors will get if they sell all their shares minus the funds they have invested. Market Value Added is considered an important principle for evaluating company performance. It will measure the actual economic performance of a company(Ahmad, et al., 2019). There is support for using MVA as a sophisticated market value performance indicator for gauging the growth of shareholder wealth. To put it another way, MVA is an essential gauge for gauging the market performance of a firm in its pursuit of maximization of shareholder value. The maximization of operational profits (such as return on investment) is important, but it is not equivalent to the maximization of shareholder value. (Lee and Kwon 2019). A positive MVA indicates that the performance of the company is good because management can increase the wealth of the company. Thus, the higher the Market Value Added (MVA) of a company, the smaller the risk borne by the company.

H2: Market Value Added positively supports Idiosyncratic Risk.

Expected Return

An empirical interpretation of the conventional CAPM states that the predicted return on a stock is purely dependent on its beta, which is defined as a scaled linear correlation with the market. (Chabi-Yo, et al., 2018). Theoretical models show a positive relationship between risk and return for stock markets, but the existing empirical literature fails to agree on an intertemporal relationship between expected returns and volatility(Bali, et al., 2009). Investors place a high value on risk and return as tools for analyzing and judging the success of their investments. Since investors are often risk-averse, they anticipate more profits in exchange for taking on greater dangers (Maneemaroj, et al., 2019). However, the CAPM's provision of a negative relationship between returns and risks, a trade-off that is inconsistent with the financial theory of the relationship between returns and risks in risk-averse agents, means that it cannot fully explain the characteristics of returns and risks.

H3: Expected Return positively supports Idiosyncratic Risk.



Figure 2. Research Model Framework

RESEARCH METHOD

Research Method

The sample used in this study consists of companies that have annual reports and companies that are consistently included in the index category SRI-KEHATI which recorded in Exchange Effect Indonesia for the 2018-2022 period. Based on the screening using purposive sampling, 10 companies were screened with a 5-year study period so that the total number of data was 50 data.

Research Variables

The research variable is the research framework model. To develop our research hypothesis, we divide it into 4 parts.Variablethe dependent used on research Thisis Idiosyncratic Risk. TemporaryIndependent variable used in study This consists of Market Value Added, Stock Liquidity, and Expected Return.

Data Analysis

The data analysis technique in this study uses multiple linear regression analysis because it will analyze two or more independent variables and one dependent variable. we create a model for analyzing the data, namely:

Idiosyncratic Risk = α + β 1 Market Value Added + β 2 Stock Liquidity + β 3 Expected

Return + ε

Dependent and Independent variables	Proxies	Measurements	Source
Idiosyncratic Risk	CAPM and IVOL	$R_{i,t} = \alpha_{i,t} + \beta_{i,t} + (R_{m,t} - R_{f,t}) + \frac{\varepsilon_{i,t}}{\sqrt{\operatorname{var}(\varepsilon_{i,t})}}$	R. Murhadi (2013),Bali and Cakici (2006)
Market Value Added	MVA	(shares outstanding) x (share price) - total equity	Brigham and Houston (2001),Al- Awawdeh and Kareem Al- Sakini (2018)
Stock Liquidity	TVA	Number of shares traded Number of shares outstanding	Wardhani et al. (2022)
Expected return	ER	$Rf + \beta + (Rm - Rf)$	Hartono (2016)

Table 1. Description Variables

Result And Discussion

The following are the results of SPSS calculations to provide an explanation and interpretation of the results of the results of data analysis:

Table 2. Descriptive Statistics								
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	Ν	Min	Max	Means	std. Deviation			
IR	50	0.03	0.24	0.0953	0.04244			
LS	50	0.01	0.09	0.0266	0.01461			
MVA	50	-34574669787500	832820022500000	116,322,860,681,923.06	177,840,118,264,278.78			
ER	50	-5.06	4,32	1.7780	2.71435			

Table 2. Descriptive Statistics

Table 2 shows the value of each variable from the smallest to the largest, starting from the Idiosyncratic Risk (IR) variable whose smallest value is 0.03 and the largest is 0.24, Stock Liquidity (LS) has the smallest value of 0.01 and the largest is 0.09, Expected Return (ER) has the smallest value of -5.06 and the largest is 4.32, and Market Value Added (MVA) has the smallest value of-34574669787500and the biggest is832820022500000.

From the results of data processing that has been done before, the results of multiple linear regression research are obtained which are presented in the following table:

Table 3. Multiple Regression Analysis

Coefficients

	Model	В	t	Sig.
1	(Constant)	0.135	9,756	0.000
	LS	-1,270	-2,447	0.018
	MVA	0.000	-2.299	0.026
	ER	0.002	0,692	0.492

a. Dependent Variable: IR

Multiple linear regression analysis using the aforementioned data processing steps yielded the following findings in the Coefficients table. The table explains that the Market Value Added variable has a positive influence on Idiosyncratic Risk, and its significance value is equal to0.026so it can be concluded that the Market Value Added (MVA) variable can answer H1, the Stock Liquidity variable (LS) has a negative influence on Idiosyncratic Risk, and its significance value is0.018so it can be concluded that the Stock Liquidity variable can answer H2, and the Expected Return (ER) variable has a significance value of0.492so that it can be concluded that the Expected Return variable does not support the Idiosyncratic Risk variable and can answer H3.

Simultaneous Test (Test F)

Simultaneous hypothesis testing is carried out to determine the effect of the hypothesis simultaneously by using the F test, the test data from the research results can be seen in the following table:

Table 4. F Test Results ANOVAa

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	0.018	3	0.006	3,814	0.016b
	residual	0.071	46	0.002		
	Total	0.088	49			

a. Dependent Variable: IR

b. Predictors: (Constant), MVA, LS, ER

The results of testing the Market Value Added hypothesis, Stock Liquidity, and Expected Return on Idiosyncratic Risk on the SRI-KEHATI index listed on the Indonesia Stock Exchange for 2018-2022 obtained a significance value of 0.016. This value is less than 0.05, so it can be said that the variables Market Value Added, Stock Liquidity, and Expected Return simultaneously affect Idiosyncratic Risk on the SRI-KEHATI index listed on the Indonesia Stock Exchange for 2018-2022.

Coefficient of Determination

The coefficient of determination is used to testcurrent model capabilities explain the dependent variable. R valueSquare means showing that ability variable Stock Liquidity, Market Value Added, and Expected Return to variables *Idiosyncratic Risk*

Table 5.Coefficient of Determination

Summary model

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	0.446a	0.199	0.147	0.03920

a. Predictors: (Constant), MVA, LS, ER

b. Dependent Variable: IR

The following table displays the determinant coefficient value of R Square, which is 0.199 based on the processed data. And the adjusted R-squared value is 0.147, so there's that. Therefore, Market Value Added, Stock Liquidity, and Expected Return only account for 14.7% of the variance in Idiosyncratic Risk, while the remaining 85.3% is impacted by additional variables outside the scope of this analysis. The t-test findings for the hypothesis are shown in Table 6 and may be interpreted as follows:

Variable	В	t	Sig.	Conclusion	Hypothesis
(Constant)	0.135	9,756	0.000		
LS	-1,270	-2,447	0.018	Significant and Negative	Support the H1 Hypothesis
MVA	0.000	-2,299	0.026	Significant and Positive	Support the H2 Hypothesis
ER	0.002	0.692	0.492	Not significant	Not Support the H3 Hypothesis

Table 6. Results of Hypothesis-testing

a. Dependent Variable: IR

CONCLUSION

The research questions that have been reviewed are related to Stock Liquidity, Market Value Added, Expected Return, and their effect on Idiosyncratic Risk (non-systematic risk) in companies listed on the SRI-KEHATI Index on the Indonesian capital market. which has been described previously, it can be concluded that of the three variables examined in this study two variables support the Idiosyncratic Risk Variable, the Stock Liquidity variable supports negatively and Market Value Added supports positively. The test results can be concluded that the regression equation has 2 factors that influence idiosyncratic risk, namely the variables of stock liquidity and market value added, while Expected Return does not affect idiosyncratic risk. From the results of the study, it can be concluded that stock liquidity supports negatively, and market value added positively supports idiosyncratic risk. This shows that the level of benchmarks used to measure how capable an issuer or company is when paying its short-term

debt plays a big role Likewise the market-added value of stocks because it also reflects the total value provided by the exchange for all investment instruments or what it means that investors will get if they sell all their shares minus the funds they invest, even though in this study the Expected Return variable does not support Idiosyncratic Risk but this variable has a positive relationship with risk and return for the stock market this is important for investors. It is expected that investors and companies can pay attention to risks that might occur so that companies are not too affected when a risk arises.

This research is limited since just 10 firms are used to generate 50 data points. Researchers in the future should collect and analyze additional data and samples from this study to ensure the reliability of their findings. So that for the next research, it is expected to be able to expand the variable factors that can influence idiosyncratic risk, such as leverage ratios, dividend policies, and other factors as well as add data and research periods to get more accurate results.

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