
THE EFFECT OF INVESTMENT RISK ON STOCK RETURNS IN COMPANIES LISTED ON THE LQ-45 INDEX

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Abstract

This study aims to analyze the effect of investment risk on stock returns for the LQ45 index for the 2016-2021 period. This research uses quantitative methods. Sampling using several criteria so that the data obtained were 27 companies. The analysis technique used is simple linear regression analysis using the SPSS version 22 program. The results of this study indicate that the significance value is $0.781 > 0.05$ and the coefficient is 0.008, which means that Beta has a positive and insignificant effect on stock returns. The results of this study do not support the hypothesis that has been put forward.

Keywords: *Investment Risk, Stock Return.*

1. INTRODUCTION (TNR, 12 Bold)

The development of the capital market in Indonesia is very rapid. Capital is an inseparable component of economic development activities. For developing countries, capital adequacy tends to be a problem. To obtain capital, companies can issue and sell capital market securities to attract funds from the public. With the capital market, those who have excess funds can invest these funds in the hope of obtaining returns in the form of dividends, while the company can utilize these funds for investment purposes without waiting for the availability of funds from the company's operating activities.

The benefits of investing in the capital market can be reflected through the return on the selected shares. According to Hartono (2008: 104) "Return can be said to be the result of investing. Investors who invest in stocks will get profit (capital gain) when the shares are resold and get dividends (profit sharing) every year. But investors must also be prepared to take risks if the opposite happens". Therefore, before investors make investment decisions, investors need to know what factors affect stock returns which can later be used as a benchmark in making investment decisions.

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LITERATURE REVIEW

Investment Risk

The capital market is a forum for the collection of various financial instruments and continues to develop. The existence of the capital market can create entrepreneurs by investing or buying shares in the capital market. Investors in investing of course always expect the maximum possible return in the future and do not want any risk or failure in their investment. However, investment is certainly not always in accordance with expectations so that more knowledge is needed about investment risk to support the decisions that investors will choose. Gumanti (2011: 50) states that "Risk is a result that will appear with a range of very good (for example, the asset doubles) to very bad, the asset is not worth at all". The decision of investors when investing activities is to minimize the risks that will be faced in the future. It is used when making short-term and long-term investments.

Beta as a Systematic Risk Measure

According to Hartono (2013: 266) "Beta is a measure of the systematic risk of a stock or portfolio relative to market risk". Beta also serves as a measure of the volatility of stock returns or portfolios against market returns. Volatility is a fluctuation in the return of a stock or portfolio in a certain period.

Stock Return

Definition of Stock Return

Return is the result obtained from investment activities, the concept of return is the rate of profit enjoyed by investors or an investment they make. According to Tandelilin (2010: 102) "Stock returns are one of the factors that motivate investors to invest and are also a reward for the courage of investors to bear the risk of investing they do". Return as the total profit or loss obtained from an investment during a certain period is calculated by dividing the distribution of assets in cash during one period plus changes in value by the value of the investment at the beginning of the period.

Types of Stock Returns

According to Hartono (2003: 235) Stock returns can be divided into two types, namely realized return and expected return.

1. Realization

Realized return is a return that has occurred and the calculation uses company history data which is useful for measuring company performance. Realized return or also called historical return is also useful for determining expected return and risk in the future.

2. Expectation

This return is used for investment decision making. This return is more important than historical return (realization) because this return is expected by all investors in the future.

Factors Affecting Stock Returns

Macroeconomic factors are detailed in several economic variables such as inflation, interest rates, foreign exchange rates, economic growth rates, international fuel oil prices and regional stock indices. Non-economic macro factors include domestic political events, social events, legal events and international political events. Meanwhile, microeconomic factors are detailed in several variables, such as earnings per share, dividends per share, book value per share, and other financial ratios.

2. RESEARCH METHOD

This study focuses on the financial performance of banking companies listed on the Indonesia Stock Exchange. The independent variable is Investment Risk (X), while the dependent variable is Stock Return (Y). Operational Definition and Measurement of Variables in this study, namely Return is the result of investment activities, while risk is the result that arises with a range from very good to very bad. Variable measurement is carried out using ratios for both variables, namely Investment Risk (X) and Stock Return (Y). Research Design, namely the research process is explained starting from the planning stage, preliminary study, determination of problem formulation, data collection, data analysis, until it is expected to obtain conclusions related to the problem under study. This research design includes important stages in the research. The research population is all LQ45 index companies listed on the Indonesia Stock Exchange. The research sample was selected using purposive sampling technique with the criteria that companies listed in the LQ45 index for the period 2016-2021 and provided financial reports during that period. The sample consisted of 27 companies. The data collection method uses the documentation method by collecting historical data on company financial reports from the Indonesia Stock Exchange, macroeconomic data from the official website of Bank Indonesia, and stock return data from the official Yahoo Finance website. Data analysis was conducted using simple linear regression. The simple linear regression model is used to predict the value of Stock Return (Y) based on Investment Risk (X), with parameters α (constant), β (regression coefficient), and e (random error).

3. RESULTS AND DISCUSSION

Stock Beta (X)

The independent variable (X) in this study is beta stocks. Stock beta is the coefficient of stock price movements against market prices, in this case the JCI. Beta is calculated by

THE EFFECT OF INVESTMENT RISK ON STOCK RETURNS IN COMPANIES LISTED ON THE LQ-45 INDEX*Nurman et al, 2023*

regressing time-series stock returns with monthly market returns and then the beta value per year will be known.

Table 1. Beta of LQ45 Index Shares for the 2016-2021 Period

No	Code	BETA STOCK						COMPANY AVERAGE
		2016	2017	2018	2019	2020	2021	
1	ADRO	2.49	1.40	1.62	2.21	0.95	-3.07	0.93
2	AKRA	0.78	0.25	1.60	3.36	1.74	2.15	1.65
3	ANTM	-0.65	-0.73	3.08	3.90	2.74	2.54	1.81
4	ASII	1.85	1.31	1.10	1.18	1.53	0.05	1.17
5	BBCA	1.25	1.28	1.14	0.93	0.89	0.88	1.06
6	BBNI	1.60	1.93	1.64	2.01	2.11	2.62	1.99
7	BBRI	1.40	1.63	1.69	1.41	1.38	1.75	1.54
8	BBTN	2.31	-0.22	2.53	0.45	2.70	4.53	2.05
9	BMRI	1.80	0.81	1.04	0.97	1.65	0.34	1.10
10	BSDE	2.35	0.54	1.45	1.45	1.85	1.43	1.51
11	GGRM	0.23	1.07	1.40	1.59	0.89	0.24	0.90
12	HMSP	0.54	1.66	1.82	1.43	1.00	0.50	1.16
13	ICBP	1.27	0.99	0.64	0.19	0.16	-0.01	0.54
14	INCO	0.09	0.16	2.40	3.66	1.55	2.11	1.66
15	INDF	1.55	1.08	1.18	0.54	0.44	-0.02	0.80
16	INTP	0.99	3.66	2.71	0.94	1.19	0.75	1.71
17	JSMR	0.23	-0.13	1.13	1.78	2.05	0.74	0.97
18	KLBF	1.80	0.82	1.22	1.20	0.48	0.33	0.98
19	MNCN	3.05	2.14	1.92	1.68	1.84	1.99	2.10
20	PTBA	2.59	2.59	1.57	1.56	0.67	1.43	1.73
21	PTPP	0.18	1.63	4.22	5.37	3.43	2.36	2.86
22	PWON	0.16	1.49	1.94	0.99	1.99	1.61	1.36
23	SMGR	0.73	1.09	3.38	2.44	1.52	0.78	1.66
24	TLKM	0.99	-0.10	-0.60	0.67	0.92	1.22	0.52
25	UNTR	1.04	0.71	0.55	0.70	0.71	0.60	0.72
26	UNVR	1.34	1.50	0.58	0.96	0.11	1.10	0.93
27	WIKA	1.42	-1.12	5.26	3.10	2.65	1.76	2.18

Source: www.yahoofinance.co.id (data processed, 2023).

Stock beta is a measure of the sensitivity of stock returns to movements in market returns. A beta value above 1 indicates high risk (aggressive stocks), below 1 indicates lower risk (defensive stocks), and a negative beta indicates a stock's ability to strengthen when the market weakens.

Highest Beta Levels in Each Year:

- a) 2016: MNCN (3.05) - Aggressive stock with high systematic risk.
- b) 2017: INTP (3.66) - Aggressive stock with high risk, WIKA (-1.12) - Defensive stock with low risk (negative beta).
- c) 2018: PTPP (4.22) - Aggressive stock with high systematic risk, TLKM (-0.60) - Defensive stock with low risk (negative beta).
- d) 2019: PTPP (5.37) - Aggressive stock with high risk, ICBP (0.19) - Defensive stock with low risk.
- e) 2020: PTPP (5.37) - Aggressive stock with high risk, UNVR (0.11) - Defensive stock with low risk.
- f) 2021: BBTN (4.53) - Aggressive stock with high risk, ADRO (-3.07) - Defensive stock with negative response to market (negative beta).

Risk Pattern: PTPP shows the highest beta trend year-on-year, indicating consistently high risk. In contrast, UNVR shows the lowest beta trend year-on-year, signaling consistently lower risk.

Implications of CAPM Theory: Based on the CAPM theory, a high beta indicates high returns expected by investors, but also indicates a lower resilience of the company to volatile markets.

Impact of Beta Values: A high beta value can provide high returns but also shows the company's vulnerability to market changes and investor behavior. Whereas a low beta value indicates less risk, but also lower profit potential in stable market conditions.

3.1. Stock Return (Y)

The dependent variable (Y) used in this study is Stock Return. Stock return is the rate of profit enjoyed by investors on an investment they make. Returns can be in the form of realized returns that have occurred or expected returns that have not yet occurred. The actual return ($R_{i,t}$) is obtained from the daily stock price of security i at time t ($P_{i,t}$) minus the daily stock price of security i at time $t-1$ ($P_{i,t-1}$) divided by the daily stock price of security i at time $t-1$ ($P_{i,t-1}$). The following is the value of stock returns on the LQ45 index for the period 2016-2021. The following are the results of the calculation of Stock Returns on companies in the LQ45 index for the 2016-2021 period on the IDX.

Table 2. Stock Return of LQ45 Index for the Period 2016-2021

No	Kode	RETURN SAHAM						RARA-RATA PERUSAHAAN
		2016	2017	2018	2019	2020	2021	
1	ADRO	2.29	0.10	-0.35	0.28	-0.08	0.57	0.47
2	AKRA	-0.16	0.06	-0.32	-0.08	-0.19	0.29	-0.07

THE EFFECT OF INVESTMENT RISK ON STOCK RETURNS IN COMPANIES LISTED ON THE LQ-45 INDEX*Nurman et al, 2023*

3	ANTM	1.85	-0.30	0.22	0.10	1.30	0.16	0.56
4	ASII	0.38	0.00	-0.01	-0.16	-0.13	-0.05	0.01
5	BBCA	0.17	0.41	0.19	0.29	0.01	0.08	0.19
6	BBNI	0.11	0.79	-0.11	-0.11	-0.21	0.09	0.09
7	BBRI	0.02	0.56	0.01	0.20	-0.05	-0.01	0.12
8	BBTN	0.34	1.05	-0.29	-0.17	-0.19	0.00	0.13
9	BMRI	0.25	0.38	-0.08	0.04	-0.18	0.11	0.09
10	BSDE	-0.03	-0.03	-0.26	0.00	-0.02	-0.18	-0.09
11	GGRM	0.16	0.31	0.00	-0.37	-0.23	-0.25	-0.06
12	HMSP	0.02	0.23	-0.22	-0.43	-0.28	-0.36	-0.17
13	ICBP	0.27	0.04	0.17	0.07	-0.14	-0.09	0.05
14	INCO	0.26	0.02	0.13	0.12	0.40	-0.08	0.14
15	INDF	0.53	-0.04	-0.02	0.06	-0.14	-0.08	0.05
16	INTP	-0.31	0.43	-0.16	0.03	-0.24	-0.16	-0.07
17	JSMR	-0.17	0.48	-0.33	0.21	-0.11	-0.16	-0.01
18	KLBF	0.15	0.11	-0.10	0.07	-0.09	0.09	0.04
19	MNCN	-0.05	-0.27	-0.46	1.36	-0.30	-0.21	0.01
20	PTBA	1.76	-0.02	0.75	-0.38	0.06	-0.04	0.36
21	PTPP	0.03	-0.31	-0.32	-0.12	0.18	-0.47	-0.17
22	PWON	0.14	0.21	-0.09	-0.08	-0.11	-0.09	0.00
23	SMGR	-0.20	0.08	0.16	0.04	0.04	-0.42	-0.05
24	TLKM	0.28	0.12	-0.16	0.06	-0.17	0.22	0.06
25	UNTR	0.25	0.67	-0.23	-0.21	0.24	-0.17	0.09
26	UNVR	0.05	0.44	-0.19	-0.07	-0.13	-0.44	-0.06
27	WIKA	-0.03	-0.34	0.07	0.20	0.00	-0.44	-0.09

Source: www.yahoofinance.co.id (data processed, 2023).

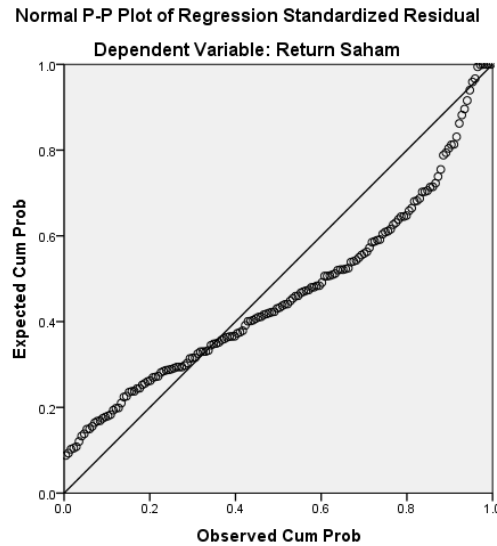
Based on table 2 above, the lowest average company stock return value is HMSP, which is -0.17, the low stock return of this company can have a negative influence on investors to invest their capital. This happens because the movement of stock prices that experience fluctuations every year so that the company gets a low stock return and does not match the expectations of shareholders (investors). Then the highest average stock return is ANTM, which is 0.56, this is because it has a stable stock price movement and good financial performance. The higher the share price, the higher the return earned by investors.

3.2. Classical Assumption Test**Normality Test**

Normality test is a test used to determine whether the dependent, independent, or both variables are normally distributed, close to normal or not. To detect the presence of

normality is to look at the spread of points on the Y axis of the Normal Probabilty Plot graph. The Normal Probabilty Plot is as follows:

Figure 1. Normal P-Plot of Regression Standardized Residuals



From the graph above, it can be seen that the data does not spread and has followed the direction of the diagonal line, it can be concluded that the regression model is declared Normality.

3.3.Simple Regression

Simple linear regression is used to predict the value of one dependent variable (Y) based on the value of one independent variable (X) that affects it.

Table 3. Multiple Linear Regression Test Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.049	.050		.975	.331		
Beta Saham	.008	.028	.022	.278	.781	1.000	1.000

a. Dependent Variable: Return Saham

Based on the table above, it can be seen that the values of the form of multiple regression equations in this study are:

$$Y = 0,049 + 0,008X$$

Description:

1. The constant value of 0.049 with a negative relationship direction indicates that if the independent variable is considered constant, the Stock Return will decrease.
2. The regression coefficient value X of 0.008 with a positive relationship direction indicates that any increase in Beta Shares will be followed by an increase in Stock Returns of 0.008 assuming other independent variables are considered constant.

3.4. Hypothesis Test (t-test)

Hypothesis testing the table above shows that the Beta Stock variable has a significant level of 0.781 which is greater than 0.05. This means that Beta Shares have no significant effect on Stock Returns and the t value of 0.339 shows a positive influence on the dependent variable.

DISCUSSION

The results of this study indicate that the significance value is $0.781 > 0.05$ and the coefficient is 0.008, which means that Beta has a positive and insignificant effect on stock returns. The results of this study do not support the hypothesis that has been put forward.

It is known that beta has a positive influence on stock returns, although beta does not significantly affect the stock returns of the LQ45 index. According to Yanti (2016) "The greater the desired profit, the greater the risk that may occur". This means that the positive beta value on stock returns indicates that the higher the beta value, the greater the return obtained from the stock investment (high risk high return). However, the results of this study also show that beta has no significant effect on stock returns. This shows that the high and low beta (systematic risk) will not affect stock returns.

This research is in line with research conducted by Suharli (2005) which states that beta has a positive and insignificant effect on stock returns, and is supported by research conducted by Septiani and Supadmi (2014) which states that beta has no significant effect on stock returns. This shows that the higher the systematic risk or beta of the stock, the higher the stock return and vice versa the lower the systematic risk or beta of the stock, the lower the stock return in the LQ45 index company for the period 2016-2021.

4. CONCLUSION

Based on the results of the research and discussion that has been stated previously, it can be concluded that the research of Beta Shares (Systematic Risk) has a positive and insignificant effect on the Stock Return of the LQ45 Index for the 2016-2021 Period on the IDX.

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