

**THE BETA ROLE IN AFFECTING STOCK RETURNS WITH
UNCONDITIONAL AND CONDITIONAL APPROACHES
(Case Study of Companies Listed in the LQ 45 Index)**

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ABSTRACT

This study aims to determine the effect of beta on return by using two unconditional and conditional approaches. In this study a sample of companies listed on the Indonesia Stock Exchange used the LQ 45 Index for the period January 2011 to December 2015. From the tests obtained results showed that in the unconditional beta approach the stock had a positive and insignificant effect on stock returns. Whereas by using a conditional approach, the results obtained where beta and return have a significant positive effect when the positive risk premium and a positive effect are not significant when the risk premium is negative.

Keyword: Beta, *Return, Risk Premium, Unconditional, Conditional.*

A. INTRODUCTION

The capital market is a market for various long-term financial instruments that can be traded both in the form of debt (bonds) and in the form of equity (shares) issued by the government and private companies (Husnan Suad 2001). Capital markets have an important role in economic development, because the capital market is one of the long-term sources of external financing for the business world, especially companies that go public and as a vehicle for investment for the community (Tjahjo 2003). The capital market can help interaction of the capital needs of a company in order to be able to carry out company activities and be able to survive in the global economy. Companies in fulfilling capital requirements can sell shares to the public in the capital market (Sukarno and Syaichu 2016: Kasmir 2014). For the public, especially investors who have excess funds, the capital market becomes a good investment alternative. The party that provides funds to the company through the purchase of shares can be said to be

an investor. Based on the shares owned, investors certainly also hope for what they will get in the future. However, of course in making an investment in stocks, investors must always pay attention to the factors that can influence stock prices.

In investing, every investor will absolutely consider the level of return that will be obtained. Usually investors will do some research to determine the level of return to be received. The total return of a company is obtained from capital gain or loss and yield. While yield is the percentage of periodic cash receipts for the investment price of a certain period of investment. For stocks, yield is the percentage of dividends to stock prices in the previous period which are shared with investors for their investments (Hartono 2016; Tendelilin 2010). Investors in choosing investments will differ from one investor to another. These differences usually have different criteria among investors, namely about how much the level of return that will be obtained from an investment. Most investors expect low risk but with high returns, therefore investors before investing, should consider carefully about some very important things in every investment decision. Investors must certainly not be separated from uncertainty or risk. An investor who invests does not know what will be obtained in the future, so it can only estimate how much profit will be obtained and some deviant things that may occur. As an investor, this uncertainty must be considered as an investment risk.

Risk considerations for investments made are also one that must be taken into account by every investor. Risks exist which can be partially eliminated by diversification (i.e. unsystematic risk) and risks that cannot be diversified (systematic risk) (Husnan Suad 2001). Because investors are risk-averse, they choose to diversify if they know that by diversifying they can reduce risk. As a result, all investors will do the same thing and thus the risk lost due to diversification becomes irrelevant in calculating risk. Only risks that cannot be eliminated by diversification are relevant in calculating risk. This risk is referred to as market risk and this risk is relevant in calculating risk.

In the Capital Asset Pricing Model (CAPM) portfolio theory, it is stated that if the risks borne by the shareholders are large, then the shares will also get a large stock return or in other words "High Risk High Return". The risk referred to here is market risk which is closely related to changes in certain types of stock prices or certain groups caused by investor anticipation of the expected rate of return. Systematic risk measurement or beta (β) is used to explain the expected stock return. Beta is an appropriate measure of market index because of the risk of a security that is well diversified, depending on the sensitivity of each stock to market changes, namely beta in those stocks (Suharli, 2005: 99-116). Beta reflects the condition of a company because

beta movements are determined by the movement of the company's stock price. The company's stock price is a reflection of the company's own financial condition in general.

Most empirical studies of static CAPM assume that beta remains constant over time and that the return of weighted portfolio values of all stocks is a proxy for the return of aggregate wealth. The general consensus assumes that static CAPM cannot explain satisfactorily the average cross-section of stock returns. They assume that CAPM holds in a conditional sense, namely beta and market risk premiums vary over time including returns on capital when measuring profits on aggregate wealth. In several other studies conducted on the CAPM, there are several weaknesses in the CAPM theory, namely the movement of the expected return from time to time due to the assumption that the capital market is perfect or there is no friction, in other words there are no transaction costs or costs or information costs. Research conducted by Fama and MacBeth (1973) tested CAPM validity and showed a positive relationship between beta and return even though it was weak. The study used three testable implications in testing the CAPM equation. First, the relationship between the expected return of a stock with the risk of the stock must be linear. Second, beta is the final measure of risk, in other words there are no other measurements of stock risk that appear in the CAPM equation. And third, in the risk-averse market of investors, a higher risk should be associated with a higher expected return where the risk premium must be positive ($E(R_m) - E(R_f) > 0$). Fama and French (1993) also tested the CAPM by using the monthly return data of stocks in America, and found that there was no significant cross-sectional relationship between beta and return, but other variables such as market factors, firm size and book to market value ratio that can explain the return significantly.

Pettengill, Sundaram, and Mathur (1995) and Huang et al. (2010) then conducted a study that explained why beta relationships and returns were not significant or weak. Pettengill, Sundaram, and Mathur (1995) argued that a statistical adjustment was needed from the previous methodology because returns used in the study were realized returns, not using expected return. Then the Conditional Approach model is developed between beta and return that is differentiated in two conditions, namely when the risk premium is negative and the risk premium is positive.

Pettengill, Sundaram, and Mathur (1995) explained that if the market return is above the risk-free asset return, the risk premium is positive ($E(R_m) - E(R_f) > 0$), beta and return must be positively related. But if the market return is below the risk-free asset return ($E(R_m) - E$

$(R_f) < 0$), then beta and return must be inversely related. In this study, a very significant relationship between beta and return in the conditional approach is produced, both when the risk premium is positive and when the risk premium is negative. He also argued that if there is a conditional relationship between beta and return, with the intention of having a positive relationship in beta and return, then two conditions are needed, namely:

Pettengill, Sundaram, and Mathur (1995) explain if the market returns for the return of risk-free assets then the risk premium is positive ($E(R_m) - E(R_f) > 0$), beta and return must be positively related. But if the market return is below the risk-free asset return ($E(R_m) - E(R_f) < 0$), then beta and return must be inversely related. In this study, a very significant relationship between beta and return in the conditional approach is produced, both when the risk premium is positive and when the risk premium is negative. He also argued that if there is a conditional relationship between beta and return, with the intention of having a positive relationship in beta and return, then two conditions are needed, namely:

- 1) Excess market return must be a positive average; and
- 2) Risk premium on the market goes up and the market goes down must be symmetrical.

Other studies conducted by (Fletcher 1997) Elsas, El-Shaer, and Theissen (2003), Hodoshima, Garza-Gómez, and Kunimura (2000), Lam and Tam (2011) also prove that capital markets in the UK, Germany, Japan and Hong Kong show a significant relationship between beta and return using the Conditional Approach methodology conducted by Pettengill, Sundaram, and Mathur (1995). However, according to the results of research conducted by Fletcher, Conditional relations between beta and return on up market and down market are not symmetrical as stated Pettengill, Sundaram, and Mathur (1995).

The purpose of this study is to test 2 methods of beta relations and returns, namely the unconditional and conditional approaches. The unconditional approach is an approach model by regressing the beta of a stock against the stock return to estimate the monthly beta coefficient. Whereas the conditional approach is an approach model by regressing the beta of a stock on stock returns to estimate the monthly beta coefficient by distinguishing positive risk premium conditions and when the risk premium is negative. Because there are differences in the results of previous research or research gaps, it is necessary to test the relationship between beta and return with the method of unconditional and conditional approaches in companies listed in the LQ 45 index on the Indonesia Stock Exchange (IDX).

B. LITERATURE REVIEW

1. *Capital Asset Pricing Model (CAPM)*

In portfolio theory introduced by Sharpe (1964) and Lintner (1965) they formulated a similar general balance model known as the Capital Asset Pricing Model (CAPM). This CAPM explains the balance between the level of systematic risk and the level of profit required by portfolio securities. In other words the main purpose of using the CAPM is to determine the minimum required level or minimum required rates of return from risky asset investments Sick, Ross, and Westerfield (1988), Roberts and Whited 2013). The CAPM concept is based on the assumption that capital markets are efficient. In an efficient capital market all assets can be divided perfectly or perfectly divisible and liquid can be traded at any time. This means that investors can diversify to the smallest units and can buy and sell securities at any time (Sartono 2016).

The market equilibrium condition of the expected return and risk can be described by the Security Market Line (SML) for individual securities. While the Capital Market Line (CML) is used to describe the tradeoff between risk and portfolio expected return. Increasing the expected return on individual securities is caused by the addition of security risks measured by beta by arguing that unsystematic risk tends to disappear and the relevant risks are only systematic risks measured by beta.

2. Beta

Risk is an opportunity where the real outcome of an investment will differ from the expected results or "the chance that the actual outcome from the investment will differ from the expected outcome" (Hartono 2016). Market risk described by beta is used by companies to determine the risks associated with the market. He also explained that market risk is changing returns due to overall market fluctuations which are also caused by recessions, wars, economic structural changes and changes in consumer choice (Husnan Suad 2001).

Companies that have high market risk tend to fluctuate against market movements. The higher the beta of a company, the more sensitive it is to market changes. In other words, investors tend to worry about entering the market due to unstable market movements. So companies with high beta will be very fluctuating against market movements and will provide an unstable return. Therefore, investors will prefer companies with low beta and have a more stable return. This

beta is obtained by regaining the return of a stock with a market return where the stock return is the dependent variable.

3. Unconditional Approach

An unconditional approach is an approach to test the relationship of beta and return by regressing the monthly beta to its monthly return. Pattengill et al., (1995) also said that unconditional relationships describe a positive risk-return relationship caused by a beta increase which will be followed by an increase in return. In other words, this model illustrates a positive relationship only if the market return is positive and vice versa, the relationship is negative if the market return is also negative. Fama and MacBeth (1973) used this method in their research and found that there was a positive relationship between beta and return but was less significant.

4. Conditional Approach

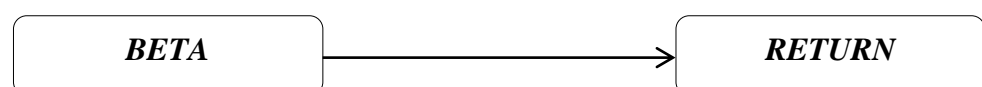
The conditional approach is a regression model to test the relationship between beta and return by regressing monthly beta to monthly returns and dividing the positive risk premium condition model and negative risk premium. This conditional approach model was developed by Pettengill, Sundaram, and Mathur (1995), this method is considered to be able to describe the relationship of beta and return by distinguishing it in conditions when the positive risk premium and risk premium are negative. The conditional approach requires two conditions so that a positive beta relationship and return can occur, namely:

- a. Excess market return market average must be positive and;
- b. Risk premium on the market goes up and the market goes down must be symmetrical.

5. Theoretical Framework

Based on the unconditional and conditional approach model and the results of previous studies that have explained the relationship between beta and return, it can be tested the relationship between beta and stock returns with the unconditional and conditional approach in this study to explain the relationship of beta and return. Then, from this description can be described by the theoretical framework as follows:

Theoretical Framework of Unconditional Approach

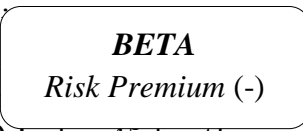


Theoretical Framework of Conditional Approach



C. RESEARCH METHODS

The historical data of the company's shares during the period January 2011 to December 2015 in this study were all companies listed in the LQ Index 45 for the period January 2011 to December 2015. The research samples will be selected based on the criteria which has been determined, it is obtained as many as 13 samples of companies with a total data of 13 x 5 (years) = 65 data.



The analysis technique used in this study is the Classical Assumption Test and Simple Regression Analysis, t Test and Determination coefficient by conducting two tests of unconditional and conditional approaches. where in the unconditional approach testing the relationship between beta and stock returns. While the conditional approach is distinguished in two conditions, namely positive and negative risk premium.

D. RESULTS AND DISCUSSIONS

Research Results

1. Classical Assumption Test
 - a. Normality Test

The normality test used in this regression model is a statistical test with non-parametric Kolmogorof-Smirnov (K-S). The significance value of the residual normally distributed is if the value is asympt. Sig (2-tailed) in the one-sample Kolmogorof-Smirnov test was more than 0.05.

Table 1
Normality Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		65
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.25773454
Most Extreme Differences	Absolute	.074
	Positive	.046
	Negative	-.074
Kolmogorov-Smirnov Z		.600
Asymp. Sig. (2-tailed)		.865

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS Output Attachment, 2018

Based on the output from the normality test above, the Kolmogorof-Smirnov (K-S) significance value is 0.865 greater than 0.05.

So that it can be concluded if the hypothesis states that the residual data is abnormal or in other words, the residual model is normally distributed.

b. Autocorrelation Test

The autocorrelation test aims to measure whether a linear regression model has a correlation between disruptive errors in period t and interfering errors in period $t-1$ (before). In this study, the Run Test was used to test the existence of autocorrelation in the regression model with the provisions of the Asymp. Sig. (2-tailed) greater than 0.05.

Table 2
Autocorellation Test
Runs Test

	Unstandardized Residual
Test Value ^a	.01609
Cases < Test Value	32
Cases >= Test Value	33
Total Cases	65
Number of Runs	38
Z	1.127
Asymp. Sig. (2-tailed)	.260

a. Median

Source: SPSS Output Attachment, 2018

From the results of the tests carried out using the Run Test, it is known that the value of Asymp. Sig. (2-tailed) of 0.260 greater than 0.05. Then from these results it can be concluded that there are no symptoms or problems of autocorrelation in this study.

c. Heteroscedasticity Test

The heteroscedasticity test used in this study is the Glejser test. The Glejser test detects the presence or absence of heteroscedasticity by regressing the residual absolute value to the independent variable. Decision making regarding heteroscedasticity is if the significance value is more than 0.05 (probability value > 0.05), it is concluded that the regression model is free from the symptoms of heteroscedasticity.

Table 3 Heteroscedasticity Test
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	.220	.032		6.906	.000
	-.016	.026	-.077	-.616	.540

a. Dependent Variable: RES2

Source: SPSS Output Attachment, 2018

Based on the results of the heteroscedasticity test above, it is known that the significance value of the above variable (beta) is 0.540 greater than 0.05. This means, that in this study did not occur or be free from heteroscedasticity.

2. Determination Coefficient (R^2)

The coefficient of determination (R^2) measures how far the model's ability to explain the dependent variable. R^2 value must increase every addition of one variable without considering the significance of the independent variable. So in this study, adjusted R^2 is used because the value can go up or down if one independent variable is added to the model. Because in this study used two approaches, then to test the coefficient of determination (R^2) will be done by distinguishing between unconditional approaches and conditional approaches.

a. Determination Coefficient (R^2) of Unconditional Approach

To find out how far the ability of the model to explain the variation of the dependent variable in the unconditional approach, can be seen in the following table:

Table 4
Determination Coefficient (R^2) of Unconditional Approach
 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.212 ^a	.045	.030	.25977

a. Predictors: (Constant), Beta

Source: SPSS Output Attachment, 2018

Based on the table above, in the unconditional method it can be seen that the correlation coefficient (R) is 0.212, which means that the relationship of beta as an independent variable with return as the dependent variable is only 21.2%. While the adjusted R^2 value is 0.030, this means that the ability of beta to explain return variations is only 3%. While 97% is explained by other factors not included in this study, such as market appreciation, capital structure, profit stability and several other factors that can influence the rate of return on stock returns.

b. Determination Coefficient (R^2) of Conditional Approach

To find out how far the ability of the model in explaining the variation of the dependent variable in the conditional approach, can be seen in the following table:

Table 5
Determination Coefficient (R²) Conditional Approach

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.323 ^a	.104	.343	.27903

a. Predictors: (Constant), (D-1). Beta, D. Beta

Source: SPSS Output Attachment, 2018

Based on the table above, in the conditional method it can be seen that the correlation coefficient (R) is 0.323 which means that the beta relationship as an independent variable with a return as the dependent variable is only 32.3%. While the adjusted R² value is 0.343, this means that the ability of beta in explaining return variation is 34.3%. While the rest is explained by other factors not included in this study. It should be noted also, in the unconditional approach described previously, the adjusted R² value is 3%, it can be seen that in the conditional approach, the beta capability in explaining the effect on higher return is compared to the unconditional approach, which is 34.3% which is far different when compared using the unconditional approach which is only 3%.

3. t - Test

In this study two tests of significance of individual parameters were carried out (t test), namely the unconditional approach and the conditional approach. So that the two approaches will be tested from two different t tests.

a) Test of Individual Parameter Significance (t -Test) - Unconditional Approach

To find out the effect of beta as an independent variable on return as the dependent variable, the t test will be used as follows:

Table 6
t - Test of Unconditional Approach
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.119	.053		2.233	.029
Beta	-.076	.044	-.212	-1.719	.091

a. Dependent Variable: Return

Source: SPSS Output Attachment, 2018

Based on the results of the t test above, it shows that beta has a negative value of -1.719 with a significance level of 0.091. This shows that in the unconditional beta approach shares have

a positive influence on stock returns. However, the beta variable significance value of the stock is 0.091 where this value is greater than 0.05, which means that the effect of the stock beta variable on stock returns is not significant. Because the significance value is greater than 0.05, the first hypothesis (H1) is rejected. This shows that stock beta has a negative effect and is not significant on stocks return or in other words, stock beta does not affect stock returns with an unconditional approach.

b) Test of Individual Parameter Significance (t -Test) - Conditional Approach

While knowing the effect of the independent variable, beta on the dependent variable, namely the return with the conditional approach, the t test is used by distinguishing between positive and negative risk premiums.

Table 7
t - Test of Conditional Approach
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.729	1.375		.530	.624
¹ D. Beta	.421	.757	.601	.556	.008
(D-1). Beta	.184	.565	.352	.326	.110

a. Dependent Variable: Return

Source: SPSS Output Attachment, 2018

Based on the results of the t test in the table above, the conditional approach shows that the influence between the independent variables on the dependent variable individually can be described as follows:

- 1) Based on the results from the table above it can be seen that the value of t calculates a positive risk premium which is proxied by "D. Beta "on stock returns is 0.556 with a significance level of 0.008. The level of significance smaller than $\alpha = 0.05$ indicates that the stock beta has a significant positive effect on stock returns when the risk premium is positive, then the second hypothesis (H2) is accepted.
- 2) Based on the testing of the results from the table above, it is known that the value t counts when the negative risk premium is proxied by "(1-D). Beta "on stock returns is positive 0.326 with a significance level of 0.110. The level of significance greater than $\alpha = 0.05$ indicates that the stock beta has a not significant positive effect on stock returns when the

risk premium is negative, then the third hypothesis (H3) is rejected.

Discussion

Based on the research that has been done, it can be seen the effect of stock beta on stock returns with the unconditional and conditional approach of companies listed in the LQ 45 group during the period January 2011 to December 2015.

1. Unconditional Approach

Based on the results of research that has been done using the unconditional approach method, it is found that the stock beta does not have a significant effect on stock returns. This is in line with the research conducted by Fama and French who tested the CAPM by using monthly return data on stocks in America and found no significant cross-sectional relationship between beta and return.

The results found in this study state that beta does not have a significant effect on stock returns. This shows that every investor who invests their funds in LQ 45 shares is a risk averse investor. This is not in line with the hypothesis proposed by assuming that the higher the beta value, the higher the rate of return that will be received. It can be assumed that, market risk is closely related to changes in certain types of stock prices or certain groups caused by investor anticipation of the expected rate of return.

Because the test results show that there is no effect of the relationship between beta and return, in line with the general consensus that static CAPM cannot explain satisfactorily the cross-section of average stock returns. They assume that CAPM holds in a conditional sense namely, beta and market risk premiums vary from time to time including returns on capital when measuring profits on aggregate wealth.

The results of the same research conducted by Fama and French who tested the CAPM using monthly stock return data, found results that showed that there was no significant cross-sectional relationship between beta and return. Thus, beta cannot explain the effect on returns, but other variables such as market factor, firm size, and book to market value ratio can explain return significantly according to the tests conducted by Fama and French. In line with this, research conducted by Pattengil et al. can explain why the relationship between beta and return is not significant, Pattengill states that there is a need for statistical adjustments from the previous methodology. This is the basis for developing a conditional approach model between beta and return by distinguishing two conditions, namely when positive and

negative risk premiums are explained in the following approach. Fama and MacBeth also added that in this relationship it is assumed that the capital market is a perfect market, where information is easily obtained without the cost and value distribution of an asset or portfolio that comes from the same and exact estimates. This assumption is commonly referred to as "homogeneous expectation" or uniform expectations, because that is the reason why the relationship between beta and return with the unconditional approach produces a non-significant relationship.

2. Conditional Approach

In the conditional approach, beta variables are tested by distinguishing two conditions when positive risk premium and risk premium are negative. In the first condition the results obtained that beta has a significant positive influence on stock returns. This is in accordance with the model approach developed by Pattengill et al. and research conducted by several other researchers such as Theriou, Fletcher, Elsas, Hodoshima and Ho who suggested that there is an influence between stock beta on stock returns both when the risk premium condition is positive. This indicates that if an investor holds a higher stake, it will provide a higher return than stocks with a lower beta.

Then, for the results of testing on a negative risk premium condition, the same results are obtained with the condition when the risk premium is positive but not significant. This study yielded results similar to those conducted by Verma where the results found stated that in the conditional approach found a relationship that was not significant during down market. This result is not in accordance with the CAPM theory in a conditional market in a study revealed by Pettengill, Sundaram, and Mathur (1995). Where it should obtain an inverse relationship between beta and return when the risk premium is negative. In other words, the results obtained should be negative, where stocks with lower beta will give a lower return than stocks with larger beta.

However, because the results of this study show different results when the risk premium is negative, then this illustrates that some stocks with higher beta give a higher level of return as well. This is possible because investors consider that some in the LQ 45 group are stocks that are liquid and quickly traded compared to other stocks. So, even though the market return is bearish and below the risk-free asset return, investors will assume that some LQ 45 stocks remain liquid for trading. so the conditional CAPM approach model developed by

Pattengill et al. less in accordance with the results in this study. Pattengill et al. also suggests that in the conditional approach two conditions are needed with the intention of the relationship between beta and return, namely:

- a. Excess market return must be a positive average; and
- b. Risk premium when the up market and down market must be symmetrical.

The first condition test can be done with One-Sample T Test with risk premium as the test variable.

Table 8
One-Sample Statistic
One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Premi Risiko	58	1,1459	,51399	,06749

Source: SPSS Output Attachment, 2018

Table 9
One-Sample T-Test
One-Sample Test

Test Value = 58						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper

Source: SPSS Output Attachment, 2018

Based on the results of testing from the two tables above, it can be concluded that the average excess market return is negative and significant. This can be seen from the t value of -842,400 and the significance of 0,000. This condition is not in accordance with what was stated by Pattengill et al., Where the average excess market return must be positive. Then for the second condition the test is carried out in the form of:

$$t = \frac{1,146 - 0,580}{\sqrt{0,067^2 + 0,173^2}} = 9,279$$

From the t value above, the results for testing in the second condition in the conditional approach are as follows:

Table 10
Simetrical Test

$b1$ (y_2)	$b2$ (y_3)	$SEb1$	$SEb2$	T	Df	Sig.
1,146	-0,580	0,067	0,173	9,279	63	0,000

From these data, it can say that risk premium when positive and negative is not symmetrical. This is because the significance value is smaller than standardized or equal to zero, illustrating that the two slope lines when the negative risk premium is different. If the two lines have different directions, it can be said that the two lines are symmetrical. However, both lines have the same direction, which is positive. So even if the risk premium is positive and when the risk premium is negative is different, but the two lines are not symmetrical because they have the same direction. This condition can also be caused by the negative data risk premium tested in this study, which is less than the positive risk premium. This condition can also be affected because the value of the average excess market return is negative rather than positive. So it can be concluded that, the results of research conducted by Pattengill et al. not in line with the results of the test above which means that the two conditions needed in the conditional beta relationship and return cannot be fulfilled in this study.

This is in line with the results of research conducted by Fletcher, where the conditional beta relationship and return on up market and down market are not symmetrical as stated by Pattengill et al. although the results found were positive and significantly negative in the study by focusing the research on the up market and down market as stated by Pattengill et al. This also proves that this research that assesses CAPM cannot explain the anomalies in stock price movements at market prices, and also cannot explain when the risk of the premium is negative but provides a positive return and vice versa. So that the CAPM cannot explain when a security with negative beta or the risk of the premium is negative but has a positive return.

E. CONCLUSION

Conclusions that can be obtained from the results of data analysis that have been done are as follows:

1. The results of the study using the unconditional approach model between beta and return show that beta has a positive effect on stock

returns. This shows that beta has no effect on stock returns, so the proposed hypothesis is rejected.

2. The results of the research for the conditional approach by distinguishing the positive risk premium condition and the negative risk premium are found that the beta has a significant positive effect on stock returns when the positive risk premium condition, however, when the negative risk premium results are not significant. This is not in line with the proposed hypothesis where the conditions at risk premium negative must be negative, while the results obtained are positive. Then, the tests carried out for both conditions when the risk premium is positive and negative. The test results conducted show that the relationship between positive and negative risk premium is not symmetrical. So, the conditional approach model cannot be used as a prediction, because the realized return on upstate and downstate conditions is not ex-ante.

It can be said here that, the results in this study say that the low beta value of shares will provide a low return as well. If investors who expect to get a large amount of profits will certainly prefer to look for stocks with high beta as well. But, if investors are more concerned with the level of investment security, then he will tend to look for stocks with low beta.

However, it needs to be recalled that stock beta is calculated through regression analysis with reference to historical data. So, this can be one of the weaknesses of the use of historical data, namely that it cannot always be used as a powerful measuring tool to predict future prices. Some experts actually suggest using beta stock analysis for short-term investments, while for long-term investments it is still recommended to refer to fundamental analysis.

BIBLIOGRAPHY

- Elsas, Ralf, Mahmoud El-Shaer, and Erik Theissen. 2003. "Beta and Returns Revisited Evidence from the German Stock Market." *Journal of International Financial Markets, Institutions and Money*. [https://doi.org/10.1016/S1042-4431\(02\)00023-9](https://doi.org/10.1016/S1042-4431(02)00023-9).
- Fama, Eugene F., and Kenneth R. French. 1993. "Common Risk Factors in the Returns on Stocks and Bonds." *Journal of Financial Economics*. [https://doi.org/10.1016/0304-405X\(93\)90023-5](https://doi.org/10.1016/0304-405X(93)90023-5).
- Fama, Eugene F., and James D. MacBeth. 1973. "Risk, Return, and Equilibrium: Empirical Tests." *Journal of Political Economy*. <https://doi.org/10.1086/260061>.

- Fletcher, J. 1997. "An Examination of the Cross-Sectional Relationship of Beta and Return: UK Evidence." *Journal of Economics and Business*. [https://doi.org/10.1016/S0148-6195\(97\)00006-4](https://doi.org/10.1016/S0148-6195(97)00006-4).
- Hartono, Jogyanto. 2016. *Teori Portofolio Dan Analisis Investasi. BPFE- Yogyakarta*. <https://doi.org/ISSN 0101-4234>.
- Hodoshima, Jiro, Xavier Garza-Gómez, and Michio Kunimura. 2000. "Cross-Sectional Regression Analysis of Return and Beta in Japan." *Journal of Economics and Business*. [https://doi.org/10.1016/S0148-6195\(00\)00031-X](https://doi.org/10.1016/S0148-6195(00)00031-X).
- Huang, Wei, Qianqiu Liu, S. Ghon Rhee, and Liang Zhang. 2010. "Return Reversals, Idiosyncratic Risk, and Expected Returns." *Review of Financial Studies*. <https://doi.org/10.1093/rfs/hhp015>.
- Husnan Suad. 2001. "Dasar-Dasar Teori Portofolio Dan Analisis Sekuritas." *Managerial Finance*. <https://doi.org/10.1021/jm050518j>.
- Kasmir. 2014. *Bank Dan Lembaga Keuangan Lainnya*. Jakarta: Rajawali Pers.
- Lam, Keith S.K., and Lewis H.K. Tam. 2011. "Liquidity and Asset Pricing: Evidence from the Hong Kong Stock Market." *Journal of Banking and Finance*. <https://doi.org/10.1016/j.jbankfin.2011.01.015>.
- Lintner, John. 1965. "Security Prices, Risk, and Maximal Gains From Diversification." *The Journal of Finance*. <https://doi.org/10.1111/j.1540-6261.1965.tb02930.x>.
- Pettengill, Glenn N., Sridhar Sundaram, and Ike Mathur. 1995. "The Conditional Relation between Beta and Returns." *The Journal of Financial and Quantitative Analysis*. <https://doi.org/10.2307/2331255>.
- Roberts, Michael R., and Toni M. Whited. 2013. "Endogeneity in Empirical Corporate Finance." *Handbook of the Economics of Finance*. <https://doi.org/10.1016/B978-0-44-453594-8.00007-0>.
- Sartono, Agus. 2016. *Manajemen Keuangan Teori Dan Aplikasi. Ke Empat*. Yogyakarta: BPFE.
- Sharpe, William F. 1964. "Capital Asset Prices: A Theory of Market

Equilibrium under Conditions of Risk.” *The Journal of Finance*.
<https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>.

Sick, Gordon, Stephen A. Ross, and Randolph W. Westerfield. 1988.
“Corporate Finance.” *The Journal of Finance*.
<https://doi.org/10.2307/2328476>.

Sukarno, Kartika Wahyu, and Muhamad Syaichu. 2016. “Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Bank Umum Di Indonesia.” *Jurnal Studi Manajemen & Organisasi*.
<https://doi.org/10.1016/j.neuro.2017.03.001>.

Tendelilin, Eduardus. 2010. “Portofolio Dan Investasi Teori Dan Aplikasi.” *Yogyakarta*. <https://doi.org/10.2753/MIS0742-122260306>.

Tjahjo, Eko Handono. 2003. “Analisis Anomali Price to Earning Ratio Dan Beta Saham Serta Pengaruhnya Terhadap Return Saham (Studi Empiris Pada Butsa Efek Jakarta).” Universitas Diponegoro.