

**THE ANALYSIS OF THE  
FIRM SIZE INFLUENCE TO THE RATE OF STOCK RETURN  
(CASE IN THE COMPANIES LISTED IN LQ 45)**

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**BACKGROUND OF THE STUDY**

The economic crisis has been destroying Indonesian economic since several years ago. The government had taken many efforts to recover the crisis. One of the effective medium to accelerate the economic recovery is by increase the activity in capital market. Capital market is an improvement board that is really interesting to the investors. It is one of the medium for the investors to invest their fund. The functions of the capital market are as an alternative fund collector beside the bank institutions. The capital market also make possible the investors to have many investment alternatives adjusted with the preference of investor risk.

By invested their fund to the capital market, the investors expect that they will get capital gain from their investment. The companies that issued their stock in capital market called as *issuer*. By issuing their stock, they expect that they will get any earning in the form of high liquidity, publicity, prestige and capital gain that will be given to the investor. The capital gain that will be received by the investors can be derived from the dividend yield and stock return. Stock return is the excess in selling price from its buying price. Generally it declares as the percentage from the buying price. More higher the selling price from the buying price, the stock return will increase. So, the indicator of the return fluctuation is the selling price and buying price of the holding stock.

According to Sharpe (1997:98), the main determination in the demand and supply of the stock is the investor's estimation to the stock return and dividend that will be distributed. Because of the reasons above, the perception of the investor to the companies performance will determine the price of the stock.. The companies that predicted would have a good performance was expected by the investors in giving a big amount of dividend payment and stock return.

The common information source that used to evaluate and forecast the company's performance is the published company's financial statement. If a new relevant information have entered the market, directly, the information will be analyzed and interpreted by the investors. The result of this process make possible to create a new balance in market price. The use of the accounting information through financial statement by the investor, is to make an investment decision to replace the fund that will be invested and to make a creditor decision in giving a credit.

The objectives of stock analysis is to evaluate the fittingness of stock price in the stock market. The result of this analysis used by the investor to determine investment strategy in making buying, selling or holding stock decision by using securities analysis. The securities analyst used 2 kind of approach, the technical approach, that used to observe the fluctuation of historical stock price and to forecast the future stock price. This approach expected to give any fluctuation illustration of certain stock price. The second is fundamental analysis. This analysis will use in this research. This approach used to evaluate the intrinsic value that have by a company, such as earning, dividend capital structure and company's growth. This approach also used to compare the intrinsic value with the market price of the stock. to determine whether the stock is undervalued or over valued. There are two main determinant variable to evaluate the intrinsic value, the expected rate of return and the risk that must be taken, are really influence by the national and international macroeconomics, and the industry condition, more higher the country risk, the investors will expect the great amount of return.

Firm size is a companies measurement in market value. The amount of the issued stock times the stock price. According to Barbee (1996), the firm size has a negative influence to the stock return, it means if the size of the firm larger, the stock return will decrease, but if the firm size become smaller, the stock return will increase.

### **PROBLEM FORMULATION**

Is firm size have a potential roles and a partial influence in explaining the rate of stock return ?

## **REVIEW OF RELATED LITERATURE**

1. Fama and French (1992) studied that Firm Size that measured by Market Value of Equity, emerged as the variable that have the strongest relation with the cross section of average returns.
2. Fama and French (1993) studied that Market Value of Equity proxies from the firms' risk, their economic rationale for this finding is, the smaller companies or which have high Book-Market Value tend to have a weaker economic and financial performance. Than companies with the opposite characteristic. Based on this logic, the higher returns on the stock of such companies are essentially compensation for the assumption of the greater risk.
3. Marwan Asri (2002) They found that smaller companies tend to have larger productivity than do the largest one.
4. Supardi (2003) He studied that Market Value of Equity did not have any significant influence to the stock return.

## **THE DEFINITIONS AND ADVANTAGE OF CAPITAL MARKET**

Capital market is a place for trading the various long term financial instrument, in the form of debt or owner's equity published by government, public authorities or private company (Tjiptono Darmadji and Hendi, 2001:1).

Capital market as an alternative way to collect fund and investment medium. It is not only give a benefit to the issuer, but also the investor, government and it's institution.

## **THE DEFINITIONS OF STOCK RISK AND STOCK RETURN**

Risk was defined as the chance that the actual outcome from an investment will differ from the expected outcome. Specifically, most investor was concerned that the actual outcome will be less than the expected outcome. The more variable the possible outcomes that can occur (the broader the range of possible outcomes), the greater the risk. Investors must constantly be aware of the risk they are assuming, know what it can do to their investment decisions, and be prepared for the consequences.

Return is the motivating force in the investment process. It is the reward for undertaking the investment. The measurement of realized returns is necessary for investors to assess how well they have done or how well investment managers have done on their behalf. Furthermore, the historical return plays a large part in estimating future, unknown returns. Returns on a typical investment consist of yield and dividend.

## **THE RELATION OF THE EVALUATION OF THE STOCK RETURN AND INVESTMENT DECISION.**

Commonly, the rationale investors in taking the decision to buy or sell the stock always based on the conditions and the company's prospect, the internal company's policy, situation and the world's economic policy, effort and the ability to analyze the securities. The intrinsic value can be define by evaluate the internal and external factors that could influence the issuer performance. Investors will relate the intrinsic value with the market value of the stock price. The higher the stock price, the higher the stock returns. If the intrinsic value higher than the stock price (undervalued), the investors tend not to buy or sell their stock. The evaluation of the intrinsic value in the stock is always different one another.

Stock price is the market value; it is the price that formed in the stock market (Jogiyanto, 1998:68). The less information in the stock market tends to make the stock price formed under the psychology pressure of the buyer or the seller (irrational action). This action may caused one side will get a high profit and the other side will get a huge loss. These things could be happened and it is legal. To prevent these things happened, it is preferable if the go public companies give the enough information, as long as the information influences the stock price periodically in published the routine information.

## **RESEARCH METHOD**

### **1. Population and Sample**

The populations of this thesis were all the companies that listed in LQ 45 index in 1998 until 2004. The consideration using LQ 45 was because LQ 45 only consist of selected companies, after passing some selection criterias, so that LQ 45 index consist of the stocks which have a high liquidity and also consider about the capitabilization of the stock

market. Then, the population that fulfill the samples criterias were only 14 companies. The technique used in collect the sample was purpose sampling, an unrandomly collection method, and fulfilled the criterias or certain requirements as a sample of the research. The list of companies included in LQ 45 since 2000-2004 is

No.	Companies	Initial	Sector
1	Astra International Tbk.	ASII	Automotive and Allied Product
2	Bimantara Citra Tbk.	BMTR	Holding and other Investment Companies
3.	Citra Marga Nusaphala Persada	CMNP	Toll Road Operator
4	Gudang Garam	GGRM	Tobacco Manufactures
5	HM.Sampoerna	HMSP	Tobacco Manufactures
6	Indofood Sukses Makmur	INDF	Food and Beverage
7	INDOSAT	ISAT	Communications
8	Kalbe Farma	KLBF	Pharmaceuticals
9	Lippo Bank Tbk.	LPBN	Banking
10	Matahari Putra Prima	MPPA	Whole Sale and Retail Trade
11	Ramayana Lestari Sentosa Tbk.	RALS	Whole Sale and Retail Trade
12	Semen Gresik	SMGR	Cements
13	Timah Tbk.	TINS	Mining
14	Telekomunikasi Indonesia	TLKM	Communications

## 2. Research Variable

Market Value of Equity

$$\text{MVE} = \text{Common Shares Outstanding} \times \text{Common Stock Price}$$

## 3. Data Analysis

The data analysis that will be used to make a hypothesis test is Multiple Linear Regression.

$$Y = a + b_1X_1 + \varepsilon$$

Where :

Y = The Rate of Stock Return

a = Konstanta

b<sub>1</sub> = Regression Coefficient of Firm Size Ratio or the average of the changing in stock return if Sales-Price ratio change 1 time

X<sub>1</sub> = Firm Size

ε = Disturbance error

#### 4. Hypothesis

$H_{o1}$  : Firm Size has no significant influence to the Rate of Stock Return

$H_{a1}$  : Firm Size has significant influence to the Rate of Stock Return

### **TECHNIQUE OF DATA ANALYSIS**

#### **MULTIPLE REGRESSION ANALYSIS**

Multiple regression analysis become an instrument to measure the influence of independent variables in this research. This instrument is an analysis that used to indicate the characteristic of relationship among the variables. The objectives of this analysis is to predict the amount of dependent variable by using the independent variable datas that we have known the amount (Santoso,2000:163)

### **RESEARCH FINDINGS**

#### **THE RESULT OF MULTIPLE LINEAR REGRESSION**

These are the result of multiple regression model research by pooled cross section data for the rate of stock return (Y), to the Firm Size ( $X_1$ ). The equivalent that getting from the multiple regression model is :

$$Y = 39.577 - 4.132E-13X_1$$

Based on the equivalent in the multiple regression model, we can interpreted each variable as :

- a. Intercept  $a=39.577$  interpret the mean of Y (rate of stock return) if the value of Firm Size equal to 0. This value can be define as the portion of the variation in the rate of stock return based on the other factos other than independent variable.
- b. Coefficient  $b_1 = - 4.132E-13$  interpret the correlation direction of  $X_1$  (MVE) to Y (Rate of Stock Return) is negative. It means if MVE increased by 1%, the rate of stock return will decrease by 4.132E-13%

### **THE IMPLICATIONS**

#### a. Multiple Regression Analysis

To evaluate how much the influence of independent variable to the rate of stock return, we make a statistic test as :

1) Partial Test (Regression Coefficient)

To test the regression coefficient that shows in its independent variables to the dependent variable, we use the T test, if the P-value smaller than the significant rate (5%), the independent variable influence the dependent variable.

**Table 1**  
**The Result of The Significant of Regression Coefficient**

Variable	Coefficient Regression	T	Probability (%)	Significant Rate (5%)
Firm Size	-4,13E-13	-0,247	0,805	Unsignificant

Source : the processed data

- $H_{o1}$  : Firm Size have no significant influence to the Rate of Stock Return  
 $H_{a1}$  : Firm Size have a significant influence to the Rate of Stock Return  
 For  $b_t$  the value of T-value = -0.247, lower than T-table, and the P-value = 0.805, higher than the significant rate (5%). The conclusion is  $H_o$  accepted. So, there is an evidence to conclude that the Firm Size did not have any significant influence to the Rate of Stock Return.

2) To analyze how much the Firm Size ( $X_1$ ), simultaneously influenced the Rate of Stock Return (Y), we used the F-test. If the probability of error rate in the F-test of independent variable smaller than the significant rate (5%), the tested model would be significant and vice versa, if the probability error rate of T-test in independent variable higher than significant rate (5%), the tested model was unsignificant. The significant analysis of regression model served below :

**The Result of Regression Model**

N	F	Probability	R Square	Significant Rate (5%)
98	0,06	0,805	0,001	Unsignificant

Source : The processed data

From the table above, we can conclude that the regression model had an error probability 80.5% higher than the significant rate (significant 5%). The level of significant rate used was 5%, so from the F-table with the degree of freedom 98-1-1=96, we can get the value of F-table 5% = ..... . Rejected area  $|f| > 0.05:96 =$

..... . The F-value is smaller than the F-table. It showed a lower value, about 0.06. It means, there was an evidence to conclude that there was no simultaneous significant influence between the independent variable, the firm size (MVE) to the rate of stock return.

It can be seen from the value of  $R^2$ . It is 0.001, shows the percentage of influence from the changing of Firm Size or MVE ( $X_1$ ) to variability of the rate of stock return. The condition shows that the factor outside the independent variable in above explain more higher than MVE, more than 99%.

From the explanation above, we can conclude that the first hypothesis was proved. The result of F-test analysis is accepted the null hypothesis ( $H_0$ ). It means there is no simultaneous significant influence between the independent variable (MVE) to the rate of stock return..

This thing happen because in a short term, the changes in the rate of stock return can not certainly measured. Theoretically :

$$\text{Rate of Stock Return} = \frac{\text{Buying Price in } t - \text{Buying Price in } t-1}{\text{Buying Price in } t-1} \times 100\%$$

But, what happens in the capital market is the law of supply and demand. When the investors buy the stock, the price of the stock will increase and vice versa, when the investors want to sell their stock, the price of the stock will be decrease. Beside that, the changes in stock price is measured by the performance of the company, as example, when a company was success in technology and launched their new product, it would have an opportunity to success and invite the public interest to the capital market.

The changes in the stock price was influenced by some factors, like the perception of the investor to the company, if the investors believe that Company A will get a profit, they will buy its stock, the stock price will increase, and vice versa. The economic condition also influenced the liquidity of the stock, when the economic condition was weak, the company's profit will decrease and the company will colaps and vice versa.



These things above caused changes of the stock price in some companies were abnormal. Sometimes, in this month the price is increase, but in the following month, the price is decrease. This things make the dividend per share of some companies were not stabil. So, these things influence the result of the analysis that there's no simultaneous significant influence of the independent variables to the rate of stock return.

Finally, this findings generally, is supported the Supardi (2002) and Marwan Asri (2002), that MVE did not have any partial significant influence to the rate of stock return. This findings have some differences with the findings of previous researchers, because the difference in time of observation and method used. Actually, the theoretical concept and empirical findings in the foreign country, specially in the developed country can not implemented to Indonesian capital market.

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