

**OBSERVATION ON RETURN AND RISK OF STOCK  
CATEGORIZED BLUE CHIP AND NON BLUE CHIP IN  
INDONESIA STOCK EXCHANGE OBSERVATION PERIOD  
FEBRUARY – JULY 2011**

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**ABSTRACT**

*With the developing economic of Indonesia than investing activity in the public is developing too. This is used by foreign investment companies a lot to operate in Indonesia with a promise of high level return. Usually, the public are tempted by high return without considering the risks so many eventually suffer losses. This is because the Indonesian public still has not understand so they have bad judgement on stock investment, they assumed investing on stocks can make their fortune gone in a second. Investment essentially is deployment of a number of funds in recent time with hope to regain profits in the future. The purpose of investment is in order to make their life more prosperous in the future. Based on the thought flow above then the writer is interested in researching on profitability and investment risk in Indonesia Stock Exchange. For that, this research is taking a title of “Observation on return and Risk of Stock Categorized Blue Chip And Non Blue Chip in Indonesia Stock Exchange Period of Observation February – Juli 2011”*

**Keywords :** Return, Risk, Blue Chip, Deviation Standard

**INTRODUCTION**

**Background Problems**

With the developing economic of Indonesia than than investing activity in the public is developing too. Generally, public invests on deposits. This is because investment on deposits are commonly known well because is conducted by bank, secure, even it is easily said contains no risk at all if we conduct deposits on government bank.

Investment essentially is deployment of a number of funds in recent time with hope to regain profits in the future (Halim,2005:4). But as the developing economic of Indonesia, many foreign investor come to Indonesia. Their investment business can be associated with precious goods, gold or foreign currency (valas), or other commodities such as coffee, soybeans, etc.

Most Indonesians investor are only tempted on high return (level investment return) as promised by the foreign investment companies without considering the risks.

Indonesia Stock Exchange is effectively operating since August 10<sup>th</sup> ,1977 after inaugurated by President Soeharto with activation of Jakarta Stocks Exchange then merged by Surabaya Stocks Exchange to become Indonesia Stock Exchange. Formally Indonesia Stocks Exchange operates under good management of the government. Since then until now, domestic investor escalation condition is still not satisfying. That is why BAPEPAM-LK continues to attempt performing socialization to

public. Ironically domestic investor have more trust on foreign investor which has not been clearly justified and it turn out a lot of adverse.

Public acknowledgement of stocks in Stock Exchange usually still low. They fear their money would be gone in a second. But actually the case is investment in Indonesia Stock Exchange is very secure because this institution in under direct supervision of the government. Even investment on securities stocks can be very valuable because in Stock Exchange they are categorized such as Blue Chip which means very profitable shares because its products are categorized as market leader so it is highly profitable, usually stable on dividend payment. That is why it is high demanding by investor cause its prices are increasing and fluctuating.

Based on the thought flow above then the writer is interested in researching on profitability and investment risk in Indonesia Stock Exchange. For that, this research is taking a title of “*Observation on return and Risk of Stock Categorized Blue Chip And Non Blue Chip in Indonesia Stock Exchange Period of Observation February – Juli 2011*”

### **FORMULATION OF THE PROBLEM**

Based on the background above, than it is formulated as follows :

1. Do stocks categorized as *Blue Chip* have positive average return on periode February – July 2011?
2. Do stocks categorized as *Non Blue Chip* have negative average return on periode February – July 2011?
3. Do stocks categorized as *Blue Chip* have higher average return than *Non Blue Chip* on periode February – July 2011?
4. Do variant coefficient of Blue Chip stocks lower than Non Blue Chip stocks ?

### **THEORITICAL REVIEW**

#### **Investment Definition**

Investment is a delay of consumption of a person to be included into productive activa for a certain period of time (Jogiyanto, 2012:5)

Even the scarifice of one’s consumption can be defined as investment for future consumption, but a larger definition of investment requires productive activa to change one unit of delayed consumption to become more than one unit of consumption in the future. Thus, with the presence of productive activa, present delayed consumption to be invest into the productive activa will increase its total utility.

Investment into productive activa can be form as real activa such as house, lands, gold, property, antiques, setting up a real business, and many other real investments or investment on business services. Beside that investor can also invest on financial activa in form of securities which is traded between investor through stock exchange.

As we know investor make investment by increases its utilities in form of financial welfares (Jogiyanto, 2012:7).

### **Financial Investment Types**

Investments into financial activa can be form of direct investment and indirect investment (Jogiyanto, 2012:7)

- Direct investment is done by direct buying of financial activa from a company through a intermediary or by other way.
- Indirect investment is done by buying stock from investment company which have portfolios of financial activas from other companies.

### **Direct Investment**

Direct Investment can be done by buying financial activa which is tradeable from money market, capital market, or derivative market.

Tradeable activa in money market are in form of activa which have low risk of failed, short due date with high level of liquidity. One sample of this activa is government bank deposits which is done many times in financial research as risk-free rate of return. The other example is negotiable certificates of deposits. Negotiable means resaleable.

While stock exchange its nature is for long term investment. The items that are tradeable in stock exchange are financial activas in form of fixed income securities and equity securities.

### **Indirect Investment**

Indirect Investment is done by buying securities from investment company. Investment company is a company who provide financial services by selling their stocks to the public and use the funds they gain to be invested into their portfolios.

### **Stock Exchange**

Generally stock exchange is a place or facility to merge demands and offer of long term financial instrument, usually more than one year (Samsul, 2006 : 43).

Purpose and benefit of stock exchange can be seen from three points of view, which are :

1. Point of view of a state
2. Point of view of issuers
3. Point of view of public (Samsul, 2006 :43)

#### **Point of View of a State**

Stock exchange is build to drive the economy of a country through private power and reduce the burden of the state

#### **Point of View of Issuer**

Stock exchange is a mean to gain additional capital of the concerned company to obtain funds in a lower cost and it can be achieved in stock market.

#### **Point of View of Public**

Public have a new means to invest their funds. Before, investment have been done by form of deposits, gold, lands or houses. Now it can be done by form of stock and obligation.

### **Stock Exchange Investment Instrument**

Instrument form in stock exchange is called effect in form of (1) stocks, (2) obligations, (3) right proof, (4) warrant proof, (5) derivative product or usually named *derivative* (Samsul, 2006 : 45)

Stock is a proof marks of having a company which the owners are also called stockholder or shareholder.

There are two kinds of stock, which are : (Samsul, 2006 : 45)

1. *Preferred Stock*

Kind of stock which have the right to first receive profit and have cumulative profit rights.

2. *Common Stock*

Kind of stock which will receive profit after preferred stock is paid. If a company gone bankrupt, then common stockholder can suffer first. Only a common stockholder can have voting rights in General Meeting of Stockholder Votes (RUPS).

**Obligation (Bonds)** is proof marks of having a company which have long term of debts to public which are three years up. Obligation holder will receive coupon as income from obligation which is paid once every three months or six months. When it is time for the company to pay off their bonds, bonds holder will receive coupon and main obligation.

**Right Proof** is a right to buy stock on a certain price in a certain period of time. Right to buy is belonged to the owner of old stocks.

**Warrant** is right to buy stock on a certain price in a certain period of time.

**Stock Index and Obligation Index** are index numbers which are tradeable for the purpose of speculation and hedging.

### **Types of Stock Exchange**

Types of stock exchange can be categorized into four markets, which are : (Samsul, 2006 : 46)

1. First Market
2. Second Market
3. Third Market
4. Fourth Market

#### **First Market**

First market is a place or facility for the company to offer their stock or obligation in the first time to the public. Here said a place because physically public buyer can meet the emission underwriter or sales agent to make order at the same time pay the order.

#### **Second Market**

Second market is a place or facility of effect trading transaction between *investor* and the price is set by investor through effect mediatory.

#### **Third Market**

Third market is effect trading transaction facility between *market maker* and *investor* and prices is set by *market maker*.

#### **Fourth Market**

Fourth Market is trading transaction facility between selling *investor* and buying *investor* without effect demiatory.

### **LQ – 45**

Stock exchange in Indonesia is still classified as stock exchange with low transactions (*thin market*), which its stock exchange are mostly are less active trade of the securities. IHSG which is including all noted stocks (which mostly are less active tradeable) is considered not properly used as indicator of stock exchange activities. Therefor on February 24<sup>th</sup> , 1997 it is introduced other alternative index which is Liquid Index – 45 (ILQ-45)(Jogiyanto, 2012 : 106). This index is formed just by 45 of most active stocks tradeable.

Considerations which are underlying the chosen stocks included in ILQ-45 are liquidity and capitalization with criterias as follows :

1. For the last 12 months, transactions of stock rates are included in 60 biggest in regular market.
2. For the last 12 months, market capitalization rate values are included in 60 biggest in regular market.
3. Have been recorded in BEI for at least 3 months.

ILQ-45 is renewed in each 6 months which are on early February and August.

### **Blue Chip Stocks**

Blue Chip Stocks are seed stocks in the exchange. A stocks can be categorize as Blue Chip Stocks if they qualified criterias as follows :

1. Capitalization.  
Stocks from *Blue Chip* company must have quiet large market capitalization (trillions). Therefor it would be difficult for the market to manipulate its prices.
2. Liquidify (excessive procentage of public ownerships).  
Although has quite large of stock capitalization, it still have to be seen how big the procentage of stock which are owned by the public (circulating in stock exchange). If public ownerships are too low then stock price will also be easily manipulated. Its stocks becomes unvalid in exchange therefor investor will be difficult to go in and out because typical trading is tend to be short term.
3. Long Period of Circulation in the Stock Market..  
Long period of circulation in the stock market is also important to know the stock's activities (track record). Time period of circulation in stock market is minimum of five years.
4. Company Performance and Stability of its Performance.  
And the most important is how the company performed for a certain period of time. Do the company gain profit each years? Does the profit increase years by years? Does the profit have enough significant than capital of the company? Basic rules that will be used for a good performance is company's growth in five years.

Performance Stability also needed to be considered. Only companies with constant profit gaining (if it loss in a year, the next year it must be get profit back and switch up the year before loss). And it confirms that the company each year is able to pay devident to their shresholder ([www.sahamok.com/blue-chip-stock](http://www.sahamok.com/blue-chip-stock)).

## **Definition of Return and Risk**

### **Return (Rate of Return)**

Investor purpose in investment is maximalise return, without forgetting investment risk factor it have to deal with. Return is one of the factors that motivated investor to invest and also reward of the bravery of the investor to bear the risk of the investment they take. Sources of investment return are composed from two main component, which are *Yield* and *Capital Gain (Loss)* (Tandelilin, 2001 : 48)

Capital Gain or Capital Loss is difference of relative recent investment price with former period price.

$$\text{Capital gain or capital loss} = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (\text{Jogiyanto, 2012 :206})$$

$P_t$  = Recent Investment Price

$P_{t-1}$  = Former Period Investment Price.

*Yield* is periodically cash income procentage upon investment price of certain period of an investment (Jogiyanto, 2012 : 206).

For stocks, *yield* is procentage of dividet upon last period stock price (Jogiyanto, 2012 : 206-207).

Therefor *return total* can be acclaimed as follows,

$$\text{Return} = \text{Capital Gain (Loss)} + \text{Yield}$$

$$\text{Return} = \frac{P_t - P_{t-1}}{P_{t-1}} + \text{Yield} \quad (\text{Jogiyanto, 2012 : 206-207}).$$

### **Risk**

Return and Risk are two inseparable things, because considerations of an investment is a trade-off both of these factors. Return and Risk have a positive relation, the bigger risk must be beared, the bigger compesated return is.

Risk is often connected with divergence and other deviation of outcome that is accepted from what is expected (Jogiyanto,2012 : 323).

According to Brigham and Houston, risk is defined as oppportunity of an unwanted situation (Brigham,Houston, 2010 : 323)

Risk of an asset can be analyzed by two ways : (1) in an independent basic which assets are reviewed separately, and (2) in a portfolio basic which owned asset is a part of a number of other assets in a portfolio (Brigham,Houston 2010 : 323). So, independent risk (*stand alone risk*) is an assets which become a risk that has to be dealing by an investor if they only have one certain kind of asset (Brigham, Houston 2010 : 323)

To be more useful, risk measurement implemented should have a certain value, it is necessary to conduct quantification of density of the probability distribution. One of the measurement tool is standard deviation (Brigham, Houston, 2010 : 329). The lower

standard deviation than the probability distributions will be more dense and the lower its stock risk.

Formula of standard deviation is ,

$$\text{Standard Deviation} = \sigma = \sqrt{\sum_{i=1}^n (r_i - \bar{r})^2 \cdot P_i} \text{ (Brigham, Houston, 2010 :331)}$$

$r_i$  = stock *return* number-i

$\bar{r}$  = stock return rates

$P_i$  = probability of gaining return

$N$  = period of measurements

If the only available data are return data samples of the several past period then standard deviation on return is also able to be estimated by using the following formula :

$$\text{Estimation } \sigma = s = \sqrt{\frac{\sum_{i=1}^N (r_i - \bar{r})^2}{N-1}} \text{ (Brigham, Houston, 2010 :331)}$$

$R_t$  = real level rate of past stock return

### **Coefficient Variant**

In measuring securities risk we also need to count the securities relatives risk. This relative risk is showing risk on each expected return unit (Tandelilin, 2001 : 561). It is necessary because risk information which only in form of variants and standard deviations can sometimes be misleading, especially when there are spreading highly expected return. Relative measurement that can be used is variant coefficient (Tandelilin, 2011 : 56)

Formula to count variant coefficient is :

$$\text{Variant Coefficient} = \frac{\text{Standard Deviasi Return}}{\text{Expected Return}}$$
$$= \frac{\sigma_i}{EeR_i} \text{ (Tandelilin, 2001 : 56)}$$

### **Hypothesis**

Hypothesis is temporary allegation about a phenomena. Which this phenomena has to be tested of its truth.

The hypothesis that will be tested are as follows :

1.  $H_0$  : expecting return rate of Blue Chip stock equals to zero  
 $H_1$  : expecting return rate of Blue Chip stock bigger than zero
2.  $H_0$  : expecting return rate of Non Blue Chip stock equals to zero  
 $H_1$  : expecting return rate of Non Blue Chip stock smaller than zero
3.  $H_0$  : expecting return rate of Blue Chip stock equals to Non Blue Chip  
 $H_1$  : expecting return rate of Blue Chip stock higher than Non Blue Chip
4.  $H_0$  : standard deviation of Blue Chip stock = standard deviation of Non Blue Chip stock

H<sub>1</sub> : Standard deviation of Blue Chip stock < standard deviation of Non Blue Chip Stock

## **RESEARCH METHODS**

### **DEFINITION OF VARIABLE AND DEFINITION OF OPERATIONAL**

#### **Definition of Variable**

This research variable is return and risk of stock which can be profitable or loss.

1. Profitable Return is *capital gain* while loss return is *capital loss*. Thus return variable in this research is *capital gain* and *capital loss*.
2. Risk is deviation of the expected result.

#### **Definition of Operational**

Operationalization of return variable in this research is using formula as follows :

$$\text{Capital Gain or Capital Loss} = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (\text{Jogiyanto, 2012 : 206})$$

P<sub>t</sub> = recent stock price

P<sub>t-1</sub> = a day before recent stock price

While risk in this risk is counted with the formula as follows :

$$\text{Estimation } \sigma = s = \sqrt{\frac{\sum_{i=1}^N (r_i - \bar{r})^2}{N-1}} \quad (\text{Brigham, Houston, 2010 :331})$$

#### **Types of Research**

Types of this research is descriptive analysis

#### **Sampling Technique**

Population of Research Data

Population of this research data are all stocks listed in Indonesia Stock Exchange periode February – July 2011.

Sampling techniques used in this research is *purposive sampling* because sample taken is adjusted with the needs of research.

#### **Research Samples**

Research sample is LQ-45 samples added with one stock of HM.Sampoerna because this stock in February-July 2011 period is not included in LQ-45 stocks. From LQ-45 stocks, they will be categorized in *Blue Chip* stock or *Non Blue Chip* stock categories.

## **Type of Data**

Data of this research is quantitative data because in form of numbers which are stock prices.

## **Data Source**

Data source of this research are secondary datas because they are obtained indirectly from the concerned company but from other media.

## **Hypothesis Testing Methods and Data Analysis**

Hypothesis is temporary allegation which will be tested of its truth. Thus this research is liked to compared the meaning of two group of variables then hypothesis testing is using Two Rates Differential Test with the help of statistic program of SPSS version 2.0.

The tested hypothesis are as follows :

1. Ho :  $\bar{R}$  Blue Chip = 0  
H1 :  $\bar{R}$  Blue Chip > 0
2. Ho :  $\bar{R}$  Non Blue Chip = 0  
H1 :  $\bar{R}$  Non Blue Chip < 0
3. Ho :  $\bar{R}$  Blue Chip =  $\bar{R}$  Non Blue Chip  
H1 :  $\bar{R}$  Blue Chip >  $\bar{R}$  Non Blue Chip
4. Ho :  $\check{O}$  Blue Chip stock =  $\check{O}$  Blue Chip Non Blue Chip stock  
H1 :  $\check{O}$  Blue Chip stock <  $\check{O}$  Blue Chip Non Blue Chip stock

To test differential meanings of two objects group research which are comparable then Test T is tested by means of Two Rates Differential Test formulated as follows :

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sum X_1^2 + \sum X_2^2}{n_1 + n_2 + n_2 - n_2}}} \quad (\text{Supranto, 2001 : 223})$$

Dimana :  $\bar{X}_1$  and  $\bar{X}_2$  = samples rates  
 $\sum X_1^2$  and  $\sum X_2^2$  = total quadrat samples  
 $n_1$  and  $n_2$  = number of members

## **RESEARCH RESULT AND INTREPRETING**

This research is using samples of 45 LQ-45 stocks and HM. Sampoerna stock in Februaty – July 2011 period.

From the observation of price stock fluctuation of LQ-45 it is described as follows :

**Table 1** Average Return of Blue Chip Stock and Non Blue Chip Stock

Num.	Stock	Average Return	Num.	Stock	Average Return
1	TLKM	-0,000039	1	ADRO	0,000973
2	PGAS	0,000272	2	ASRI	0,005441
3	ANTM	-0,000975	3	BBKP	0,002983
4	TINS	-0,001023	4	BBTN	0,001867
5	BBRI	0,003125	5	BJBR	0,000843
6	BMRI	0,002236	6	BNBR	0,000702
7	BBNI	0,002771	7	BRAU	0,000449
8	INTP	0,000833	8	BSDE	0,002922
9	INDF	0,002674	9	BTEL	0,005447
10	ISAT	0,000948	10	CPIN	0,006161
11	BBCA	0,003499	11	DOID	0,001589
12	BDMN	-0,000508	12	ELSA	-0,000040
13	ASII	0,003210	13	ELTY	0,002668
14	BUMI	0,000682	14	ENGR	0,007432
15	INCO	-0,000971	15	GJTL	0,005321
16	GGRM	0,003014	16	INDY	-0,000100
17	HMSP	0,002063	17	ITMG	0,000959
18	SMGR	0,001479	18	JSMR	0,002253
19	UNVR	0,000353	19	KLBF	0,002411
20	UNTR	0,002089	20	LPKR	0,002987
21	MEDC	-0,001965	21	LSIP	-0,006416
22	AALI	0,000462	22	PTBA	0,000461
			23	SMCB	0,000569
			24	UNSP	0,003738
	<i>RETURN RATE</i>	0,001085		<i>RETURN RATE</i>	0,002114

From table above, it can be seen that by choosing *Blue Chip* stocks probability of facing loss by investor is bigger than investment on *Non Blue Chip*. It is notable from 22 *Blue Chip* stock observed 6 stocks generated negative return rate while on *Non Blue Chip* there are only 3 stocks from 24 observed stock which generated negative return rate. It is showing that *Blue Chip* stock is likely have decreasing price more often than *Non Blue Chip*. And actually return rate of overall *Blue Chip* stocks are lower than return rate of *Non Blue Chip* stock which on *Blue Chip* stock is 0,001101 or 0,1101% and on *Non Blue Chip* is 0,002114 or 0,2114%. And after the return rate was meaning tested, it is obtained that both return from *Blue Chip* stock and *Non Blue Chip* stocks are not different significantly because significance level of data management result is 14,3% while significance level of this research is 5%. But by investing on *Blue Chip* stocks or *Non Blue Chip* stocks investor will gain return above zero nominally but not big enough to be categorized as profitable because it is proven statistically that return level on *Blue Chip* stock and *Non Blue Chip* stock are generating return not different than zero.

**Table 3** Standard Deviation *Blue Chip* stock and *Non Blue Chip*

Num	Stock	Standard Deviation	Num.	Stock	Standard Deviation
1	TLKM	0,019164	1	ADRO	0,018067
2	PGAS	0,032908	2	ASRI	0,042188
3	ANTM	0,012643	3	BBKP	0,032101
4	TINS	0,017064	4	BBTN	0,017820
5	BBRI	0,025408	5	BJBR	0,017730
6	BMRI	0,018444	6	BNBR	0,026121
7	BBNI	0,016259	7	BRAU	0,017202
8	INTP	0,016889	8	BSDE	0,024383
9	INDF	0,015353	9	BTEL	0,046310
10	ISAT	0,015410	10	CPIN	0,068282
11	BBCA	0,025995	11	DOID	0,099805
12	BDMN	0,016946	12	ELSA	0,027305
13	ASII	0,017730	13	ELTY	0,022935
14	BUMI	0,020123	14	ENGR	0,030244
15	INCO	0,011745	15	GJTL	0,067023
16	GGRM	0,026549	16	INDY	0,016341
17	HMSP	0,017979	17	ITMG	0,028917
18	SMGR	0,015142	18	JSMR	0,012691
19	UNVR	0,013194	19	KLBF	0,042076
20	UNTR	0,017370	20	LPKR	0,023180
21	MEDC	0,019316	21	LSIP	0,075641
22	AALI	0,013348732	22	PTBA	0,011591
			23	SMCB	0,019319
			24	UNSP	0,064765
	RISK RATE	0,018408		RISK RATE	0,035502

From table above, it is seen that risk of *Blue Chip* stocks is lower than *Non Blue Chip* stocks which is 1,8408% for *Blue Chip* stocks and 3,5502% for *Non Blue Chip* stocks. It is confirmed by statistical test result which shows risk of *Blue Chip* stocks is indeed lower than *Non Blue Chip* stocks with significance level 0%.

## CONCLUSION AND SUGGESTION

### Conclusion

1. From gained return, it can be concluded that *Blue Chip* stocks is not able to give higher return than *Non Blue Chip* stocks
2. In investment on *Blue Chip* stocks or *Non Blue Chip* stock the return obtained is not big enough although it is a positive value or indeed profitable.
3. Risk of *Blue Chip* stocks is indeed lower than *Non Blue Chip* stocks.

## **SUGGESTION**

1. In investment in Indonesia Stock Exchange there is no need to fear of loss because from six months of observation, it is showed a positive result both on *Blue Chip* stock or *Non Blue Chip* stocks
2. In investment in Indonesia Stock Exchange there is no need to be a fanatic on choosing *Blue Chip* because from the observation shows *Non Blue Chip* stocks are capable to gain higher return than *Blue Chip* stocks.
3. If the investor do not like high risk or risk averse then the investor should choose *Blue Chip* because it is proven that its risk stock is lower than *Non Blue Chip* stock.

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