THE INFLUENCE OF MACROECONOMIC FACTORS ON STOCK MARKET INDEX
(Study on LQ45 Index for August 2011–July 2016)

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ABSTRAK

Penelitian ini bertujuan untuk mengamati pengaruh simultan dan parsial factor ekonomi makro yang diantaranya adalah harga minyak dunia, nilai tukar, tingkat inflasi dan tingkat suku bunga terhadap indeks LQ45. Penelitian ini menggunakan explanatory research dengan pendekatan kuantitatif, dengan 60 jumlah sampel selama 10 periode indeks LQ45 pada Agustus 2011 – Juli 2016. Data yang digunakan adalah data sekunder dengan tipe data time series. Analisa yang digunakan dalam penelitian ini adalah analisis deskriptif, inferensial statistik dan regresi linear berganda. Hasil penelitian menunjukkan bahwa 1) Variabel ekonomi makro harga minyak dunia, nilai tukar, tingkat inflasi dan tingkat suku bunga memiliki pengaruh signifikan secara simultan terhadap indeks harga saham, indeks LQ45; 2) Variabel harga minyak dunia tidak memiliki pengaruh secara parsial terhadap indeks LQ45; 3) Variabel nilai tukar memiliki pengaruh positif dan signifikan secara parsial terhadap indeks LQ45; 4) Variabel tingkat inflasi tidak memiliki pengaruh secara parsial terhadap indeks LQ45; 5) Variabel tingkat suku bunga memiliki pengaruh negative dan signifikan secara parsial terhadap indeks LQ45.

Kata Kunci: Indeks LQ45, Harga Minyak Dunia, Nilai Tukar, Tingkat Inflasi, Tingkat Suku Bunga

ABSTRACT

This research aims to observe the simultaneous and partial effect of macroeconomic factors which are world oil price, exchange rate, inflation rate and interest rate on LQ45 index. This research uses explanatory research and quantitative approach with the total of 60 samples for 10 periods of LQ45 index from August 2011-July 2016. The data collection method is using documentation with secondary time series data. The analysis method for this research is using descriptive analysis, inferential statistics and multiple linear regression. The results show that 1) The world oil price, exchange rate, inflation rate and interest rate variables have a significant effect on LQ45 index simultaneously; 2) The variable world oil price has no significant effect on LQ45 index partially; 3) The variable exchange rate has a positive and significant effect on LQ45 index partially; 4) The variable level of inflation rate has no significant effect on LQ45 index partially; 5) The variable interest rate has a negative and significant effect on LQ45 index partially.

Keyword: **LQ45 Index, World Oil Price, Exchange Rate, Inflation Rate, Interest Rate**

A. INTRODUCTION

Investment activities in Indonesia have started to develop since the 17th century where Indonesia is still in the Dutch colony and still growing until now. Since 1994 until 2009 the daily transaction in Indonesia Stock Exchange (IDX) increased by 4000 percent. (sahamok.com accessed on September 21, 2016) It proves that the Indonesian people are become more receive the capital market and assume that its existence can be used to generate profits for both investors and companies that issues stocks.

The investors that interested to investing in capital market should understand the risks that will be faced. According to Fahmi (2014:461) there are three risks that will associated the investment activity which are systematic risk, unsystematic risk and total risk. Systematic risk is the risk that will affects the whole stock market and therefore it cannot be reduced or diversified away. A company cannot control systematic risk individually, while unsystematic risk is restricted to individually stock or security's return which are unique to a company. Then the total risk is the combination of systematic risk and unsystematic risk.

Noting macroeconomic become systematic risk in investing is important, the investor also can not dismiss it as something that will be faced. As known, the macroeconomic variables as above continue to fluctuate each period so that the indicated effect on investment activity in the capital market. Macroeconomic factors that will be used as the independent variables are world oil prices, exchange rates of rupiah against dollar, level of inflation and interest rate. An accurate estimation of the relationship between macroeconomic variables and performances of the stock market index can enable investors to make better investment decisions. At the same time, it might help policy makers to make effective decisions and encourage more capital inflows into the capital market of the country.

The first factor that may affect the stock price is world oil price. Various industries around the world still rely on fuel oil which is refined crude oil products as fuel for production factors. Trading of crude oil causing a chain effect on the world economy. Due to increasing economic growth in developing countries such as Indonesia, resulting in demand for crude continues to rise. The oil price fluctuation will impact the company's production costs. When the oil price tends to increase the production-cost will follow to increase and make the price of goods produced rise. The company need to make better perception to the customer and so the goods sold will increase too, then the stock price will be affected by the investor sentiment. So, the stock price following the increasing of world oil price.

Another macroeconomic factor beside the world oil price is exchange rate. According to Bodies, Kane and Marcus (2011:550), the exchange rate is the rate which domestic currency can be converted into foreign currency. Problems will arise when a country trade with other countries, where each country uses a different currency. So, the exchange rate is the price that must be paid by a country's currency for another country's currency. If the exchange rate of rupiah is strengthening then the company do not need to confuse about the value, the problem exist when the rupiah getting weakened then the company should take more effort so they will not lose the profit because of the higher production cost.

Another major macroeconomic goal in every country is inflation rate. Inflation can have serious consequences. Inflation occurs when there is an increase in the general level of prices. Inflation does not mean that prices are high, but rather that the prices are increasing continously. According to Bodies, et al (2011:552) the rate at which the general level of prices rise continuously is called inflation. High rates which is above 10% per year of inflation often are associated with "overheated" economies, that is, economies where the demand for goods and services are outstripping productive capacity which leads to upward pressure on prices, so can be concluded that inflation is a process of rising prices in general and an ongoing basis with regard to market mechanisms that can be caused by various factors, among others, increased of consumption, high liquidity in the market to trigger consumption and speculative until their disfluencies goods distribution.

Another factor affecting the stock price movements are interest rates. Investors will continuously watch the interest rate. According to Tandelilin (2001:49) when interest rates are in a higher position than the stock return, then investors will sell stocks and divert investment funds in the banking sector, which called the savings or bank deposits. This is due to investments in banking provides a lower level risks for investors, so that the interest rate can affect investor sentiment in the stock market. Conversely, a decline in interest rates could also encourage investors shift their investment from savings or deposits to the capital market (shares) so that trading liquidity will increase, which will influence the stock price.

A. LITERATURE REVIEW

1. LQ45 Index

LQ45 index consists of 45 companies with high liquidity and market capitalization, which are selected by multiple selection criteria. In addition to an assessment of liquidity, the selection of these issuers also considers the market capitalization. Since its launch in February 1997 primary measure of liquidity transactions are transactions in the regular market. In accordance with market developments and to further refine the criteria of liquidity, then since the review in January 2005, the number of trading days and the frequency of transactions entered as a measure of liquidity. So, the criteria of an issuer to be included in the calculation of the index LQ45 is to consider the following factors:

a. Listed on the Stock Exchange at least 3 months
b. Activities of transactions in the regular market value, volume and frequency of transactions
c. The number of trading days in the regular market
d. The market capitalization at the specified time period

In addition to considering the criteria liquidity and market capitalization above, will be also the financial situation and growth prospects of the company. Indonesia Stock Exchange regularly monitor the performance of issuers included in the index calculation LQ45. Every three months to do an evaluation of the movement sequence of these stocks. The replacement stock will be conducted every six months at the start of February and August.

2. World Oil Price

The crude oil is one of the vital energy. This is because the processed crude oil is a source of energy for production and transportation activities in the company. Currently the reference price of crude oil that is commonly used is the West Texas Intermediate (WTI) or light-sweet. Crude oil traded on WTI is a crude oil which has a high quality, because it has a low sulfur content and suitable to be used as fuel, so the price of oil has been a standard for oil trade in the world. WTI oil price is generally higher five to six dollars rather than OPEC oil prices and a higher one to two dollars compared to the Brent oil price (thebalance.com accessed on October 30, 2016). This was the reason why the price of WTI oil becomes standard size for trading oil in America. Determination of the

quantity of oil supplied by giving a price according to the quality of products.

The world oil price is an important factor in the economy of a country including Indonesia. This is because there is no single country that does not rely on oil and be able to immediately decrease its consumption due to price increases. Oil become the top energy source use to sustain the process of production as compared to other energy sources, so that fluctuations in the price of oil is very sensitive to economic conditions or economic growth in each country. World oil prices that used as the independent variable in this study is using WTI type of world oil price. The standard price of WTI oil is also used by the American states as a standard size oil trading. While the size of the units used are bbl or barrels are also used in the American state.

3. Exchange Rate

In order for individuals or companies in one country to purchase goods and services from another country, they must acquire the currency of that country. The price of the overseas currency in terms of the home country's currency is the exchange rate. According to Nellis and Parker (2004:352) an exchange rate is the price at which the currency of one country is exchanged in the foreign exchange market for the currency of another country. There are three kinds of determination of the exchange rate system, according to Hady (2001:44) the system includes:

a. Fixed Exchange Rate System
   A fixed and stable exchange rate system is necessary that the cash flows of international trade and investment between countries can run smoothly.
b. Floating Exchange Rate System
   This system applies exchange rate of a currency is determined by the forces of demand and supply in the foreign exchange market. Floating exchange rate system is divided into two:
   1) Freely Floating Rate or Clean Rate is the system in the absence of government interference in the demand and supply of foreign exchange.
   2) Managed Float or Dirty Float is a system with government intervention in supply and demand in the foreign exchange market. This system is widely used in various countries around the world.
c. Pegged Exchange Rate System
   The exchange rate system that done by linking the currency value of a country or a particular currency. According to Dornbusch, Fischer and Starz (2004:485),

commonly known as the exchange rate or currency exchange rates in various transactions or buying and selling foreign currency, known there are four types, which are:

a. Buying Rate is the rate imposed if a bank purchases foreign currency.
b. Selling Rate is the rate imposed a bank if the bank performs foreign exchange sales.
c. Middle Rate is the middle rate between selling and buying rate currency against international currencies, which are set by the central bank at a certain moment.
d. Flat Rate is the exchange rate prevailing in the transaction of buying and selling bank notes and traveller cheque, where the rate is already taken into account the promotion and other costs.

This study will use Middle Rate as a variable to determine the effect of the LQ45. Indicator exchange rate used is the Indonesian Rupiah against the US Dollar. Exchange rate data will be taken from Bank Indonesia as the central bank for Indonesia.

4. Inflation Rate

According to Fahmi (2014:293), inflation is a situation where the declining value of the currency of a country and the rising prices of goods which takes place systematically. Inflation is a dangerous situation for the economy of a country and capable of causing a great influence and very difficult to overcome quickly. Inflation occurs when there is an increase in the level of prices generally. It does not mean that prices are high, but rather that they are increasing continously. According to Hubbard, Garnett, Lewis and O'Brien (2014:204) inflation is a price increase in a sustainable economy at a general level from one year to another year.

According to Welch (2010:119) the primary price indexes to measure inflation are the Consumer Price Index (CPI), which focuses on goods and services typically purchased by households; The Producer Price Index (PPI), which focuses on production inputs purchased by businesses; and The GDP Price Index, which measures price changes in the economy as a whole, each index focusing on the prices of a collection of goods and services important to a particular segment of the economy.

According to Hubbard et al (2014:206) the Consumer Price Index (CPI) is the most widely used measure of inflation. Policy-makers use the CPI to track the state of the economy. Businesses use it to help set the prices of their products and the wages and salaries of their employees. The CPI measures changes in the prices of goods and services that consumers typically purchase, such as food, clothing, and daily needs. Producer Price Index (PPI) measures the goods and services price that businesses buy, either for further processing or for sale to a consumer directly. The GDP Price Index is used to measure price changes for the entire economy and is calculated in a slightly different way from the CPI and PPI. This study will use the CPI rate to measure the inflation rate.

5. Interest Rate

According to Dornbusch et al (2004:44) interest rates, expressed the level of payments on loans or other investments, over the repayment agreement, which is expressed in annual percentage. The interest rates used in this study is a benchmark interest rate issued by Bank Indonesia, commonly known as BI Rate. According to Bank Indonesia that have rights to announce the BI Rate, BI Rate is the interest rate that describes the policy attitude or monetary policy stance set by Bank Indonesia and informed to the public.

This research use the data of Sertifikat Bank Indonesia (SBI) to represent the interest rate variable. Sertifikat Bank Indonesia (SBI) is one of debt instrument because this asset requires the issuer to make payments back within a certain amount consisting of the principal amount plus interest. SBI interest rate determined at auction at the headquarters of Bank Indonesia on Wednesday every week. According to Suta (1999) in scientific papers, if the SBI interest rate increases, the deposits interest rate will also increase so that the investments in banking deposits is more attractive to the investor, on the other hand the interest rate of bank loans will also rise which will cause a drop in revenues from the company because of the increased amount of interest payments on the debt so investment in stocks would likely be reduced while if SBI interest rate has decreased, SBI will be a less attractive investment option compared to other investment instruments such as stocks or bonds so that the demand of investment instruments consequently increased the price of stock in the stock market.

6. Hypothesis

Research hypothesis according to Sugiyono (2009: 96), the hypothesis is a temporary answer to the research problems formulation, in which the

formulation of research problems has been expressed in the form of questions. Based on the background and the literature review above, the hypothesis formulations for this research are:

H1 : The independent variables of Macroeconomic factors which are World Oil Prices (X1), The Exchange Rate of Rupiah against Dollar (X2), Inflation Rate (X3) and Interest Rate (X4), influence on LQ45 Index (Y) simultaneously.

H2 : The independent variables of Macroeconomic factors which are World Oil Prices (X1), The Exchange Rate of Rupiah against Dollar (X2), Inflation Rate (X3) and Interest Rate (X4), influence on LQ45 Index (Y) partially.

B. RESEARCH METHOD
1. Research Type

The type of research used in this research is explanatory research with quantitative approach with multiple linear regression. Those type of research used to understand the influence between the independent variables which are world oil price (X1), exchange rate (X2), inflation rate (X3) and interest rate (X4) on the dependen variable which is LQ45 index (Y).

2. Research Location

This research will be implemented in official website of Indonesia Stock Exchange (www.idx.co.id), World Oil Price Site (www.quandl.com) and Bank Indonesia website (www.bi.go.id). The reason for choosing the location in those place is due to the availability of the data required in research

3. Variable & Operational Definition

According Sugiyono (2008:38) the definition of variables is a variety of forms applied by the research to be studied in order to obtain information about it, then drawn conclusions. Variables to be analyzed is divided into two, namely:

a) Independent Variables, is a variable that affects or is the cause of the change or the emergence of the dependent variable. This variable is usually called the independent variable and is symbolized by the letter (X). In this study, there were four independent variables, namely:

X1 = World oil prices that uses WTI oil price
X2 = Exchange rate that uses middle rate
X3 = Inflation Rate that uses CPI rate

X4 = Interest Rate that uses SBI rate

b) Dependent Variable, is a variable that is affected or which become due for their independent variables. This variable is usually referred to as the output variable, criterion or consequent. In this study, the dependent variable in question is:
Y = LQ45 Index (Y)

4. Population & Sample

According to Sugiyono (2008: 115) population is generalization region consisting of objects or subjects that have certain qualities and characteristics defined by the study to be learned then drawn conclusions. The population in this study is LQ45 index for August 2011 – July 2016.

The sample of this study is using saturated sample. The saturated sampling is a technique when all members of the population used as the sample.

5. Data Collection Technique
a. Source of Data

This study data is sourced from secondary data. Analysis of the data used in this research is to perform quantitative analysis using statistical calculation technique. Analysis of the data obtained in this study will use the help of computer technology are statistical data processing program, known as SPSS (Statistical Package for Social Sciences) 24.0.

Secondary data is data obtained by researchers indirectly through an intermediary medium such as personal letters, books of references, journals, literature and official documents of the company. The secondary data for the LQ45 Index in this study were obtained from the Indonesia Stock Exchange (www.idx.co.id) sites in the form of historical data abaout LQ45 index. The secondary data for world oil price will taken from the trusted website (www.quandl.com) and exchange rate, inflation rate and interest rate data will taken from Bank Indonesia website (www.bi.go.id).

b. Data collection method

Data collection techniques used in this study is the secondary documentation data. Documentation is a method of data collection by reading and studying the documents, archives, official letters, and reports of companies that deal with the problems examined then the data is examined and processed. The type of data is time

series because the data consist data that in chronological order

6. Data Analysis Method

After the data collection is done, the next step is to analyze the data already obtained. The purpose of data analysis is to simplify the data into a form that is easy to read and interpret, thus providing a clear picture of an inquiry. Data analysis techniques used in this study are:

a. Descriptive Statistics

According to Sugiyono (2015:207) Descriptive statistics are statistics to analyze the data with the description or depiction of data that have been collected previously and did not intend to make valid conclusions. In other words, just look at the general description of the data obtained. Description of data seen from the average (mean), standard deviation, maximum and minimum values.

b. Regression Analysis

Regression analysis aims to analyze the influence of independent variables on the dependent variable. The study involved four independent variables thus using multiple regression analysis. Method of multiple linear regression analysis was used to measure the relationship between the independent variable and dependent variable using SPSS 24.0 for windows.

c. Hypothesis Testing
1) Determination Coefficient (R^2) Analysis

Determination coefficient (R^2) essentially measure how far the ability of the model to explain variations in the dependent variable (Ghozali, 2009: 87). Determination (R^2) test is an important measure in the regression, as this may inform whether or not the regression model estimated. The coefficient of determination reflects how large the variation of the variable Y or the dependent variable that can be explained by the variable X or independent variables.

2) Simultaneous Test (F Test)

The statistical test F indicate whether all the independent variables included in the model have influence together or bonded to the dependent variable (Ghozali, 2009: 88). F statistical test used to determine the effect of all independent variables included in the regression model together with dependent variable being tested at a significant level of 0.05.

3) Partial Test (t Test)

T statistical test indicates how far the influence of the independent explanatory variables individually or in explaining the variation of the dependent variable and is used to determine whether or not the effect of each independent variable on the dependent variable individually tested at the level of 0.05 (Ghozali, 2009: 88).

C. RESULT AND DISCUSSION
1. Regression Test Result

Multiple linear regression analysis is used to observe the amount of contribution for the independent variables which are World Oil Price (X1), Exchange Rate (X2), Inflation Rate (X3) and Interest Rate (X4) on dependen variable which is LQ45 Index (Y). Based on the results of multiple linear regression testing can be seen the relationship between the independent variables on dependent variable generate an equation Y = 0.012X1 + 1.054X2 – 0.009X3 – 0.086X4 + ε

2. Hypothesis Testing
a. Determination Coefficient (R^2) Analysis Result

The result from SPSS v24.0 for Windows, shows that the value of Adjusted R Square is 0.977 or 97.7%. Thus, it can be said that the influence of variable World Oil Price, Exchange Rate, Inflation Rate and Interest Rate is 97.7% while the remaining 2.3% is influenced by other variables outside the research.

b. Simultaneous Test (F Test) Result

The calculated F value in this study is 627.857, that number greater than the F table value which is 2.527 and with a significance level of 0.000 which is smaller than α 0.05. It can be concluded that there is significant influence between variable World Oil Price, Exchange Rate, Inflation Rate and Interest Rate on LQ45 Index simultaneously.

c. Partial Test (t Test) Result

The second hypothesis is using the t test. Partial regression model testing is used to determine whether each independent variable (X1), (X2), (X3) and (X4) regression models forming individually have a significant effect on dependent variable (Y) or not. The t-test is done by comparing the t-value of each independent variable with a

value table with a degree of error of 5% (α = 0.05). The results and the descriptions of the study are:

1) Based on the result above, t value for World Oil Price is 0.275, this is influence with significance value is 0.785 which is greater than α 0.05 this indicates that variable World Oil Price has no significant effect on variable LQ45 Index partially.
2) Based on the result above, t value for Exchange Rate is 17.434, this is influence with significance value is 0.000 which is smaller than α 0.05 this indicates that the variable Exchange Rate has a significant effect on variable LQ45 Index partially.
3) Based on the result above, t value for Inflation Rate is -0.407, this is influence with significance value is 0.685 which is greater than α 0.05 this indicates that variable Inflation Rate no significant effect on variable LQ45 partially.
4) Based on the result above, t value for Inflation Rate is -2.073, this is influence with significance value is 0.043 which is lower than α 0.05 this indicates that variable Interest Rate has a significant effect on variable LQ45 Index partially.

3. Discussion
a. The Relationship of Independent Variables on Dependent Variable Simultaneously

The simultaneous test result showed that World Oil Price, Exchange Rate, Inflation Rate and Interest Rate have a significant effect on LQ45 Index simultaneously. Hypothesis that World Oil Price, Exchange Rate, Inflation Rate and Interest Rate has a significant effect on LQ45 Index can be accepted. F test result showed a significant result that is lower than 0.05 that the whole it can be stated statistically independent variables simultaneously have significant effect on LQ45 index. This result is accordance with Maulidya (2013) research.

b. The Relationship of World Oil Price (X1) on LQ45 Index Partially

Based on the test result of the second hypothesis that World Oil Price has no significant effect to LQ45 index partially. This is shown by the results that the significant value for variable World Oil Price is higher than 0.05. Hypothesis that World Oil Price has a significant effect on LQ45 Index partially cannot be accepted. The test result is consistent with the research conducted by Maulidya (2013) and Nugraheni (2016).

The LQ45 index consists of 45 companies that have highest liquidity and market capitalization in stock market and the member will be changed every six months through evaluation based on the terms and conditions. However, during the observation period most of the companies on the LQ45 index are companies that are not directly related to the world oil commodity, which are the companies whose revenues are not dependent on the world oil price. According to Pardede (2016), companies directly related to the world oil commodities are the companies that included in the coal and oil and gas sectors in which the LQ45 index is consist only 7 to 8 percent during the observation period. Therefore, the rise or fall of world oil prices will not directly affect the earnings of the majority companies in the LQ45 index and does not affect the value of the LQ45 index.

c. The Relationship of Exchange Rate (X2) on LQ45 Index Partially

Based on the test results, Exchange Rate has a positive significant effect to LQ45 index partially. This is shown by the results of research shows the significant value for variable Exchange Rate is lower than 0.05. This test result has similarities with the study conducted by Nugroho (2008) but not accordance with the research conducted by Aurora and Riyadi (2013) and Maulidya (2013) which said that variable Exchange Rate has negatively effect on LQ45 Index and Abid (2016) study show that the Exchange Rate variable has no effect on LQ45 Index.

The positive effect of the exchange rate on the LQ45 index is thought to be the result of companies that also sell goods manufactured abroad or also called exports. If the exchange rate depreciates (the nominal increase but the value of money decreases) it will affect the general price of goods in the country, so the purchasing power of the people weakens, but it is profitable for other countries that import goods from Indonesia because it assumes that the price of goods in Indonesia decreased so that will increase the import demand. This situation triggers export-oriented companies to increase productivity, thereby increasing the company's profit margin which will then increase share prices and affect the LQ45 index.

d. The Relationship of Inflation Rate (X3) on LQ45 Index Partially

The results of this study stated that variable Inflation Rate negative effect is not significant to

LQ45 Index partially. The results of this study have similarities with previous research conducted by Nugroho (2008), Riadi. A et al (2013), Aurora and Riyadi (2013) and Maulidya (2013) which claimed that the Inflation Rate has no effect on LQ45 Index.

The inflation rate during the observation period is included in safe inflation due to its rate which is less than 10% per year, the average of inflation rate during the observation period is 5.61% per year. The inflation rate does not significantly affect the prices as a whole and is still within normal levels. Investors believe that the inflation rate occurring during the observation period is still at a reasonable level and is awaiting the government's decision to overcome the inflation rate. So, the decision of investor in its investment activity is not influenced by inflation rate.

e. The Relationship of Interest Rate (X4) on LQ45 Index Partially

The results of this study stated that variable Interest Rate has a significant effect on LQ45 Index partially. This is shown by the results of research on a table that shows the significant value for variable Interest Rate is lower than 0.05. Hypothesis that Interest Rate has a significant effect on LQ45 Index partially is accepted. The test result is consistent with the research conducted by Nugroho (2008), Riadi. et al (2013), Aurora and Riyadi (2013) and Maulidya (2013) but not in accordance with research conducted by Abid (2016).

This result indicates that the interest rate is still become the parameter of the investment instrument which is the reference for the society, this is because the low interest rate is considered less profitable for investors, so investors prefer to invest their capital in the stock market and make the LQ45 index an increasing trend during the study period.

D. CONCLUSION AND SUGGESTION
1. Conclusion

This research is analyzing the influence of World Oil Price, Exchange Rate, Inflation Rate and Interest Rate as the independent variables and LQ45 Index as the dependent variable. This research held for 10 periods of LQ45 Index, from August 2011 until July 2016. Based on the problems that have been formulated and the results of data analysis it can be concluded as follows:
a. Simultaneous effect was performed using F test. F test results indicate that the independent variable World Oil Price, Exchange Rate, Inflation Rate and Interest Rate has a significant effect on LQ45 Index simultaneously.
b. T test results showed that the independent variable Exchange Rate and Interest Rate have a significant influence on LQ45 Index partially. Other independent variables World Oil Price and Inflation Rate showed no significant effect on the LQ45 Index partially.

2. Suggestion
Based on the conclusions of the research, the suggestions that can be considered are:
a. For next research, this study uses variables World Oil Price, Exchange Rate, Inflation Rate and Interest Rate, to get better results then in subsequent research can be added for other variables such as the level of national income, the money supply and so on.
b. For next research in order to obtain more accurate research results, research should next add a period of time, because time is used in this study only includes monthly data over a period of five years.
c. For prospective investors and investors that want to invest in stocks included in LQ45 Index then to consider the macroeconomic variables that affect the value of LQ45 Index such as World Oil Price, Inflation Rate and Interest Rate and especially Exchange Rate and Interest Rate, as seen from the results of the study indicate that the macroeconomic variables that have an impact on changes in the value of LQ45 Index.

E. REFERRENCES

Abid. 2016. The Effect of Macroeconomy and Global Index on LQ45 Index and its Impact on Investment Decision: The Case Study at Indonesian Stock Exchange. *Serials Publications.* 13(2), 2016: 473-489.

Aurora, T. Riyadi, A. 2013. Pengaruh Inflasi, Suku Bunga dan Kurs Terhadap Indeks LQ45 di Bursa Efek Indonesia. *Jurnal Dinamika Manajemen Vol 1. No.3 Juli – September 2013.*

Bodie Zvi, et al. 2011. *Investments 9th Edition.* New York: Mc-Graw Hill.

Crude Oil Prices: Trends and Impact on the Economy and You https://www.thebalance.com/crude-oil-

prices-trends-and-impact-on-the-economy-and-you-3305738 accessed on October 30, 2016

Dornbusch et al. 2004. *Makroekonomi.* Diterjemahkan oleh Julius A. Mulyadi. Jakarta: PT. Global Media Edukasi.

Fahmi, Irham. 2014. *Pengantar Manajemen Keuangan.* Bandung: Alfabeta.

Ghozali, Imam. 2009. *Aplikasi Analisis Multivariat dengan Program SPSS*. Semarang: Universitas Dipenogoro.

Hady, Hamidy. 2001. *Valas untuk Manajer (Forex for Managers).* Jakarta: Ghalia Indonesia.

Hubbard Glenn, et al. 2014. *Macroeconomics 3rd Edition.* Australia: Pearson.

Indeks LQ45 http://www.sahamok.com/bei/indeks-bursa/indeks-lq-45/ accessed on October 14, 2016.

Maulidya, R. 2013. The Influence of BI Rate, Level of Inflation, World Gold Price, Oil Price, and IDR Exchange Rate against USD towards The LQ45 Indexes in The Indonesian Stock Exchange. *Minor Thesis.* Universitas Jendral Soedirman.

Nellis, G. Joseph and Parker, David. 2004. *Priciples of Macroeconomics*. England: Pearson Education Limited.

Nugraheni, Dayu. 2016. Pengaruh Tingkat Suku Bunga *The Fed*, Nilai Tukar, Harga Minyak Dan Indeks Saham Regional Terhadap Indeks LQ45 di BEI (Periode Tahun 2010-2015). *Minor Thesis.* Faculty of Economy and Business. Universitas Sebelas Maret.

Nugroho, Heru. 2008. Analisis Pengaruh Inflasi, Suku Bunga, Kurs dan Jumlah Uang Beredar terhadap Indeks LQ45. *Thesis*. Diponegoro University.

Perkembangan Bursa Efek Indonesia tahun 1994 – 2009 http://www.sahamok.com/perkembangan-bursa-efek-indonesia-1994-2009/ accessed on September 21, 2016

Riadi, A et al. 2013. Pengaruh Tingkat Inflasi, Tingkat Suku Bunga Sertifikat Bank Indonesia, serta Nilai Tukar Rupiah terhadap *Jakarta Islamic Index* (Jii) dan Indeks LQ45.

Fakultas Ilmu Administrasi. Universitas Brawijaya.

Sugiyono. 2008. *Metode Penelitian Kuantitatif Dan Kualitatif Dan R&D*. Bandung: Alfabeta.

_____. 2009. *Metode Penelitian Pendidikan*. Bandung: Alfabeta.

_____. 2008. *Metode Penelitian Kuantitatif Dan Kualitatif Dan R&D*. Bandung: Alfabeta.

_____. 2015. *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif dan R&D.* Bandung: Alfabeta.

Suta, I Putu Gede Ary. 1999. *Pengaruh Ekonomi Makro Terhadap Pasar Modal*, Jakarta.

Tandelilin, Eduardus. 2001. *Analisis Investasi dan Manajemen Portofolio*. Yogyakarta: BPFE.

Welch, J. Patrick and F. Gerry. 2010. *Economics: Theory and Practice 9th Edition.* United States of America: John Wiley & Sons, Inc.