THE INFLUENCE OF MACROECONOMIC VARIABLES TOWARD JAKARTA COMPOSITE INDEX ON INDONESIA STOCK EXCHANGE

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Abstrak: Penelitian ini bertujuan untuk mendapatkan bukti empiris variabel makroekonomi: jumlah uang beredar, produk domestik bruto, inflasi, BI Rate, nilai tukar IDR / USD terhadap IHSG. Penelitian ini dilakukan dengan cara memeriksa data pada periode Januari 2007 - Desember 2016. Teknik penelitiannya menggunakan analisis regresi linier berganda. Hasilnya menunjukkan bahwa Money Supply dan GDP berpengaruh positif namun tidak signifikan, BI Rate dan nilai tukar IDR / USD negatif dan berpengaruh signifikan terhadap Indeks Harga Saham Gabungan.

Kata kunci: Supply uang, Pendapatan Bruto Domestik, Inflasi, BI rasio, rasio pertukaran uang IDR/USD, JCI

Abstract: This study aimed to get empirical evidence macroeconomic variables: money supply, gross domestic product, inflation, BI Rate, exchange rate IDR/USD toward JCI. This research conducted by examine the data in the period January 2007 – December 2016. The research technique is using multiple linear regression analysis. The result showed that the Money Supply and GDP positive but not significant effect, inflation negative and not significant, BI Rate and exchange rate IDR / USD negative and significant effect on the Jakarta Composite Index.

Keywords: Money Supply, Gross Domestic Product, Inflation, BI Rate, Exchange Rate IDR/USD, JCI

1. Introduction

Investing in capital markets is always interesting to follow, fluctuations in stock price movements provide space / opportunities for investors to earn substantial profits, especially when compared with interest earned by a customer from the proceeds of storing funds in the form of deposits or other products. However, it is undeniable that such fluctuating movements are also at risk of harming investors. Therefore, many people who think investing in the capital market is high risk, in accordance with the term high risk high return, which means taking a higher risk to gain greater profit.

Capital needs by relatively large companies and high public interest to invest to encourage the government to establish the Indonesia Stock Exchange. Stock exchanges are established to facilitate the public to invest in securities, and also to facilitate the company in obtaining working capital. The high interest of the people to invest will also increase the interest of companies to go public, ultimately will encourage the increasing number of issuers, the amount of traded securities, and the increase in the volume of transactions that occur at any time.

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The development of the capital market in a country can be seen from the high number of shares traded, the number of listed companies, the transaction volume, the transaction value, and Jakarta Composite Index (JCI), as well as the market capitalization value to all of them has brought certain consequences for investors, issuers and other capital market participants.

	Number of	Transaction	Transaction		Number of
Year	Listed	Listed Volume		JCI	Shares
	Companies	(shares)	(thousand rupiah)		Registered
2006	344	436.936	445.708	1.805,52	924.489
2007	383	1.039.542	1.050.154	2.745,83	1.128.174
2008	396	787.846	1.064.528	1.355,40	1.374.412
2009	398	1.467.659	975.135	2.534,35	1.465.655
2010	420	1.330.865	1.176.237	3.703,51	1.894.828
2011	440	1.203.550	1.223.441	3.821,99	2.198.133
2012	459	1.053.762	1.116.113	4.316,69	2.438.408
2013	483	1.342.657	1.522.122	4.274,18	2.827.795
2014	506	1.327.016	1.453.392	5.226,95	3.084.060
2015	521	1.446.314	1.406.362	4.593,01	3.342.584

Table 1 Growth Indonesian Stock Exchange

Source: JSX Monthly Statistic the period 2006-2016

Based on table 1 above, showing the development of Indonesian capital market over the last ten years includes the growth of the number of issuers, transaction volume, transaction value, JCI value and number of shares listed on the Indonesia Stock Exchange. From the data, it can be seen that the number of listed listed companies in Indonesia Stock Exchange has increased every year. It shows that more and more companies need alternative capital besides banking to do development and investment in their company.

The development of JCI which tends to increase, in addition to describe the fundamental condition of the company that is improving, also shows that the income of investors who invest in various types of shares on the Stock Exchange is increasing. The improved fundamentals of the company and the recovery of investor confidence in the capital market reflects the improving condition of the national economy. The movement of the JCI is essentially inseparable from the macroeconomic condition of the country, the stock price index is strongly influenced by macro variables. Fluctuations in macroeconomic variables will create uncertainty over stock business activity.

Based on the phenomenon mentioned above it can be said that there are indications of changes in macroeconomic variables have a strong enough influence on the performance of the Indonesian capital market as happened in 2008. Research on capital market performance has

been done in the last 14 decades until now either by using CAPM or by using APT. The use of the CAPM model in analyzing the performance of the capital market is questionable. The inability of CAPM demonstrated by various insignificant study results. The weakness of the CAPM model is that the first model uses only one factor in analyzing the movement of the market portfolio; secondly it is assumed that the relevant risk is a systematic risk that is only reduced by beta.

According to Ross (1980) the movement of the stock price index is not only influenced by the market portfolio assuming that asset price changes affect by some sources of risk not only measured by beta. Ross assumes that stock prices are influenced by k factor linearly in a multifactor model. APT model testing by some researchers stated that this condition can explain the movement of Jakarta Composite Index as conducted by Ross and Roll.

Based on the above exposure then this research will refer to some previous research results. In previous research has identified several macroeconomic variables used to influence the JCI that is the money supply, inflation, BI Rate and exchange rate of Rupiah against US Dollar. In a study that referred to the theory of Arbitrage Pricing Theory developed by Ross and Roll (1980) in APT theory mentioned that the movement of stock price index influenced by k factor linearly in a multifactor model. Factors that are meant are factors that indicate general or common economic conditions are also called systematic risk factors. These factors affect the price on a day with different intensities (Elton and Gruber, 1995).

2. Literature Review

2.1. The Influence of Money Supply toward Jakarta Composite Index

The money supply also has a close relationship with the interest rate in a country. According to Fisher's theory that the increase in the amount of money in circulation will stimulate the occurrence of inflation, this happens if it is assumed that the velocity of money and the volume of economic production are constant. In this case money can be used to overcome the problem of inflation or deflation.

If a country is in a state of deflation then the government should increase the level of money supply and vice versa if there is inflation then the government should lower the level of its money supply. But in addition to the money supply, the value of the price of goods can also be judged from the level of production and consumption in the community. With the growing production it will affect the level of income and does not close the possibility of creating employment opportunities which means reducing unemployment. With the reduced unemployment rate, this shows that the economy in a country can be said to increase.

Sprinkel and Manurung (2003) conclude that there is a positive relationship between the growth of money supply and stock prices, but the timing is not always consistent and seems to be shorter. Palmer in Manurung and Panutur (2004) examines the relationship between the money supply growth rate and stock price movements and concludes that in general changes in money supply make changes in stock prices. Cooper in Manurung (2003) also conducted a study of the money supply and stock price for the period 1947 to 1970 using monthly data.

2.2. The Influence of Gross Domestic Bruto toward Jakarta Composite Index

Investments in capital markets in addition to providing benefits also contain certain risks. The ability of investors to understand and predict macroeconomic economic conditions and the effects of the global economy taking into account the development of sectoral stock price indices will be useful in making the right investment decisions with low risk levels. The increase in gross domestic product will increase the income of the community, so that the increase of gross domestic product will encourage the business sector to expand its business. Furthermore, the business sector requires financing for business expansion to conduct stock issuance or stock offering in the capital market.

2.3. The Influence of Inflation toward Jakarta Composite Index

Reilly (1992) suggests there are two opinions about the relationship between the rate of inflation with stock prices. The first opinion states that there is a positive correlation between inflation and stock prices. This opinion is based on the assumption that inflation is the demand-pull inflation, which is the inflation caused by the excess demand for supply of goods available. In these circumstances, the company may charge the cost increase to the consumer with a larger proportion so that the company's profits increase.

Thus, it will increase the company's ability to pay dividends and will provide a positive assessment on stock prices. The second opinion states that there is a negative correlation between inflation and stock prices. This opinion is based on the assumption that inflation is costpush inflation, which is the inflation caused by the increase of production cost. Given the rising prices of raw materials and labor, while the economy is in a state of inflation, producers do not have the courage to raise the price of their products. This will result in the company's profit to pay any downward dividend which will have an impact on the negative stock price assessment

2.4. The Influence of BI Rate toward Jakarta Composite Index

The interest rate is the price paid per unit of currency borrowed per certain period of time, expressed as a percentage. Interest rates will be an attraction for investors to lend their capital

in the money market, for example in the form of deposits. In addition to the lure of higher interest rates, depositing funds in the form of deposits is also more secure than holding stocks at a higher risk level. According to Cahyono in Raharjo (2010) states that an increase in interest rates will cut corporate earnings. This happens in two ways. The increase in interest rates will increase the interest expense of the issuer, so that the profit can be cut.

With the downward trend in earnings, investors will have a negative effect on the company so that it will have an impact on the stock price decline of the company concerned. In addition, when interest rates are high, production costs will increase and product prices will be more expensive so that consumers may postpone their purchases and keep their funds in the bank. Then interest rates and stocks are negatively correlated.

Moreover, in the theory of portfolio, according to James Tobin when high interest rates individuals tend to allocate their wealth into the form of savings or deposits due to high expected returns. In other words, when interest rates go down people will tend to add securities in their portfolios (Nopirin, 2000). A potential increase in the BI rate will encourage investors to shift their funds to the money market or savings and time deposits so that investment in the stock exchange will fall and further lower JCI.

2.5. The Influence of Exchange Rate IDR/USD toward Jakarta Composite Index

The exchange rate is the ratio of the currency value of a country to another country or the price between the two currencies. Exchange rate is a variable that many foreign investors pay attention to. Exchange rates traded on the forex market will have a substitution effect with the stock market. When the rupiah depreciates, holding the dollar will be more profitable for investors, in addition to the profits obtained by foreign investors after converted into dollars will be less.

With a lower profit rate, investment in the stock market becomes less attractive in the eyes of foreigners instead they will transfer funds to the forex market. Maryanti (2009) who has conducted a study entitled "Analysis of the Effect of Interest Rate of SBI and the Value of US Dollar Exchange Against the JCI". The results indicate that the exchange rate negatively influences or there is a conflicting relationship between exchange rate changes with the JCI. Then the exchange rate and the JCI are negatively related.

Research on the relationship between exchange rate to other JCI says Changes in one macroeconomic variables have different impact on each type of stock, that is, the stock is positively affected while the other shares are negatively affected. For example, a sharp rise in the USD exchange rate against the rupiah will have a negative impact on issuers with dollar debt while the issuer's products are sold locally.

Meanwhile, export-oriented issuers will receive a positive impact from the rise in the USD exchange rate. This means that the stock price of the issuer that is negatively affected will decrease in the stock exchange, while the issuer that is positively affected will increase its share price. Some listed issuers on the stock exchange will be negatively affected and some will be positively affected by sharp USD exchange rate changes. Furthermore, JCI is also affected negatively or positively depending on the dominant group of impact (Mohamad Samsul, 2006).

3. Conceptual Framework and Hypotheses

The framework of thought is arranged by looking at the relationship between the variables studied. The relationship is described in the following matrix.



Picture 1 Conceptual Framework

Referring to the formulation of the problem and the theoretical foundation, a conceptual model is developed to analyze the effect of Money Supply, Gross Domestic Product, BI Rate, Inflation, and Exchange Rate IDR/USD toward Jakarta Composite Index. The portfolio investment sector is made differently depending on the exogenity and endogenous assumptions of a variable to be examined in terms of generalization efforts and model development in this study to observe the effect of Money Supply, Gross Domestic Product, Inflation, BI Rate and Exchange Rate IDR/USD is respectively as independent variables and Jakarta Composite Index as the dependent variable.

Based on conceptual framework supported by theory and result of previous research, hence research hypothesis can be formulated as follows:

- The amount of Money Supply has a positive and significant impact on the Jakarta Composite Index
- Gross Domestic Product has a positive and significant impact on the Jakarta Composite Index
- 3. Inflation has a negative and significant effect on the Jakarta Composite Index

- 4. BI Rate have a negative and significant effect on the Jakarta Composite Index
- Exchange Rate IDR/USD has a positive and significant impact on the Jakarta Composite Index
- Money Supply, Gross Domestic Product, Inflation, BI Rate, Exchange Rate IDR/USD simultaneously affect the Jakarta Composite Index

4. Research Methodology

The study used an explanative (confirmatory) design. This design is used because the research to test or confirm the relationship or influence between variables or constructs. This is in line with that proposed by Zikmund (1994) that causal research designed to identify causal and effect relationships among variables in which the research problem has been clearly defined. An explanatory or confirmatory design was chosen because the study tested the hypothesis in the multifactor equation,

The subject of this research is a company that has been go public and listed in Indonesia Stock Exchange from 2006-2016, while the object under study is Jakarta Composite Index (JCI). The research will use multiple linear regression model to analyze various macroeconomic factors which have been identified include: money supply, gross domestic product, inflation, BI Rate and exchange rate IDR/USD affecting variation of Jakarta Composite Index.

The analysis is done by using Multiple Linear Regression model, as performed by Roll and Ross (1980) that is using time series data to the value of Jakarta Composite Index (JCI) and macroeconomic variable during the last ten years from 2007-2016

5. Study Finding

5.1. Descriptive Statistic

In this research, the empirical findings on the effect of macroeconomic variables are Money Supply, Gross Domestic Product, Inflation, BI Rate, exchange rate IDR/USD as independent variable to Jakarta Composite Index as dependent variable. The results of processed statistical descriptive data into research variables by using spss version 22 is presented in the table.

	Ν	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
M2	120	1363907	5003300	2936270.42	1086525.837
GDP	120	303358	1074260	679392.83	231877.523
INFLATION	120	2.41	12.14	5.9689	2.24784
BI RATE	120	5.75	9.50	7.1479	.99552
IDR/USD	120	8611	14657	10607.56	1718.171
JCI	120	1241.54	5518.68	3675.1417	1228.17700
Valid N (listwise)	120				

Table 2 Descriptive Statistic

Source: Output SPSS 22 (data processed, 2017)

On the variable of Money Supply (M2) shows that the average value (mean) of 2936270.42 with a minimum value of 1363907 and the maximum value of 5003300. Data deviation on the variable Money Amount can be seen from the mean value of 2936270.42 with standard deviation (SD) of 1086525.837 where the mean value is greater than the standard deviation, eating data can be categorized well.

GDP variables have a mean value of 679,392.83 with a minimum value of 303.358 coming from GDP in 2007 and a maximum value of 1074260 coming from GDP in 2016. Meanwhile, to see how big the deviation of data on the variable of Gross Domestic Product can Seen from the mean value of 679392.83 with standard deviation (SD) of 231877.523 where the standard deviation value can be categorized well.

Inflation variable has a mean value of 5.9689 with a minimum value of 2.41 and a maximum value of 12.14%. Meanwhile, to see how big the deviation data on inflation variable seen from the standard deviation of 2.24784. In this case the inflation variable data can be said good, because the standard deviation value is smaller than its mean value.

BI Rate variables have a mean value of 7.1479 with a minimum value of 5.75 and a maximum value of 9.50. Meanwhile, to see how big the deviation of data on the variable of BI Rate seen from the standard deviation that is equal to 0.99552. In this case the variable data BI Rate can be said good, because the standard deviation value is smaller than its mean value.

Exchange Rate IDR/USD variable has an average of 10607.56 with a minimum value of 8611 and a maximum value of 14,657. Meanwhile, to see how big the deviation of data on the variable Exchange Rate IDR/USD seen from the standard deviation of 1718.171. In this case

the data of Exchange Rate IDR/USD can be said good, because the standard deviation value is smaller than its mean value.

The lowest Jakarta Composite Index (minimum) is -1241.54, while the Jakarta Composite Index (maximum) 5518.68 is derived from the Jakarta Composite Index in March 2015. By looking at the above data it can be concluded that the value of Jakarta Composite Index corrected positively and significantly marked with minimum and maximum values that have a very large difference. It shows that the development of Indonesia Stock Market runs well. While the standard deviation of JCI of 1228.17700 shows the deviation of data whose value is smaller than the average of 3675.1417 shows the data of JCI variable can be said either.

The burden of research data will affect statistical data processing. For that, in this research, will be transformed data to maintain the homogeneity of research data so that the errors that occur will be smaller. Data Transformation is an attempt done with the primary objective of converting the scale of measurement of the original data into another form so that the data can satisfy the assumptions underlying the analysis of variance. The type of data transformation performed is to convert to first difference delta. This type of data transformation is used for research using time series data. After data transformation, the research data become 119 samples.

5.2. Classical Assumption Test

5.2.1. Normality Test

Picture 2 Normal P-Plot



Source : data processed (2017)

Based on the Normal P-Plot chart above, it can be concluded that the normal graphic pattern is seen from the points spreading close from the diagonal line and spreading following

the direction of the diagonal line. Based on the normal plot chart, it shows that the regression model is normally distributed.

5.2.2. Autocorrelation Test

Table 3	Autocorrel	ation Test	Results
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Model	Durbin-Watson					
1	2.165					
Source · data processed (2017)						

In the regression test results through SPSS version 22 seen in Table 3 yields Durbin Watson value of 2,165 such results indicate no autocorrelation.

5.2.3. Multicollinearity Test

Tabel 4	Multicoll	inearity Te	st Result	
Unstandardi	zod			

		Unstandardized					
		Coeff	Coefficients			Collinearity	v Statistics
Model		В	Std. Error	t	Sig.	Tolerance	VIF
1	(Constant)	21.299	21.377	.996	.321		
	M2	.000	.000	.420	.675	.944	1.060
	GDP	.001	.002	.411	.682	.974	1.027
	INFLATION	-21.798	22.719	959	.339	.841	1.190
	BI RATE	-225.607	98.481	-2.291	.024	.785	1.274
	IDR/USD	178	.043	-4.123	.000	.886	1.128

a. Dependent Variable: DIFF(Y,1)

Source : data processed (2017)

Based on Table 4 Tolerance and VIF values it is seen that no Tolerance value below 0.10 and VIF value is not above 10 this means that the two independent variables have no correlation multicollinearity and can be used to predict the JCI during the 2007-2016 observation period **5.2.4. Heteroscedasticity Test**

Picture 3 Scatterplot



Source : data processed (2017)

Based on Figure 2 above, it can be seen that the data (dots) spreads above and below the zero line. The pattern of the data positions tends to gather in one place, namely between number 2 and 2. But there is also the data (dots) are spread far from the numbers -2 and 2. This shows not happen heteroskedastisity on multiple regression model.

5.3. Results and Discussion Coefficient of Determination (R²)

The strength of independent variables affects the dependent variable variation can be known from the value of the determinant coefficient (R^2), which vary between zero and one.

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.969 ^a	.939	.936	309.58288

Tabel 5 Coefficient Determination Result (R2)

Source: Output SPSS version 22 (data processed,2017)

Table 5.12 shows the correlation coefficient (R) and the coefficient of determination (R square). The R value explains the relationship between the independent variables (x) and the dependent variable (y). From the results of data processing obtained value of correlation coefficient of 0.969 or equal to 96.9% means the relationship between variables X (Money Supply, Gross Domestic Product, Inflation, BI Rate, Exchange Rate IDR/USD) to variable Y (JCI) in Strong category.

R square explains how big the variation y caused by X, from the calculation results obtained R^2 value of 0.939 or 93.9%. Adjusted R Square is the adjusted value of R^2 so that the description is closer to the quality of the assessment model, from the calculation of Adjusted R

square value of 0.936%. This means that 93.6% of JCI is influenced by research independent variables. While the rest is influenced by other factors outside the model. So, it can be concluded that the influence of independent variables is very large on changes in JCI.

5.4. Research Analysis Result

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	21.299	21.377		.996	.321
	M2	.0001	.000	.036	.420	.675
	GDP	.001	.002	.034	.411	.682
	INFLATION	-21.798	22.719	086	959	.339
	BI RATE	-225.607	98.481	213	-2.291	.024
	IDR/USD	178	.043	360	-4.123	.000

 Table 6
 Research Analysis Result (t-test)

a. Dependent Variable: DIFF(Y,1)

Source : Output SPSS version 22 (data processed,2017)

Tabel '	7	Result	Analysi	is ((F-Test)
1 abei	'	Itesuit	¹ Milary SI	19	1 1 0 30)

	ANOVA**									
Mode	el .	Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	958774.136	5	191754.827	7.632	.000°				
	Residual	2864138.798	114	25124.025						
	Total	3822912.934 ^e	119							

Source : Output SPSS version 22 (data processed,2017)

Multiple linear regression analysis is used to test the effect of two or more independent variables on one dependent variable. The regression equation can be seen from the test results table coefficients. In the read coefficients are values in column B, the first line represents the constant (a) and the next line represents the constant of the independent variable. Based on the above table then the regression model used is as follows.

JCI = 21,299 + 0.001X1 + 0.0001X2 - 21,798X3 - 225,607X4 - 0,178X5 + e

6. Discussion

6.1. Partial Test Discussion (t-test)

6.1.1. The Influence of Money Supply toward Jakarta Composite Index

The results of this study give the meaning that the growth of money supply in Indonesia will be followed by the increase of people's activity to invest in Indonesia capital market. Theoretically the effect of changes in the money supply on JCI can be explained by using Keynes's money demand theory (in Lipsey et al., 1999) consisting of demand for transaction motive (Lt), demand for money for guard motives (Lj) and money demand For the speculative motive (Ls). The demand for money for transactions and vigilance is part of the income of society while the demand for money for the purpose of speculative motives is determined by the interest rate. The purpose of holding money for speculative motives is primarily to gain the level of profit that can be gained because the money holder can predict precisely in the future. At a time when interest rates are high, the demand for money for the purpose of speculating declines because the money owners will keep the funds in the bank in the hope of earning interest in the form of interest. Conversely, if the BI Rate falls, the demand for money for speculated purposes will increase. This explains the Indonesian capital market that the growth in the money supply has a positive effect on the Jakarta Composite Index as a result of the increasing number of demand for stocks.

When viewed from the value of the regression coefficient, changes in the money supply have the least effect on the Jakarta Composite Index when compared with the influence of other variables although the change in the money supply increases every year. It can be explained that: First, the growth of money supply in Indonesia is followed by the growing inflation rate every year. Secondly, the demand for more money is used to purchase goods and services and is used to invest in the real sector rather than using stock portfolio transactions. When viewed from the value of stock portfolio transactions it will show a much smaller value when compared with the total value of changes in the money supply in the same period. Thus, although the money supply tends to increase in the last 10 years but the amount used to invest the stock portfolio is still relatively small, so the effect on the improvement of capital market performance is still relatively small.

6.1.2. The Influence of Gross Domestic Product toward Jakarta Composite Index

The results of this study give a sense that the growth of Gross Domestic Product will be followed by a rise in stock prices although not significant and vice versa. Theoretically, the effect of changes in gross domestic product on the Jakarta Composite Index can be explained that the growth of Gross Domestic Product is to reflect the increase in average income by the community (Lipsey, et al., 1999), enabling communities to increase their consumption and investment including increased investment in the capital market.

If the public tends to increase investment in the capital market by choosing a stock portfolio, it will result in increased stock demand. The increasing demand for stock portfolios will drive stock prices up. If the stock price increase experienced by many issuers then the movement of JCI will also increase.

When viewed from the regression coefficient the effect of changes in the rate of economic movement against the Composite Index is smaller when compared with the effect of changes in BI Rate, changes in inflation and exchange rate IDR/USD even though the economic movement tends to increase each year. It can be explained that Indonesia's economic growth is not determined by economic activity in the capital market but Indonesia's economic growth is more dominantly influenced by economic activities outside the capital market such as economic activity in the banking sector which until now still has the greatest contribution to economic growth in Indonesia (Kompas, 2012). Thus, although Indonesia's economic growth tends to increase but the contribution of economic activity in Indonesia Stock Exchange to Indonesia's economic growth is still relatively small. Based on the above description, in this study can be said that economic growth is not a good indicator to see the growth of capital market performance in Indonesia.

6.1.3. The Influence of Inflation toward Jakarta Composite Index

The results of this study suggest that inflation growth in Indonesia is followed by a decline in stock prices on the Indonesia Stock Exchange as inflationary changes that tend to increase will have an impact on the rising prices of goods and services. Increased prices of goods and services will result in increased production costs by the company. On the other hand, the growth of inflation will lower the real income level of the people who earn a fixed income, thus decreasing the purchasing power by the community.

If seen from the value of regression coefficient, the influence of inflation change on JCI is higher when compared with the influence of the money supply, the effect of Gross Domestic Product, and the Exchange Rate IDR/USD. It can be explained that fluctuating inflationary changes will create uncertainty in the business activity of stocks so that will make investors afraid to face risks, especially when inflation is likely to increase.

6.1.4. The Influence of BI Rate toward Jakarta Composite Index

The result of this study explains that the increase of BI Rate of Indonesia will be followed by declining share price in Indonesia Stock Exchange, thus encouraging also decrease of JCI. It can be explained that for investors who are rational in making long-term investments will always make investment choices that provide higher profits. Thus, it can be said that investing in shares or depositing funds in the bank are two alternate investment alternatives. History of theory there are several rationales that support the relationship of BI Rate affect the stock price index.

This study shows that changes in BI Rate in Indonesia tend to decrease in the last 5 years. The decline in BI Rate over a relatively long period of time tends to encourage investors to invest in Indonesia's stock market by choosing a stock portfolio because interest income will be earned by investors when depositing funds in banks declines. This condition resulted in the number of demand for stock portfolio in Indonesian capital market tends to increase in a relatively long period of time reflected by the movement of JCI in Indonesia Stock Exchange tend to increase in the same period of time.

When viewed from the regression coefficient, changes in BI Rate have the most dominant influence on the movement of JCI. It is explained that the BI Rate in Indonesia is included in the category is quite high when compared with some countries in Asia such as Malaysia, Singapore and Philippines. The high interest rates on deposits make investors very sensitive to changes in interest rates, especially when interest rates tend to increase. If an increase in the deposit rate can provide a higher rate of interest income than the expected return when making a stock transaction, then investors will tend to divert their investments by depositing funds in the bank rather than performing risky transactions, as well as otherwise.

6.1.5. The Influence of Exchange Rate IDR/USD toward Jakarta Composite Index

From the results of this study can be concluded that the variable Exchange Rate IDR/USD has a negative and significant influence on the variables of Jakarta Composite Index. The rise in foreign exchange rates (in this case USD) gives a negative sentiment to the domestic stock market, this condition causes the movement of funds from the stock exchange to the foreign exchange market because the speculators consider it more profitable to speculate in the foreign exchange market. In the foreign exchange market, USD is the currency used as a reference in determining the value of a country's foreign currency, whether it appreciates or depreciates. This negative relationship is clarified on the results of Pasaribu and Kowanda (2013) research which states that the Exchange Rate IDR/USD gives negative and significant influence on the Jakarta Composite Index in the short and long term.

6.2. Simultaneous Test Discussion (F-test)

From the estimation results obtained F calculate of 7,632 where this value is greater than F table with significance level 0.000 thus simultaneously there is a significant influence between the Money Supply, Gross Domestic Product, Inflation, BI Rate and Exchange Rate IDR/USD towards Jakarta Composite Index.

7. Conclusion and Suggestion

7.1.1. Conclusion

Based on the results of the analysis and discussion, then the conclusions can be formulated as follows:

- 1. The results prove that the amount of Money Supply positive and insignificant effect on Jakarta Composite Index (JCI).
- 2. The research results prove that Gross Domestic Product has positive and insignificant effect to Jakarta Composite Index (JCI).
- 3. The research results proved that Inflation has a negative and insignificant effect on Jakarta Composite Index (JCI).
- 4. Research results prove that BI Rate has a negative and significant effect on Jakarta Composite Index (JCI).
- 5. The results of the study prove that the Exchange Rate IDR/USD has a negative and significant effect on the Jakarta Composite Index (JCI).
- 6. The results prove that Money Supply, Gross Domestic Product, Inflation, BI Rate and Exchange Rate IDR/USD jointly affect the Jakarta Composite Index (JCI)

7.1.2. Suggestions

Based on the results of the analysis of the discussion and some conclusions in this study, as for suggestions that can be given through the results of this study in order to get better results, namely:

- Bank Indonesia as the monetary authority needs to control the BI Rate to control inflation. Because the increase in BI Rate has the greatest effect on the Jakarta Composite Index in Indonesia Stock Exchange
- 2. As an alternative institution of financing, the government should encourage capital markets by providing incentives for businesses to become issuers in the capital market.
- 3. For investors, should pay attention to information related to macro economic vaiabel issued by Bank Indonesia such as BI Rate and Exchange Rate IDR/USD because with

the information can be used to predict JCI then used for the right decision making in connection with its investment.

REFERENCES

Abugri, Benjamin. 2008. "Empirical Relationship Between Macroeconomic Volatility and Stock Returns: Evidence from Latin American market", International Review of Financial Analysis Volume 17, 396-410.

Blanchard, Oliver, Macroeconomic, Third Edition, Prentice Hall, New Jersey, 2003

Damayanti, Verra, Analisis Hubungan Variabel Makro Ekonomi Terhadap Indeks Harga Saham Sektoral di Bursa Efek Jakarta (2001-2004), Tesis MPKP, Universitas Indonesia, Jakarta, 2005

Kasmir. 2012. Analisis Laporan Keuangan. Jakarta: PT. Raja Grafindo Persada.

- Lipsey, R.G. & Steiner, P.O. (1999). Pengantar Ilmu Ekonomi. Alih Bahasa: Anas Sidik, Jakarta: Bina Aksara.
- Mankiw, N. Gregory, Makroekonomi, Edisi Keenam, Penerbit Erlangga, Jakarta, 2007
- Mishkin, Frederick, Eakins, Stanley, Financial Market and Financial Institutions, Third Edition, Addison Wesley Longman, 1999
- Mohan, Nandha, Shawkat Hamoudeh, "Systematic risk, and Oil Price and Exchange Rate Sensitivities in Asia-Pacific Stock Markets", Research in International Business and Finance Vol 21, Pages 326-341, 2007
- Morelli, David, "The Relationship Between Conditional Stock Market Volatility and Conditional Macroeconomic Volatility: Empirical Evidence Based on UK Data", International Review of Financial Analysis 101–110, 2002
- Munawir. 2001. Analisis Laporan Keuangan. Yogyakarta: BPFE.
- OPEC, Monthly Oil Market Monthly Oil Market Report, February 2008
- Pasaribu, Rowloand Bismark Fernando dan Kowanda, Dionysia. 2013. Dinamika Bursa Saham Asing dan Makroekonomi terhadap Indeks Harga Saham Gabungan Bursa Efek Indonesia. Jurnal Akintansi dan Bisnis, Vol.14, No.1.
- Puspitaningtyas, Zahra. 2012. Prediksi Tingkat Pengembalian Investasi Berupa Deviden Yield Berdasarkan Analisis Financial Ratio. Jurnal Ekonomi, Vol 9 No. 13 Maret 2013
- Rahardja, Pratama, Mandala Manurung, Teori Ekonomi Makro : Suatu Pengantar, Edisi Ketiga, Lembaga Penerbitan FE UI, Jakarta, 2005
- Rahman, A. 2005. Analisis Portofolio Optimal pada Saham LQ-45. Jurnal Ekonomi Perusahaan, Vol 2 No. 9 Agustus 2012

- Ricard J. Teweles, Edward S. Bradley, The Stock Market, 5th Edition, John Wiley & Sons, New York, 1987.
- Rjoub, Husam, Tursoy, Turgut, dan Gunsel, Nil, (2009), The effects of macroeconomic factors on stock returns: Istanbul Stock Market, Studies in Economics and Finance, Vol. 26 Iss 1 pp. 36 – 45
- Rusmin, Pasar Modal: Teori, Masalah dan Kebijakan dalam Praktek, CV Alfabeta, Bandung 2006.
- Saltman, Cynthia, "Oil, Price, Inflation and Stock Market", Journal of Financial Service Professionals (Juli 2005): 10-12
- Sharpe, William F, Gordon J. Alexander, Jeffry V. Bailey, Investasi, Jilid 1, Prenhallindo, Jakarta, 1999
- Sharpe, William F, Gordon J. Alexander, Jeffry V. Bailey, Investasi, Jilid 2, Prenhallindo, Jakarta, 1999
- Singh, Tarika, Mehta, Seema, dan Varsha, M. S. (2011). Macroeconomics Factors and Stock Returns: Evidence from Taiwan – Journal of Economics and International Finance Vol. 2(4), pp.217-227. Academic Journals

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