## DO WORLD GOLD PRICE, DOW JONES ISLAMIC MARKET AND INFLATION AFFECT THE PERFORMANCE OF JAKARTA ISLAMIC INDEX?

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#### Received: Maret 2014; accepted: Agustus 2014

**Abstract:** This study aims to analyze the influence of world gold price, Dow Jones Islamic Market, and inflation towards the Jakarta Islamic Index (JII) in Indonesia Stock Exchange (IDX) from January 2008 to September 2013. The object of the study is publicly traded company listed on the Jakarta Islamic Index (JII). The obtained index is 30 companies listed in Jakarta Islamic Index (JII) with 69 observation data. Data analysis is performed using Error Correction Model (ECM). The result shows that whole variables have significant influence toward Jakarta Islamic Index in the long run. While in case of short run, Dow Jones Islamic Market has a significant influence toward Jakarta Islamic Index.

*Keywords:* Jakarta Islamic index; Dow Jones Islamic market; world gold price; inflation; error correction model

JEL Classification: P45, E44, G15

Abstrak: Studi ini bertujuan untuk menganalisis pengaruh harga emas dunia, Dow Jones Islamic Market, dan inflasi terhadap Jakarta Islamic Index (JII) di Bursa Efek Indonesia dari bulan Januari 2008 sampai September 2013. Objek studi ini adalah perusahaan publik yang terdaftar dalam Jakarta Islamic Index (JII). Indeks yang diperoleh sebanyak 30 perusahaan dengan 69 observasi. Analisis data menggunakan Error Correction Model (ECM). Hasil menunjukkan bahwa harga emas dunia, Dow Jones Islamic Index dalam jangka panjang. Sedangkan dalam jangka pendek, hanya Dow Jones Islamic market yang berpengaruh terhadap Jakarta Islamic Index.

*Kata kunci:* Jakarta Islamic index; Dow Jones Islamic market; harga emas dunia; inflasi; error correction model *Klasifikasi JEL:* P45, E44, G15

## INTRODUCTION

Investment today becomes very popular among the people in the world, including Indonesia. The aim is to get the future value of the fund in form of interest, coupon, profit sharing, dividend, or capital gain. Different investment instruments provide different compensation the investors will reach. Majority of investors in Indonesia invest their money in the Bank on the deposit account as their investment instrument. Banks offer interest rate of saving deposit from 5.25% to 9,13% per year (*Suku Bunga Deposito*, 2014). Even in both conventional bank and sharia bank, the yield will not significantly different (Pribadi, 2013). In bank deposit, people only can wait and stay until the date of maturity, they cannot join to interfere the business and manage their portfolio. People cannot minimize the risk of the portfolio and cannot enjoy the profit more than the interest rate (4% up to 7,5%) even when the company get very high income. So, there is other choice of investment instrument which allows people to manage their investment, manage the risk, manage the portfolio, and join general assembly of the company (Rapat Umum Pemegang Saham) where dividends are declared.

Stock market becomes the other alternative of investment instrument which provides more flexibility and intervention of the investor. Stock market is an intersection between saving surplus unit with the saving deficit unit through securities trade. Stock market (under Indonesia Stock Exchange) allows the people from all over the world to join investing in Indonesian companies which are listed in IDX. Stock market allows the people to choose the stock which they want to hold. There is no regulation which prohibits investor to invest in certain stock, and there is no a regulation which will force investor to invest in certain stock. Until today, there are more than 450 companies which are listed in IDX.

Since Indonesia Stock Exchange was established in 1912, it already has had a big role and important part in Indonesia. At that time, the fund which has been collected were used by Netherland companies to expand their business. But today, IDX is already functioned to help the companies which is very important toward Indonesia economic condition and welfare.

Capital market consists of stocks, bonds, and mutual funds. The goal of all is same: to collect fund from the society and utilize it for business activities of the companies. Every company which is listed in IDX will get a chance to get fund from people by the help of underwriter and investment banking during Initial Public Offering (IPO). So, it is expected that company's performance can help the country in case of society welfare. The listed companies are grouped based on their sector, such as: agriculture, mining, finance, consumer's good, miscellaneous industry, etc.

To see the development of stock market in Indonesia, people will use indicator of stock

market in Indonesia that is Jakarta Composite Index (JCI) or *Indeks Harga Saham Gabungan (IHSG)*. This indicator will move in the same line with the other economic indicators. Because the macroeconomic indicators are not stagnant but fluctuate, results of the indicator of stock market will also fluctuate. Stock market is one of the economic movers in a country, because stock market is the instrument to make a capital and accumulation of long term fund for improving people participation in circulating fund to finance national development (Novianto, 2011).

At first, Indonesia Stock Exchange (IDX) only had one kind of composite index namely Jakarta Composite Index (JCI) or Indeks Harga Saham Gabungan (IHSG), which was established on April 1st 1983 as the indicator of all stock. At that time, the listed stocks were 13 stocks. As the development of stock market, the amount of stocks which were listed experienced the development also. This condition motivated the occurrence of other index to ease the investor in their analysis of the stock traded in Indonesia Stock Exchange (IDX). With this development, there are more indices in Indonesia Stock Exchange (IDX) such as Jakarta Composite Index (JCI) or Indeks Harga Saham Gabungan (IHSG), Individual Index, Sectoral Index, LQ45 Index, Jakarta Islamic Index (JII), Primary Stock, and Development Index.

There are so many sectors (agriculture, mining, finance, consumers good, miscellaneous industry, etc.) in the stock market, but they can be classified into two general categories: conventional and sharia. Conventional and sharia were decided and issued by *Majelis Ulama Indonesia* on July 3<sup>rd</sup> 2000. Both conventional and sharia stock market are compiled based on the rule of sharia.

Jakarta Composite Index (JCI) or *Indeks Harga Saham Gabungan (IHSG)* consist of all stocks which are listed in Indonesia Stock Exchange (IDX), either conventional and sharia stock of company. But the study in this research focuses on sharia stock market only. This research tries to see which factors that can impact the movement of Islamic stock index.

Jakarta Islamic Index (JII) is the most important component of IHSG which becomes the index of sharia company stock. This index



Figure 1. Long Term Jakarta Islamic Index

shows the development of sharia companies which are listed in IDX. Through Jakarta Islamic Index (JII) which is already issued by MUI of Indonesia Stock Exchange, people can contribute to the country by giving fund to the saving deficit unit without any worry about the *halal* or *haram* transaction inside it. Because of the existence of JII, people can manage the investment, portfolio, and the company without losing sharia aspect. So, the investor still can get benefit of holding stock such dividend, capital gain, and the right to join the meeting with the other stockholders.

Based on the graph above (Figure 1), Jakarta Islamic Index is responded positively by market and still in its uptrend up to now. Islamic stock market becomes the important choice for the investors in stock market. It is same with the existence of Islamic Bank. It becomes the need of people especially in this country. Islamic stock market with its index (Jakarta Islamic Index) becomes the indicator which influences the economic condition in Indonesia; it consists of the stocks list of companies which are determined by MUI.

Jakarta Islamic Index is an important component of *Indeks Harga Saham Gabungan (IHSG)* which consists of whole companies stocks. The stocks which are listed in this index (JII) become the choice for moslem investor, so the investment will not only become the field of income, but it also can become the field of seeking grant of Allah.

In a study on thesis by Mauliano (2009), external and internal factors which influence the stock index in Indonesia are used. External factors are Dow Jones Index (DJIA), New York Stock Exchange Index (NYSE), Footsie London Index (FTSE), Strait Times Singapore Index (STI), Nikkei 225 Tokyo Index (N225), Hang Seng Hong Kong Index (HSI), KOSPI Korea Index (KS11), Kuala Lumpur Stock Exchange Index (KLSE), and world oil price. Internal factors are Foreign Exchange, SBI interest rate, Inflation. The SBI interest rate and inflation data were taken from Bank Indonesia data. Meanwhile, world oil price was taken from OPEC. The result showed the most factors which influence Jakarta Composite Index are Dow Jones, Hang Seng, KLSE and world oil price and internal factors were SBI interest rate and inflation. The research showed that stock market was really sensitive with the condition of economics from many sides.

In the other research done by Sutanto (2013), the researchers used SBI interest rate, world oil price, world gold price, foreign exchange, Nikkei225, and Dow Jones Industrial Average as the variables to analyze what factors influence Jakarta Islamic Index. He found that SBI interest rate and world oil price had relationship but not significant. World gold price, Nikkei225, and Dow Jones had positive relationship with significant result. Foreign exchange did not influence JCI.

In other research, Prasetiono (2010) used Fundamental of macro economics and oil price toward LQ45 stock price. He found that within a short run, economic growth and crude oil price influenced LQ45 stock price. Furthermore, in the long run of economic growth, SBI rate influenced LQ45 stock price as checked in Error Correction Model.

Novianto (2011), on the other hand, analyzed the factors which influenced Jakarta Composite Index. This research aimed to know the influence of exchange rate of Dollar toward Rupiah, SBI interest rate, Inflation, and Money Supply (M2) toward Jakarta Composite Index (JCI) in Indonesia Stock Exchange between January 1999 to June 2010. Partially, exchange rate and money supply had positive relationship with significant result. Meanwhile, inflation and SBI interest rate had no positive relationship with significant result. From the four variables, the dominant determinant toward Jakarta Composite Index in Indonesia Stock Exchange (IDX) was exchange rate. This research was in accordance to the research done by Novianto (2011) who analyzed the factors which influence Jakarta Composite Index. The result showed that Gross Domestic Product (GDP), exchange rate, Dow Jones Industrial Average, interest rate of Sertifikat Bank Indonesia (SBI) had positive relationship with significant result.

Other study conducted by Wulandari (2010) who analyzed the factors which influence risk stock of Jakarta Islamic Index stock components. This research aimed to know the influence of interest rate, inflation, and liquidity variables toward Jakarta Islamic Index (JII) in Indonesia Stock Exchange between January 2008 to September 2013. Partially, interest rate and inflation had significant negative effect. Meanwhile, liquidity variables had no significant effect on investment risk stocks listed on the Jakarta Islamic Index.

Panatagama (2013) analyzed the factors which influenced the stock return of 10 stocks in Jakarta Islamic Index with independent variables such as consumer price index, crude oil price, interest rate, and trading volume. The result showed that interest rate and oil price had a negative relationship, consumer price index had a positive relationship, and trading value had no relationship toward Jakarta Islamic Index.

Hugida (2011) found that trading volume, inflation, and exchange rate of rupiah had positive significant influence, while interest rate of SBI had negative significant influence to stock price volatility of LQ45 in 2006 – 2009 by multiple linear regression method.

In this research, the researcher tried to find out whether the factors which influence JCI (Jakarta Composite Index) mentioned above will affect the JII (Jakarta Islamic Index). Therefore, moslem investors will have some basis or indicator when they join the stock market. The research will be based on Dow Jones Islamic Market, World Gold Price, and Inflation as the independent variables. This study uses data from January 2008 to October 2013. Analysing these variables will also be figured out the factors that have influence in Jakarta Islamic Index.

## **RESEARCH METHOD**

## Data and Sources

This research uses secondary data collected from the literature which are related to the problem researched and were collected by other researchers. Secondary data are taken from books, journals, and articles. The data in this research are taken from January 2008 to September 2013. The data are collected through seeking the data that are related with the variables of research respectively with the year of analysis and document it. The sources are *Bank Indonesia, Bursa Efek Indonesia,* HOTS Software KDB Daewoo Securities, London Fix Historical Gold (Kitco), Yahoo!! Finance and Google Finance.

## **Analysis Tool**

Error Correction Model (ECM) is the tool to analyze the relationship between Dow Jones Islamic Market (DJIM), World Gold Price (GOLD), and Inflation (INF) toward Jakarta Islamic Index (JII) by following these procedures:

The Multiple linear regression models in

this research are formulated as follow:

$$JII_{it} = \beta o + \beta_{1t} D JI M_{it} + \beta_{2t} GOLD_{it} + \beta_{3t} INF_{it} + e_t$$
 1)

Where: *JII* = Jakarta Islamic Index;  $\beta_0$  = Constant;  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  = Coefficient; *DJIM*= Dow Jones Islamic Market; *GOLD* = World Gold Price; *INF* = Inflation;  $e_t$  = Error term.

Error Correction Model can be conducted if the whole variables are not stationary at level (but at difference), and the variables are co-integrated with stationary of the residual at level. This test is to know the behavior of short run and long run of the data.

The model is formulated below:

$$D(JII) = \beta 1 + \beta 2 D(DJIM) + \beta 3 D(GOLD) + \beta 4 D(INF) + \beta 5 Ut(-1)$$
(2)

Where: *JII, DJIM, GOLD,* and *INF* are first different variables;  $\beta$ 1 is intercept;  $\beta$ 2,  $\beta$ 3,  $\beta$ 4 are short run coefficient; *Ut(-1)* is the one period lag residual of model

If the coefficient of residual is significant and contains negative sign, it validates that a long run equilibrium relationship among the variables exists.

Descriptive statistics becomes a set of whole descriptive coefficient which concludes the variables in a study. It represents the entire population or sample in the study and explains data central tendency and dispersion measurement (Panatagama, 2013). Descriptive analysis is the part of statistics which is used to describe the data without making any conclusion, but only explain that data. This research will conduct descriptive test by seeking some data such as: mean, median, maximum, and minimum value.

#### Unit Root Test

The unit root test used in this study is Augmented Dickey Fuller (ADF) which is to know the existence of unit root in the variables. Unit root test is the test which is used to determine whether the data are stationary or not. The test will observe the whole variables in this study. Groups of data are stationary if the average value and variant of time series data do not experience a systematic changing all the time, or some said the average and variant are constant (Nachrowi and Usman, 2006). The random walk model equation is formulated below:

$$Y_t = \rho Y_{t-1} + U_t \tag{3}$$

If  $\rho = 1$ , it means that model is random walk without trend. Here, it is found that  $Y_t$  is not stationary. So, it can be in the problem of unit root and the data are not stationary. Therefore, the next model is formulated:

$$\mathcal{X}Y = r Y_{t-1} + U_t \tag{4}$$

A non-stationary data means that the regression will be spurious (non-sense regression). If the stationary of research data is known, the linearity of research data testing will be conducted through co-integration test.

#### Long Term Estimation

Long Run equation in Error Correction Model is the regression linear with variables which are not stationary at level. With this test, the existence of long run impact of independent variables toward dependent variable by using multiple regression model will be figured out.

Multiple linear regression is utilized to know the influence of Dow Jones Islamic Market, World Gold Price, and Inflation, toward Jakarta Islamic Index from 2008.1 to 2013.9.

#### **Co-integration Test**

Co-integration test is conducted if the data are not stationary at level and this test is to analyze the validity of the model which contains the symptom of spurious regression. Co-integration of an equation can be seen by its residual. If the residual is stationary, it means that there is co-integration. Meanwhile, if it is not stationary, it means that the long run model above is a spurious or non-sense model. Actually, the simple regression model as follows:



Figure 2. Long Term Jakarta Islamic Index

$$Y = \beta o + \beta_1 X 1 + U_t$$
 5)

In this test, the equation will be written as follows:

$$U_t = Y - \beta o - \beta_1 X 1 \tag{6}$$

If  $U_t$  is stationary, so Y and X1 is co-integrated. It is possible to occur because the Y and X1 trend eliminate each other, so the variables which are not stationary can results in stationary result. The parameter which is achieved is co-integration parameter and the regression is co-integration regression.

# Consideration of Stock Investment (Jakarta Islamic Index)

Jakarta Islamic Index is the index of 30 selected sharia stocks. It means a moslem investor will use this index to maximize the profit without worrying of non-sharia elements of stocks from unlawful companies. As long as investors use this JII index, they will always find the best sharia stock choices because once the member of JII does not fulfill the sharia screening, it will not be listed as a member of JII anymore. It is because *Dewan Syariah Nasional* (DSN-MUI) will always control and manage the development of companies business through

Jakarta Islamic Index. The latest members of Jakarta Islamic Index are given in the appendix.

The companies listed in JII become the choices and stock picks when people want to invest in sharia stock by direct buying at secondary market or through investment manager of mutual fund. Jakarta Islamic Index is also a great product of mutual fund which is available in the asset management companies. Therefore, Jakarta Islamic Index is needed both in stock market and also the mutual fund.

From the figure of Jakarta Islamic Index above (Figure 2), it is clear that Jakarta Islamic Index is still in strong up trend. In order to invest through this index, investors should consider the variables which will influence this index globally and locally. Therefore, this study will use Dow Jones Islamic Market as the leader of Islamic sharia world index, World gold price as the main indicator of world investment because gold is the only "money" which can be traded and accepted in any place and time, and inflation as a reflection of Indonesian economic condition.

#### **RESULT AND DISCUSSION**

#### Unit Root Test

Unit root test is the test which is used to determine whether the data is stationary or not. The test will observe the whole variables in this

Table 1. Result of ADF Test Statistics at First Difference Lag 1

Variables	<b>ADF</b> Test Statistics	Critical Value (1%, 5%, and 10%)	
		-4.1013	
JII	-5.182440	-3.4779	
)		-3.1663	
		-4.1013	
DJIM	-5.160058	-3.4779	
Djiivi		-3.1663	
		-3.5312	
GOLD	-5.206528	-2.9055	
GOLD	0.200020	-2.5899	
	-4.487082	-4.1013	
INF		-3.4779	
		-3.1663	

study. Groups of data are stationary if the average value and variant of time series data do not experience a changing systematically all the time or the average and variant are constant (Nachrowi and Usman, 2006).

From table 1, it is known that the ADF test statistics of Jakarta Islamic Index, Dow Jones Islamic Market, World Gold Price, and Inflation are -5.182440, -5.160058, -5.206528 and -4.487082 (respectively). Since these values are under the whole critical value, it means that these data are stationary at first difference lag 1.

Because the stationary test is conducted in the first difference/integrated-degrees test, therefore, the relationship to be examined among JII and other independent variables must be conducted in ECM estimation and forecasted on their first difference. It is formulated with the following equation:

$$DJII_{it} = \beta o + \beta_{1t} DDJIM_{it} + \beta_{2t} DGOLDit + \beta_{3t} DINFit + e_t$$
(6)

Where D = Difference;  $\beta o$  = Intercept;  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  = Coefficient; *JII* = Jakarta Islamic Index; *DJIM* = Dow Jones Islamic Market; *GOLD* = World gold price; *INF* = Inflation rate;  $e_t$  = Error term.

### Long Run Equilibrium Estimation

Long Run equation in Error Correction Model is the regression linear with variables which are not stationary at level. With this test, the existence of long run impact of independent variables toward dependent variable will be figured out.

Based on the Table 2, it is concluded that: 1) Dow Jones Islamic Market (*DJIM*) influences Jakarta Islamic Index (*JII*) level at  $\alpha = 1\%$ . One unit rises in *DJIM* will increase JII level by 0.269549 units; 2) World Gold Price (*GOLD*) influences Jakarta Islamic Index (JII) level at  $\alpha=1\%$ . One Dollar rises in *GOLD* will increase JII level by 0.093974 units; 3) Inflation (*INF*) influences Jakarta Islamic Index (*JII*) level at  $\alpha=1\%$ . One unit rises in INF will decrease JII level by -12.68336 units.

R-Squared is 0.917336 and it is more than the Durbin Watson stat (0.621282), so it is the symptom on spurious model, but if the residual is stationary at level, it will be no longer spurious, but accepted. Therefore, co-integration test should be conducted.

#### **Co-integration Test**

Co-integration of an equation can be seen by its residual. If the residual is stationary, it means that there is co-integration. However, if it is not stationary, it means that the long run model above is a spurious or non-sense model.

The table above proves that the ADF test statistics is significant at  $\alpha$  = 5% or it is under 5% critical value. It means that the residual is stationary and that dependent variable (*JII*) has a co-integration with the independent variables (*DJIM, GOLD,* and *INF*). In other words, the model above is not spurious regression but co-

integrated regression. So, the null hypothesis is rejected and the long run model is accepted. The coefficients of variables (*DJIM*, *GOLD*, *INF*) are therefore long run coefficient and significant.

#### **Error Correction Model**

As the variables such as *JII*, *DJIM*, *GOLD*, *INF* are cointegrated, the Error Correction Model can be conducted. This test is used to know the behavior of short run and long run of Jakarta Islamic Index. The model is:

$$D(JII) = \beta 1 + \beta 2 D(DJIM) + \beta 3 D(GOLD) + \beta 4 D(INF) + \beta 5 Ut(-1)$$
7)

Where: *JII, DJIM, GOLD,* and *INF* are first different variables;  $\beta 1$  is intercept;  $\beta 2$ ,  $\beta 3$ ,  $\beta 4$  are short run coefficient; *Ut(-1)* is the one period lag residual of model.

If the coefficient of residual is significant and contains negative sign, it validates that there exists a long run equilibrium relationship among the variables (*JII*, *DJIM*, *GOLD*, and *INF*).

Based on the result of ECM test shown in Table 3, it is known that: 1) The coefficient (RES) is significant and contains negative sign. So, it is concluded that a long run equilibrium among the variables exists; 2) The model above is also not a spurious model because R-squared (0.502787) is less than DW stat (2.215824); 3) Prob (F-stat) is 0,0000 (under 5%), it means that the variables influence the dependent one jointly; 4) Dow Jones Islamic Market (*DJIM*) influences Jakarta Islamic Index (JII) level at  $\alpha$ =5% in case of short run estimation. One unit

rises in *DJIM* will increase *JII* level at 0.226240 units; 5) World Gold Price (GOLD) does not influence Jakarta Islamic Index (*JII*) level at  $\alpha$ =5% in case of short run estimation; 6) Inflation (*INF*) does not influence Jakarta Islamic Index (*JII*) level at  $\alpha$ =5% in case of short run estimation.

After completing whole ECM steps, two equations are achieved which become the core of the study. With this equation, the influence of independent variables toward dependent variable which are analyzed can be interpreted. Based on long run estimation, the result is:

$$JII_{t} = -122.1364 + 0.269549 DJIM_{t}^{*} + 0.093974 GOLD_{t}^{*} - 12.68336 INF_{t}^{*}$$
8)

Explanation: (\*) is significant variable at 5%; (t) is period / time

This equation tells that *DJIM*, *GOLD*, and *INF* have significant impact to *JII* in the long run.

While the output of short run equation is:

 $\Sigma JII_t = 0.479677 + 0.226240 \ \Sigma D JIM_t^* + 0.018358 \ \Sigma GOLD_t - 7.505802 \ \Sigma INF_t - 0.321106 \ RES_{t-1}$ 

Explanation: (\*) is significant variable at 5%; (t) is period / time

This equation tells that only *DJIM* has impact to the *JII* in short term. One unit rises in *DJIM* will increase *JII* level at 0.226240 units. Based on speed adjustment value, there is 33% disequilibrium in short term of *DJIM*, *GOLD*, and *INF* 

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-122.1364	44.14213	-2.766890	0.0074
DJIM	0.269549	0.018603	14.48921	0.0000
GOLD	0.093974	0.025894	3.629244	0.0006
INF	-12.68336	2.970312	-4.270041	0.0001
R-square		0.917336		
F-stat		240.4388		
		(0.000000)		
DW-stat		0.621282		

Table 2. Long Run Estimation

toward JII which are corrected in every period.

The long run and short run analysis is not spurious. This result is proven by co-integration test and Error Correction Model. The data are also valid according to classical assumption test. It means that the data are accepted with all the result. The study contains long run and short run analysis. According to Utomo (2011), in stock market, long run investment needs more than three months, while the short run is one day to three months. Therefore, this study analyzes the historical time series data in order to see the influence of the independent variables toward dependent variables in the future.

Dow Jones Islamic Market is the kind of Dow Jones Industrial Average (Wall Street Capital Market biggest index) located in United States of America. Dow Jones Islamic Market has impact to Jakarta Islamic Index both in long run and short run (proven by long run estimation and Error Correction Mechanism). It means that whole investors in Jakarta Islamic Index should consider this variable.

Dow Jones Islamic Market cannot be separated from the condition of United States of America as the superpower country with all of its ability, including the economic side. America is one of the superior countries in case of economics. It can be seen by its currency, US Dollar is the world currency which is used in international transaction. It means that the depreciation and appreciation of US Dollar will influence the international transaction. Therefore, the movement of economic activity and changing of monetary policy created by US Government will be responded by international market. Trade balance of America is also important for international transaction. A bad trade balance will create a changing of some policies. This condition will probably motivate the changing of the amount of goods and services imported and exported.

Government policies through the Fed (monetary policy) will influence the world condition, especially Indonesia. Jakarta Islamic Index is a big index in Indonesia Stock Exchange. This phenomenon can be seen in the case of tapering policy by the Fed, in which the decreasing of tapering stimulation creates the Dow Jones Islamic Market decline immediately following by other indices in the world including Jakarta Islamic Index. All conditions and development of United States of America, which are reflected in Dow Jones Islamic Market, will be seen by whole countries in the world including Indonesia. So, it is true that Dow Jones Islamic Market will influence Jakarta Islamic Index both in the long run and short run.

Gold is the only one thing which can be used as the money (transaction tool), as jewelry, and as investment tool, because gold has nominal value and intrinsic value inserted in every piece of gold. Therefore, gold is the only "money" that people trust every time. It does not matter whether the economic condition is good, normal, or even crisis, people still use gold in order to keep up the purchasing power of the wealth they have. Moreover, gold is antiinflation effect. It means that when government publishes the increasing of inflation data which show the higher commodities price which lower down the purchasing power, on the other hand, gold will follow the inflation rate. So, it does not matter if the inflation is high. Gold will adjust it.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.479677	3.193372	0.150210	0.8811
D(DJIM)	0.226240	0.030342	7.456428	0.0000
D(GOLD)	0.018358	0.059626	0.307883	0.7592
D(INF)	-7.505802	4.606732	-1.629312	0.1082
RES(-1)	-0.321106	0.091388	-3.513652	0.0008
R-square	0.502787			
F-stat	15.92658			
	(0.000000)			
DW-stat	2.215824			

Table 3. Error Correction Model

Gold is very strong against Dollar. When US Dollar is appreciated, gold price will also adjust it because the price of world gold price has a direct relationship with US Dollar. Then when the US Dollar is depreciated or not trusted anymore at that time, investor will sell US Dollar and change their portfolio to gold investment. Therefore, the price of gold will adjust the changes also. It is cleared that gold will have a big position in the world economic indicator including the index of stock market. So, the movement of world gold price will reflect many things. When the gold price increases, it means that the market is in positive sentiment (because inflation is always increased). It shows that the market is good because people collect gold continually in long term period. This shows that purchasing power and welfare of people is better, therefore Jakarta Islamic Index will also appreciate. However, when gold price decreases, it means that error occurs in the market, thus, Jakarta Islamic Index will respond it with positive relationship. Because the philosophy of gold is to hedge fund (keep fund value), it will need a long time for the investors to enjoy the benefit of having gold. So, gold investment will influence the index of stock market (Jakarta Islamic Index) in the long run only, not the short run.

In the short run, the movement of gold price is a usual behavior. Gold will not be influenced only by government policy or market behavior. Moreover, there is agreement of all nations in the world to limit the trade of gold in order to keep the stabilization of world gold price (Tanuwidjaja, 2011, p.43). So, market will not respond it and Jakarta Islamic is not influenced.

Inflation has a negative relationship toward Jakarta Islamic Index. Inflation is a bad news because it defines a rising of overall prices and indicates the decreasing of people purchasing power. Inflation will make people unable to buy and consume the goods and services as many as before, because the inflation causes the people to lose their money as if it is stolen by an invisible thief.

High inflation reflects the high price of goods and services, including the commodities which are used by companies in their production. When inflation is high, companies will suffer some troubles generally, such as: 1) Higher cost of production; 2) Higher salary demanded by the labor; 3) Lower demand by people, and 4) Credit which should be paid by companies will be more difficult because of lower net income and higher interest rate

In the short run, the effect of inflation will not have a significant influence to the people. So, the fund which is invested in Jakarta Islamic Index will develop and circulate regularly, and the vice versa. Short run inflation will not influence the company significantly because company will always consider this situation in their project. Therefore, the changing of inflation in the short run will not influence the stock market including Jakarta Islamic Index. Short run inflation will always anticipated by each company by good pricing method which considers the risk in every production. So, the people lifestyle will not change, because the changing price in the market will not totally influence the people saving and expenditure. Therefore, it is clear that short run inflation has no effect to Jakarta Islamic Index.

However, if the inflation is suffered in long run, bad forecasts of economic activities will occur. People will suffer from lower income, poverty will rise, and company's income will decline. High inflation in the long run will create people losing their jobs (unemployment raises), many companies will experience a lower performance of production, higher interest rate will creates some unit defaults, and stock market will experience negative effect from this condition. It is clear that when inflation rises overtime in long run, people will decrease their investment in stock market, people will withdraw their fund in order to fulfill their basic needs. At least, their investment will be moved to the bank deposit which provides higher interest rate. This situation is better than to keep the fund in Jakarta Islamic Index with the lower performance (high risk) of majority companies listed in IDX. So, inflation will be responded by Jakarta Islamic Index in the long run with significant level.

## CONCLUSIONS

As the variable which influences Jakarta

Islamic Index, Dow Jones Islamic Market has a significant influence in long run and short run with positive coefficient. It means that the role of DJIM as the reference of Islamic index is useful to be considered in Jakarta Islamic Index investment.

World Gold Price has a positive relationship toward Jakarta Islamic Index with significant result in long run. However, it does not influence Jakarta Islamic Index in the short run estimation. It is because gold is the most favorite investment and also the only tool which has intrinsic value which makes people believes gold as the infinitive investment which is very strong for economic condition in long run. Moreover, the increasing price of gold will give the positive sentiment to the stock market, and the decreasing price of gold will motivate people to buy more gold. Therefore, it will not influence the economic condition in short run. So, the movement of gold price in short run will not affect people investment in Jakarta Islamic Index because the changing price in short run is a usual market behavior.

Inflation has a negative relationship toward Jakarta Islamic Index with significant result in long run estimation. In the short run, inflation does not influence the investment in Jakarta Islamic Index. Inflation in the long run reflects the condition of a country, but not in the short run. Inflation in the short run is still controlled by the companies and government policies. When the inflation rate is announced in the first day of every month, less than 2 weeks after that, Bank Indonesia as the central bank of Indonesia will fix and control it through the interest rate policy. Therefore, it does not reflect the economic condition immediately, and the stock market (Jakarta Islamic Index) will not influenced

Based on the coefficient of each variable, it is concluded that in the long run, one unit rises in Dow Jones Islamic Market will increase Jakarta Islamic Index level at 0.269549 units. Then, one Dollar rises in World Gold Price will increase Jakarta Islamic Index level at 0.093974 units. One unit rises in Inflation will decrease Jakarta Islamic Index level by 12.68336 units. Based on the coefficient of each variable, it is concluded that in the short run, one unit rises in Dow Jones Islamic Market will increase Jakarta Islamic Market level at 0.226240 units.

## REFERENCES

- Hugida, L. (2011). Analisis faktor-faktor yang mempengaruhi volatilitas harga saham (Studi pada perusahaan yang terdaftar dalam indeks LQ45 periode 2006–2009). *Manuscript*. Semarang: Fakultas Ekonomi Manajemen, Universitas Diponegoro.
- Mauliano, D. A. (2009). Analisis faktor-faktor yang mempengaruhi indeks harga saham gabungan (IHSG) di Indonesia. *Jurnal Fakultas Ekonomi Manajemen*, Universitas Gunadarma. Jakarta: Universitas Gunadarma.
- Nachrowi, D., and Usman, H. (2006). *Pendekatan* populer dan praktis ekonometrika untuk analisis ekonomi dan keuangan. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Novianto, A. (2011). Analisis Pengaruh Nilai Tukar (Kurs) Dolar Amerika/Rupiah (Us\$/Rp), Tingkat Suku Bunga SBI, Inflasi, dan Jumlah Uang Beredar (M2) Terhadap Indeks Harga Saham Gabungan (IHSG) di Bursa Efek Indonesia (BEI) Periode Januari 1991–Juni 2010. *Manuscript.* Semarang: Fakultas Ekonomi Studi Pembangunan, Universitas Diponegoro.
- Panatagama, F.M. (2013). The analysis of macroeconomics variables tha influence stock return Jakarta Islamic Index and Its VAR forecasting. *Manuscript*. Yogyakarta: Fakultas Ekonomi Universitas Muhammadiyah Yogyakarta.
- Prasetiono, Dwi Wahyu. (2010). Analisis pengaruh fundamental ekonomi makro dan harga minyak terhadap saham LQ45 dalam jangka pendek dan jangka panjang. *Journal of Indonesian Applied Economics*. Vol. 4 No. 1 Mei 2010: 11-25
- Pribadi, F. (2013). *Lecture notes*. Retrieved November, 2013, from Universitas Muhammadiyah Yogyakarta, International Program for Islamic Economics and Finance, website: www.umy.ac.id
- Sutanto, B. (2013). Analisis pengaruh ekonomi makro, Indeks Dow Jones, dan Indeks

Nikkei225 terhadap indeks harga saham gabungan (IHSG) di BEI Periode 2007 – 2011. *Scientist Journal* (2) No.1, Universitas Surabaya.

Wulandari, S. (2010). Pengaruh tingkat suku bunga, likuiditas, dan tingkat inflasi terhadap risiko investasi saham yang terdaftar pada Jakarta Islamic Index (JII). *Manuscript*. Fakultas Ekonomi Akuntansi Universitas Muhammadiyah Yogyakarta.