

## CHAPTER V

### RESULT AND DISCUSSION

#### A. Descriptive Statistics

This study shows the regression results as contained in table 4.1 below :

**Table 5.1 Statistic Descriptive**

Variable	Coefficient	t-Statistic	Prob.
THE_FED_RATE	-0.160751	-1.741341	0.0862
LOG(GOLD_PRICE)	0.262046	2.894905	0.0051
INFLATION	0.007167	0.524064	0.6020
LOG(M2)	0.597157	8.006880	0.0000
C	-4.461045	-2.649339	0.0101
R-squared	0.870722		

*Source: (data using evIEWS 9)*

From the above regression equation can be concluded:

The fed rate has a negative and insignificant relationship to JII with coefficient (-0.160751) and confidence level (0.0862), while Gold Price has a significant positive effect on JII with coefficient (0.262046) and confidence level (0.0051), in variable Inflation shows that variable this is not significant positive influence to JII with coefficient (0.007167) and confidence level (0.6020) and last independent variable is Money Supply which has significant positive relation to JII with coefficient (0.597157) and confidence level (0.0000). Based on the results shown

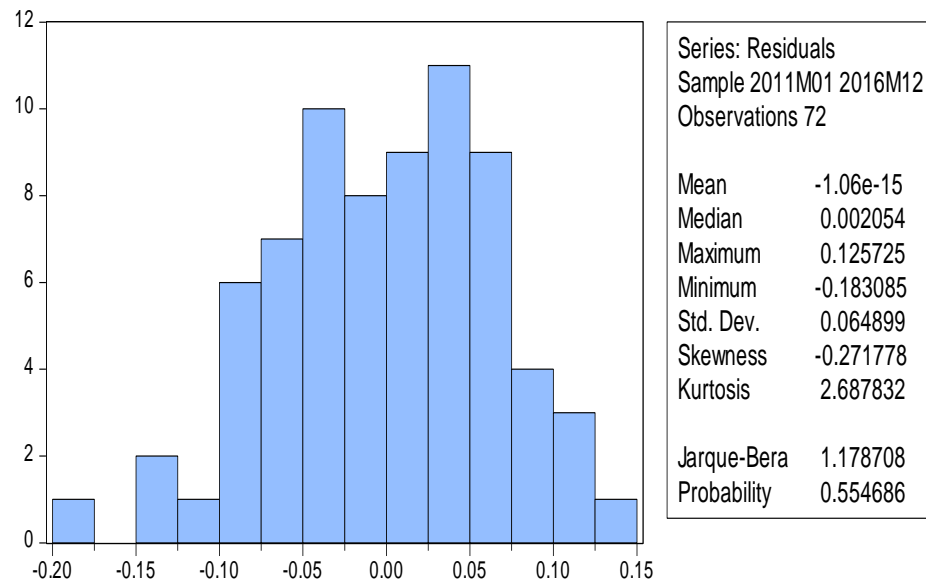
in the above table 87.07 percent R-Square free variable can explain related variables, the remaining 12.93 is explained by variables outside the model.

### **B. Classic Assumption**

Test In this study used the classical assumption test to determine whether there is interference in normality, multicollinearity, heteroscedasticity, and autocorrelation. The regression model can be said to be a good model if it meets the classical assumptions. Here are the results of the classical assumption test:

## 1. Normality test

Below is a Normality Test Table :



**Figure 5.1 normality test (data processed)**

### a. The Interpretation test results normality

Based on the results of the normality table above shows that the probability value is 0.554686 ( $> 0.05$ ) so it can be said that the probability value of this model is not significant, while based on normality test results can be seen from the probability value jargue-bera (JB), if the probability  $> 0.05$ , then the model in normal state, based on this parameter is known that the value of probability value at JB is 0.554686, greater than the value of 0.05 Thus It can be concluded that the regression model meets the assumption of normality.

## 2. Heteroskedasticity Test

Below shows the table Test heteroskedasticity:

**Table 5.2 heteroskedasticity test (processed data)**

Heteroskedasticity Test: Harvey			
F-statistic	1.722919	Prob. F(4,67)	0.1552
Obs*R-squared	6.715246	Prob. Chi-Square(4)	0.1517
Scaled explained SS	4.729685	Prob. Chi-Square(4)	0.3162

### a. Interpretation test results of heteroskedasticity

Based on the output table above, shows that nila OBS \* R Square 0.1517 > 0.05 Then it can be concluded that the above model does not contain heteroskedasticity.

## 3. Multicollinearity test

The following table shows the Multicollinearity Test:

**Table 5.3 Multicollinearity test (processed data)**

	THE_FED_RATE	GOLD_PRICE	INFLATION	M2
THE_FED_RATE	1.000000	-0.260541	-0.124848	0.611353
GOLD_PRICE	-0.260541	1.000000	-0.067625	-
INFLATION	-0.124848	-0.067625	1.000000	0.000800
M2	0.611353	-0.779888	0.000800	1.000000

a. Interpretation of Multicollinearity test results

in this study using multicollinearity test by looking at the correlation between the independent variables because the way is felt most easy and practical and the value of multicollinearity test benchmark. Based on output results if the data in the table above the correlation value between the free variables  $< 0.8$  means no symptoms Multicollinearity on the free variables.

**4. Autocorrelation Test**

Autocorrelation Test Results are listed in the table below:

**Table 5.4 Correlation test (processed data)**

Variable	Coefficient	t-Statistic	Prob
AR(1)	0.791208	9.307664	0.0000
SIGMASQ	0.001552	5.186588	0.0000
<b>Durbin-Watson stat</b>			<b>1.786827</b>

a. Interpretation correlation test results

Based on table 4.4 above shows the results of correlation test that has been improved by using model AR (1) there is a DW value of 1.786827 means that the value of DW is between the value of dU (1.54) and dL (2.46) then According to the table (4.4) DW test in this case data is free from autocorrelation problems or in other words there is no autocorrelation.

## C. Hypothesis Test

### 1. Multiple Regression Analysis Test

Regression analysis is an analysis used to measure the effect of free on the variable. In this research used multiple regression to see whether there is influence or linear relationship of the independent variable that is The fed rate, Gold Price, Inflation, money supply to dependent variable Jakarta Islamic Index model of regression analysis is to answer the hypothesis that has been proposed by the researcher.

### 2. Partial Test (T Test)

T test statistics basically show how far the influence of one independent variable individually in explaining the variation of the dependent variable (Ghozali, 2011). In this study researchers will use the T test to see how far the fed rate, gold price, inflation, M2 affect the JII index. Here is a table of T test values.

**Table 5.5 T test value**

Variable	Coefficient	Std.Error	T - Statistic	Prob.
THE_FED_RATE	-0.160751	0.092314	-1.741341	0.0862
LOG(GOLD_PRICE)	0.262046	0.090520	2.894905	0.0051
INFLATION	0.007167	0.013675	0.524064	0.6020
LOG(M2)	0.597157	0.074580	8.006880	0.0000
C	-4.461045	1.683833	-2.649339	0.0101

a. The influence of the fed rate Toward JII

Based on Table 4.5 obtained the results with The t-statistical value of the fed rate of -1.741341 with a value of significance of 0.0862, the value of this probability shows greater than 0.05 ( $0.0862 > 0.05$ ). From the result, it can be concluded that the fed rate has negative effect not significant to JII index. In other words, the independent variable of the fed rate does not significantly affect the dependent variable JII, meaning that  $H_0$  is accepted and  $H_a$  is rejected.

b. The Influence of Gold Price toward JII

While on the variable Gold Price obtained with the results of the t-statistical value is 2.894905 with a significance value of 0.0051, the value of this probability shows smaller than 0.05 ( $0.0051 < 0.05$ ). From these results can be concluded that the price of gold has a significant positive effect on the index JII. In other words independent gold price variable significantly influences the dependent variable JII, meaning  $H_a$  received and  $H_0$  rejected.

c. Influence of Inflation Toward JII

Furthermore, the Inflation variable is obtained with the result of the t-statistic value is 0.524064 with the significance value of 0.6020, in this probability value shows greater than 0.05 ( $0.6020 > 0.05$ ). From these results can be concluded that Inflation

positively insignificant impact to index JII. In other words, independent variable inflation does not have a significant effect on JII dependent variable, meaning that  $H_0$  is received and  $H_a$  is rejected.

d. Influence Money Supply (M2) Toward JII

The last independent variable is money supply (M2). In variable M2 obtained with result of t-statistic value equal to 8.006880 with significance value 0.0000, at this probability value show smaller than 0,05 ( $0.0000 < 0,05$ ). From the result, it can be concluded that M2 has a significant positive effect on JII index. In other words, the independent variable M2 has a significant effect on the dependent variable JII, meaning  $H_a$  is received and  $H_0$  is rejected.

### 3. Simultaneous Test (F Test)

Based on the table 4.6 shows the value of the F test results as follows:

**Table 5.6 Test scores F**

F-Statistic	31.67509
Prob ( F-Statistic)	0.000000

Based on the result from table 4.6 the value of F statistic is 31.67509 with probability value 0,000000. Since the probability value is well below 0.05 ( $0.000000 < 0.05$ ), the regression model can be used to



predict the JII index. Or in other words that The fed rate, gold price, inflation and money supply together or simultaneously affect the JII index.

#### 4. Determination Coefficient Test ( $R^2$ )

**Table 5.7 Coefficient of Determination (  $R^2$  )**

R- Squared	0.870722
Adjusted R- Squared	0.858788

Based on the results shown in the above table 87.07 percent of R-Squared free variables can explain related variables, the remaining 34.59 is explained by variables outside the model (100% - 87.07% = 12.93%).

#### 5. Discussion

##### a. The influence of the fed rate to JII

The first analysis result that is the independent variable fed rate to JII obtained the result with the t-statistical value of the fed rate equal to -1.741341 with value significant 0.0862, at this probability value show bigger than 0,05 (0,0862 > 0,05). From the result, it can be concluded that the fed rate has the negative effect not significant to JII index.

The results of this study are not in accordance with the hypothesis proposed by researchers because the fed rate has no

significant effect on JII. The reason why the fed rate variable is insignificant to JII is as follows:

First, if we refer to the theory the Fed by Wongswan (2005) that if interest rates rise then the stock market tends to weaken. But in reality that happens when we look at the events of 2015 when the fed raised market interest rates did not respond significantly, even the stock market has strengthened, This is also happening on the JII index. The reason is that investors have already anticipation the increasing of interest rate, so that after the interest rate increase, the market tends to strengthen.

Second, the psychological factor of investors about JII return expectation. investors still choose to invest in companies listed in index JII because as we know that index JII is the most 30 liquid stock, means the companies that listed in JII is a stock that has a good performance, from the good performance will create the result of the return is a good too. meaning people think rationally.

Third, investor avoid the risk about Global uncertainty or economics uncertainty either national or international area. Investors consider when the rate of the fed rate rises and they choose to move their investment funds in the form of deposits may not necessarily be more profitable for investors, in addition to switching investment from JII index to deposit must go through

various considerations whether it is in terms of cost as well as the value of the currency, therefore investors prefer to keep investing in a liquid Index in this case is the JII index.

this study is different from previous research by Wijayaningsih, Rahayu dan Saifi (2016), which states that the fed rate influences significant against JII. this is because the data used in the study in 2008-2015.

b. The influence of Gold price toward JII

The second analysis result is the Gold Price variable obtained with the result of the t-statistic value is 2.894905 with the significance value of 0.0051, the value of this probability shows smaller than 0.05 ( $0.0051 < 0.05$ ). From these results can be concluded that the price of gold has a significant positive effect on the index JII.

The results of this study in accordance with the author's hypothesis that the price of gold has a significant positive effect on JII. The reasons for this case are:

Firstly, when the gold price rises then investors tend to sell gold with the aim of profit and switch investment to the capital market. this is in accordance with the reality that occurred in 2011 until 2014 which shown the movement of gold price increased and many investors has sold the gold. This is supported by previous research by Utoyo (2016).

Secondly, Invest in JII stock more profitable. when gold prices rise and investors sell their gold, they (investors) are more confident to allocate their funds to Index JII, because JII is an index consisting of 30 sharia companies with the largest capitalization. Therefore, when there is an increase in gold price then there is also an increase in index JII.

c. Influence of Inflation to JII

The third variable is Inflation obtained with the result of the t-statistic value of 0.524064 with the significance value of 0.6020, in this probability value shows greater than 0.05 ( $0.6020 > 0.05$ ). From these results can be concluded that Inflation positively insignificant positive to index JII.

The results of this study are not in accordance with the hypothesis proposed by the researcher because inflation has no significant effect on JII. The reason why inflation has no significant effect on JII are :

First, Based on the theory of type of inflation by Boediono (1982) The type of inflation in Indonesia is included in the category of mild inflation, this is accordance If we look at the economic conditions, especially in Indonesia inflation rate data in 2011 with 2016 is in normal condition, meaning there is no crisis during the research period, so the variable inflation does not significantly affect JII.

Secound, The reason is that investors already believe when they choose to invest in a liquid stock company (Index JII) that the company has already anticipation (just in case) to mitigate the risks when there will be an increase in inflation. therefore the increase in inflation during this study period has no significant effect on JII.

this study is supported by previous research by Maqdiyah (2014) , Nimran dan Musadieq (2013), and Hasanah and Panjawa (2016) which states that inflation has no significant effect to the JII.

d. The influence of Money supply to JII

And the last independent variable is money supply (M2). In variable M2 obtained with result of t-statistic value equal to 8.006880 with significance value 0.0000, at this probability value show smaller than 0,05 ( $0.0000 < 0,05$ ). From these results can be concluded that M2 has a significant positive effect to the JII index.

from the results of this analysis in accordance with the author hypothesized that the money supply has a significant positive effect on JII. This is caused by :

firstly, when the money supply in the community is increasing then the society is having surplus money, means there is a tendency of society to increase their consumption and

investment. This is supported by the John Major Keynes theory about Money Demand Theory.

Secondly, when public consumption increases, the demand for the company will increase as well, so that the company can increase its production amount and earn higher profits, in this case, trigger the investors to invest. This is supported by data in middle of 2013 until the end of 2014 which shown the increasing in the money supply effect on the rise of JII index.

this research is supported by previous research by Hasanah and Panjawa (2016). which states that the money supply has a significant effect on JII.