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Vector Autoregression Analysis of The Relationship Between Inflation Rate, Interest Rate, and Exchange Rate To The Jakarta Islamic Index

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Vector Autoregression Analysis Of The Relationship Between Inflation Rate, Interest Rate And Exchange Rate With The Jakarta Islamic Index

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ABSTRACT

The Indonesian Sharia Capital Market is an interesting thing to study because based on the 2019 Global Islamic Finance Report (GIFR) report, Indonesia is ranked first in the Global Sharia Financial Market. The Jakarta Islamic Index (JII) is the sharia stock index that was first launched on the market. Indonesian capital on July 3, 2000 and only consisted of the 30 most liquid Islamic shares listed on the Indonesia Stock Exchange. This study will try to uncover how the relationship between macroeconomic variables in Indonesia by using Vector Autoregression (VAR) analysis and using monthly secondary data from 2012-2019. VAR analysis which has advantages including multivariate, free from spurious endogeneity and exogeneity variables and can detect relationships between variables in the equation system. The results of this study indicate that the JII of the previous period and the BI Rate have a positive influence on JII, while inflation and the Rupiah-US Dollar Exchange rate have a negative relationship with JII. The implication of the results of this study is to strengthen the rupiah price which greatly affects JII.

Keywords: JII, Shariah stock, JII, Macroeconomics, VAR.

1. Introduction

Today the development of Islamic economics has grown and developed rapidly in the Indonesian economy, both among academics and practitioners. In the 2019 Global Islamic Finance Report, Indonesia won a score of 81.93 in the 2019 Islamic Finance Country Index (IFCI) which brought Indonesia to rank first in the global Islamic financial market. The main potential is the total Muslim population of Indonesia, amounting to 12.7 percent of the total world population. Indonesia has a market size of the halal food-beverage industry of 169.7 billion US dollars in 2016, and is projected to reach 1 trillion US dollars in 2030. In the pharmaceutical industry sector, Indonesia is among the top 5 countries that consume halal pharmaceutical, with a level of consumption of 5.7 billion US dollars. Then for the consumption of halal cosmetics the value reaches 3.7 billion US dollars.

The consumption sector in the halal fashion industry, Indonesia is ranked 5th in the world. Indonesia was also chosen as the world's best halal tourist destination according to the Global

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Muslim Travel Index (GMTI) 2019 and outperformed 130 destinations from around the world, Indonesia could become the center of world sharia economics and finance in the future, This also has implications for the development of the Islamic capital market which is part of the Islamic financial industry (Pasaribu and Mikail 2013). The application of sharia principles in the capital market certainly comes from the Qur'an as the highest legal source and the Hadith of the Prophet Muhammad. The Koran itself implies investment in general in Surah Al-Baqarah verse 261.
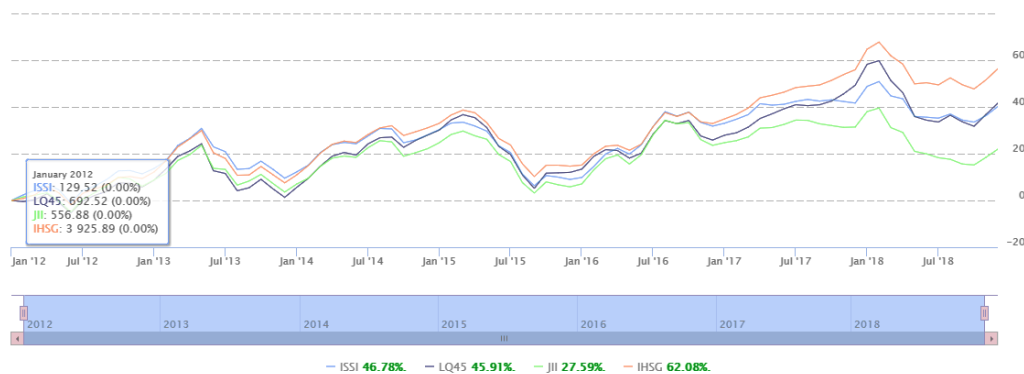

Figure 1. Comparison Between ISSI, IHSG, LQ45 and JII Index 2012-2020
Source: indopremier.com

Based on the Figure 1., when compared with conventional indexes like LQ45 and IHSG, JII is reasonable still losing, but if we compare between JII that started in 2007 compared to ISSI which started in 2011, JII is still inferior to ISSI, this is where the need for research related to macroeconomic variable factors that affect JII.

The most unfortunate thing about Jakarta Islamic Index (JII), which is arguably the leading Sharia shares, but only represented by 30 shares (Indonesia Stock Exchange 2016). , is that it is less desirable than the Indonesia Sharia Stock Index (ISSI) which covers all shares in DES, Whereas ISSI should be a real benchmark for the development of sharia investment (not just the best) and is less than four times cheaper than JII.

High index prices certainly reflect stocks with high returns as well. There are various things that affect high stock prices, of course apart from the quality and financial health of companies that issue their shares and are listed in the index there are macroeconomic factors that have a direct relationship with the development of shares in the capital market, among others, are the inflation rate, bank interest rates Indonesia (BI Rate) and the Currency Exchange, in this case the Rupiah against the US Dollar (Suciningtias and Khoiroh 2015).

Looking at the chart, even though the price is much cheaper than JII, ISSI's capitalization value is certainly higher because it contains 331 shares than JII which only contains 30 shares. Therefore, investing in ISSI shares should actually be "more blessing" because it also raises the status of sharia shares in Indonesia in real terms and helps middle class companies to develop, although they must choose carefully because there are many unstable stocks, rather than investing in JII which indeed, it can be said to be "guaranteed" and high returns, for "profit-oriented" investors will certainly not glance at ISSI shares. ISSI as an index is certainly an investment instrument that is influenced by macroeconomic variables.

Based on previous research by (Pasaribu and Mikail 2013), states that the inflation rate variable has a negative relationship with ISSI. While the BI Rate variable has a positive influence on ISSI, which indicates that the capital market has no substitute relationship with banks, but is complementary to banks. In addition, according to Sutawijaya and Zulfahmi (2013) the BI rate factor has a negative influence on investment, so the government and banks need to be followed up on efforts to formulate an ideal interest rate so as not to have a detrimental impact on realized investments.

Agreeing with the above research, Suciningtias and Khoiroh (2015) also revealed that the variable level of inflation and the exchange rate of IDR-USD had a significant negative effect on ISSI. In theory inflation has a negative effect on investment, because inflation will create greater uncertainty given the profitability of investment becomes increasingly unclear, expectations of investment profits become more difficult and increase the uncertainty of investment financing (Sukirno 2003, 305). Interest rates also negatively affect investment according to Keynes's liquidity preference theory that the money function is also used to speculate, depending on the interest rate of a country's savings, where higher expectations of profit will be chosen (Boediono 2001, 97). The exchange rate will also affect a person's decision to invest in which if the domestic currency depreciates will cause the price of imported materials to be expensive and have an impact on rising production costs, which results in a decline in stock market performance (Wiyani and Wijayanto 2005).

Pratama, Yoghi Citra and Abdul Azis (2018) research shows that all independent variables simultaneously influence on the return volatility of Jakarta Islamic Index (JII). Domestic macroeconomic variables that have a statistically significant effect on the return volatility of Jakarta Islamic Index are the BI rate and exchange rate (IDR-USD). Both of these variables have a substantial adverse impact on the return volatility of JII. While, the inflation variable

does not have a significant effect on the return volatility of Jakarta Islamic Index. So after seeing various previous studies , the authors want to examine how the relationship of macroeconomic variables that appear to be most influential (Inflation, BI Rate, IDR Exchange Rates -USD) to the price of JII with monthly data from the beginning January 2012 to January 2019

2. Literature Review

2.1 *Bank Indonesia Interest Rates (BI-rate)*

According to Widoatmodjo (2007), the Bank Indonesia interest rate (BI-rate) is the interest rate to respond to changes in inflation and the rupiah exchange rate as a reference for bank interest rates such as savings and deposit rates. The increase in the BI-rate is a signal where the economic situation worsens. 2008 was a year when a global crisis occurred which also affected the Indonesian economy.
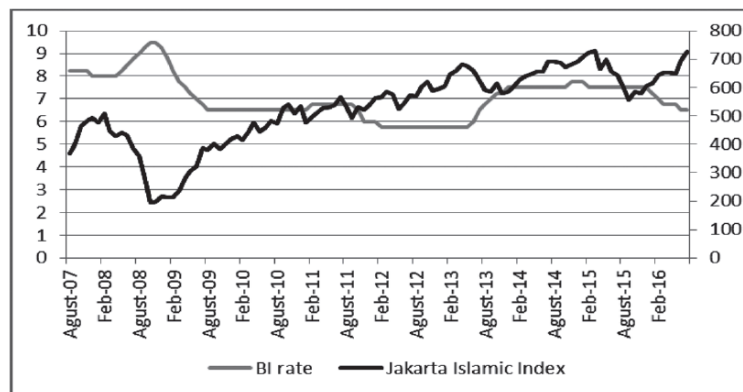

Figure 2. The changes of JII and BI rate from 2007 – 2016

Source : Indonesia Stock Exchange and Bank Indonesia

Macro variables such as Interest Rates, Exchange Rates, and Inflation, variables can affect the value of stocks. For example if interest rates rise there is a possibility that people would prefer to keep money in the bank, but if interest rates go down there is a possibility that people will divert their money to the capital market. The interest rate as one of the macroeconomic indicators can affect investment activity in the stock market. This fact is due to the interest rate can influence the changes in the level of corporate profits. Increases in interest rates will increase the cost of production and investment costs so that profits earned will reduce. BI rate showed an upward trend per December 2007 - November 2008 at 9.5% and followed by a correction of 47% JII. Improved BI rate during the period December 2007

- November 2008 gave an adverse effect on the fluctuation of JII. Instead, the tendency of decreasing BI rate after that time until January 2013 signaled the strengthening of stock indices in the equity markets, particularly the index JII (See Figure 2)

2.2 Inflation

According to Tandelilin (2010), inflation is the tendency for an increase in the prices of products as a whole so that there is a decrease in the purchasing power of money.. Inflation occurs when prices continue to creep up as a result of economic growth or too much money circulating in the market. When a country experiences a high and uncertain inflation increase, the risk of investment in financial assets will increase and the domestic currency's flexibility will weaken against the global currency. According to Gadang (2013) inflation is a dangerous factor for a country's economy. The amount of inflation can also affect stock prices and can affect stock demand.
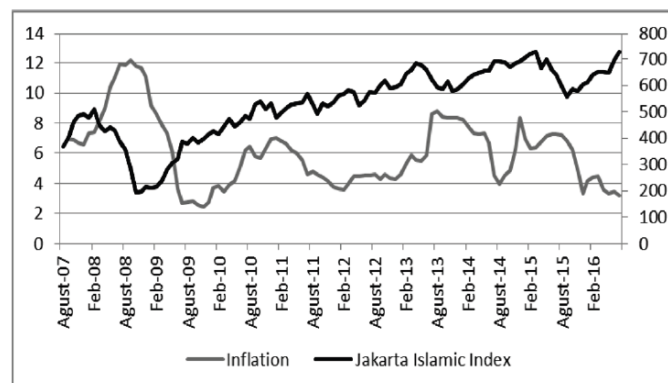

Figure 3. The changes of JII and Infaltion rate from 2007 – 2016

Source : Indonesia Stock Exchange and Bank Indonesia

The high inflation is enough to give rise to social costs such as reduced purchasing power. This data means that the ability of people to make the consumption of goods and services would lower so that the company's sales revenue may decline. In the global financial crisis of 2008, inflation reached 11.85% over that time followed by a decline in the index JII about 47% by August 2007 - November 2008. Based on Figure 2 in the period, the inflation rate had an impact on JII index weakened significantly. By contrast, declined inflation and tended to be stable may be one signal of the strengthening of the stock price index in the capital market as can be observed in the development of the index JII period July 2008 to January 2013.

2.3 IDR/USD exchange rate

Mankiw (2006) translation of Chriswan Sungkono, the exchange rate is the value someone uses when exchanging one country's currency with another country's currency. So the IDR / USD exchange rate is the value or price of the rupiah expressed in dollars, where the value is influenced by supply and demand. In Indonesia, the exchange rate system is a free floating exchange rate in which the exchange rate is fully determined by market mechanisms without the intervention of the Central Bank. For investors themselves, the depreciation of the rupiah against the dollar indicates that the outlook for the Indonesian economy is bleak. Because the depreciation of the rupiah can occur if the fundamental factors of the Indonesian economy are not strong (Sunariyah, 2006). This certainly adds to the risk for investors if they want to invest in the Indonesian stock exchange (Robert Ang, 1997). Investors will certainly avoid risk, so investors will tend to take action and wait until the economic situation is felt better.
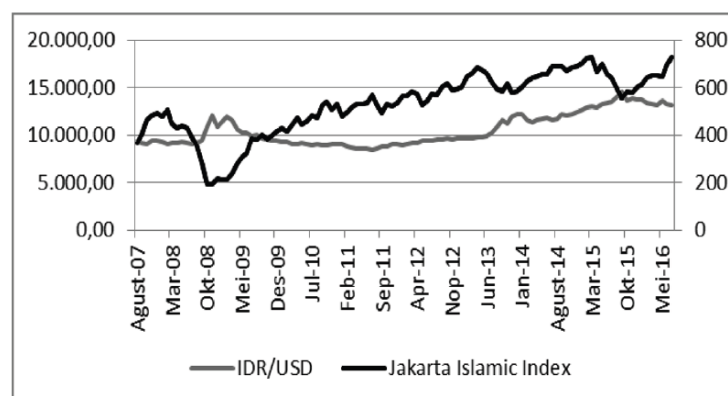

Figure 4. The changes of JII and IDR/USD exchange rate from 2007 – 2016

Source : Indonesia Stock Exchange and Bank Indonesia

The effect of exchange rate fluctuation participated in on economic activity. Changes in exchange rates may have an impact on the industry's performance changes. Depreciation condition on exchange rate can increase the export earnings of the company. Export opportunities occur because domestic goods become more competitive with lower selling prices counted in the real exchange rate. However the instability of exchange rate will also interfere with the performance of various industries, particularly industries that utilize raw materials imports and settlement of liabilities denominated in foreign currencies. This data

can lead to a decrease in the price index of price stocks. As of August 2007 - November 2008 depreciated by 22% while the index JII corrected by 47% based on the period (See Figure 4).

3. Research methodology

This type of research is quantitative descriptive research that is research about data collected and expressed in the form of numbers. Quantitative data is data in the form of numbers or qualitative data that is leveraged (Sugiyono, 2002). The variables used in this study are 1 dependent variable and 4 independent variables. The dependent variable used is the Indonesian Jakarta Islamic Index (JII), while the independent variable is the BI interest rate (BI-Rate), inflation, exchange rate (exchange rate), and JII in the previous period. The data used in this study are secondary data taken as a whole from official sources in the form of secondary data from January 2012 to January 2019. The software used in this study is Microsoft Excel and Eviews 6.
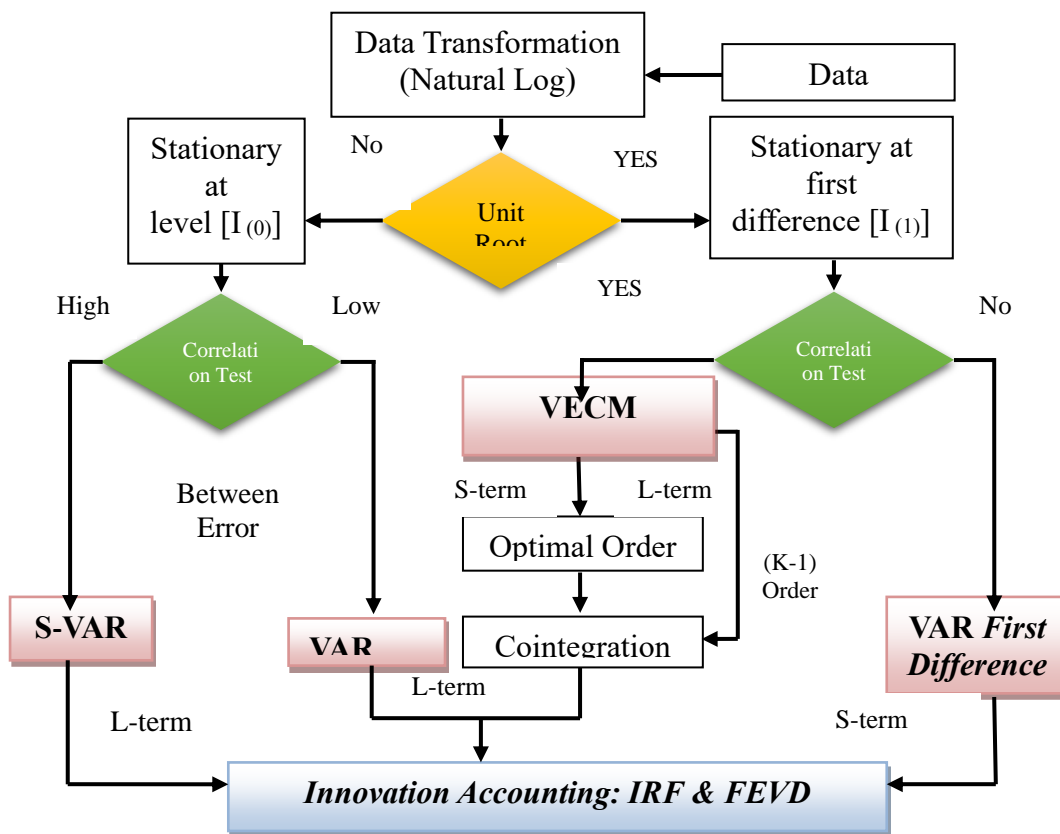

Figure 5. Research Framewor with VAR method
Source: Ascarya (2009)

4. Results and Discussion

4.1 *Stationarity Test*

Table 1 Stationary Test Results at the Level

| Variable | ADF | MacKinnon Critical Value | | | P-Value | Information |
	Statistic	1%	5%	10%		
Ln_JII	-2.198953	-4.096614	-3.476275	-3.165610	0.4824	**Not Stasioner**
Inflation	-2.246909	-4.098741	-3.477275	-3.166190	0.4564	**Not Stasioner**
SBBI	0.347794	-4.096614	-3.476275	-3.165610	0.9985	**Not Stasioner**
Ln_Kurs	-1.479645	-4.096614	-3.476275	-3.165610	0.8273	**Not Stasioner**

Based on Table 1, the unit root test results at the level level show that all variables are not stationary at 5% real level as seen from the absolute value of t-ADF greater than the absolute value of MacKinnon Critical Values at the level of 5%. At the unit root test which is not stationary at the level of level is carried out further testing at the level of first difference.

Table 2 Stationarity Test Results at the First Difference level

| Variable | ADF | MacKinnon Critical Value | | | P-Value | Information |
	Statistic	1%	5%	10%		
Ln_JII	-7.436425	-4.098741	-3.477275	-3.166190	0.0000	**Stationer**
Inflation	-6.392958	-4.100935	-3.478305	-3.166788	0.0000	**Stationer**
SBBI	-5.785225	-4.098741	-3.477275	-3.166190	0.0000	**Stationer**
Ln_Kurs	-8.831402	-4.098741	-3.477275	-3.166190	0.0000	**Stationer**

Based on Table 2, it can be seen that the unit root test results at the first difference level show that all variables have been stationary at 5% significance level as seen from the absolute value of t-ADF smaller than the absolute value of MacKinnon Critical Values. Afterall data is declared stationary then the data can be processed to the next stage which is to determine the Optimum Lag.

4.2 Determine the Optimum Lag

The next step in estimating this model is determining the optimum lag length. Intermediate candidates will be sought by using the available information criteria, namely the criteria for Likehood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), and Hannan-Quin Criterion (HQ). If the information criteria refer to a candidate interval, then the lag will be chosen to continue the estimation at the next stage. The lag test in this study uses the EViews 10.0 application. The optimum lag test results for the five models will be shown in Table 4.3.

Table 3 Determining Optimum Lag

Lag	LR	FPE	AIC	SC	HQ
0	NA	0.000205	2.860709	2.995639	2.913865
1	620.5696*	9.17e-09*	-7.157419*	-6.482768*	-6.891640*
2	22.36913	1.01e-08	-7.064130	-5.849759	-6.585728
3	19.98965	1.15e-08	-6.956084	-5.201992	-6.265059
4	9.257189	1.60e-08	-6.653046	-4.359233	-5.749397
5	13.53501	2.02e-08	-6.467813	-3.634279	-5.351541
6	14.96589	2.44e-08	-6.351554	-2.978299	-5.022659

Based on Table 3, it can be seen that the value containing an asterisk (*) is the smallest value contained in the criteria, so the lag at that value is the most optimum lag. In this test, the majority of the asterisks are in lag 1. Therefore, in this study lag one is the most optimum lag. Stability Test Optimal lag length has been obtained from previous tests. After that, the optimal length of the selected hose needs to be tested, whether the interval is the length the maximum stable or unstable VAR interval. The stability of the VAR model can be seen from inverse roots value of the characteristic polynomial AR. A VAR system is said to be stable (stationary) if all the roots have modulus that is smaller than one (Lutkepohl 1991). Stability Test in this study uses the EViews 10.0 application. Here are the results stability testing:

Table 4 Stability Test Results

Root	Modulus
0.971061	0.971061
0.936366	0.936366
0.883529 – 0.108880i	0.890213
0.883529 + 0.108880i	0.890213

Based on Table 4, the modulus values for the VAR model range between 0.890213-0.971061. Based on these results state that the modulus value obtained does not exceed one, so it can be concluded that the VAR model is stable at each interval so that it can be performed FEVD (Forecasting Error Variance Decomposition) tests on this model and then can produce valid output.

4.4 Cointegration Test

Cointegration testing is important to know whether variables that are not stationary individually can be cointegrated or not. In addition, cointegration tests were also conducted to see the long-term relationship of the variables used in the study. Cointegration relationship in this study can be seen from the value of trace statistics. An equation is said to have a cointegration relationship if the value of the trace statistic is greater than the critical value of 5 percent. The Stability Testing in this study uses the Johansen Cointegration test on the EViews 10.0 application. Following are Johansen's cointegration test results:

Table 5 Johansen Cointegration Test Results

Hypothesized No. Of CE (s)	Eigenvalue	Trace Statistic	0,05 Critical Value	Probabilitas
None	0.270635	40.99040	47.85613	0.1890
At most 1	0.206836	19.53089	29.79707	0.4552
At most 2	0.042955	3.773551	15.49471	0.9209
At most 3	0.011522	0.788021	3.841466	0.3747

Based on Table 5, it can be seen that the results of the Johansen cointegration test show there is no cointegration equation, ie when the trace statistic value is smaller than the critical value

at the critical point of 5%. This indicates that this equation has a short-term equilibrium relationship between JII and inflation, the BI rate and the IDR exchange rate. With no cointegration in this equation, the model that will be used in this study is the Vector Auto Regression (VAR).

4.5 Engel-Granger Causality Test

After getting the optimum lag in testing the model, a stable model, and the absence of cointegration, the Engel-Granger causality test is then performed. This is done to see the effect of the JII variable on inflation, the BI rate, the IDR-USD exchange rate and vice versa. Causality Test in this study uses the EViews 10.0 application. The results of the causality test are in Table 6.

Table 6 Engel-Granger Causality Test Results

Null Hypothesis	Observation	F-statistic	Probabilitas
JII influenced by Inflation	68	1.08894	0.3428
JII influenced by *BI rate*	68	1.48651	0.2340
JII influenced by Rupiah Exchange rate	68	4.84041	0.0111
Inflasi influenced by *BI rate*	68	6.33386	0.0031
The BI rate is influenced by the Rupiah Exchange Rate	68	3.32439	0.0424

Based on Table 6, the results obtained indicate that at a level of five percent, ie when the probability value is below 0.05, the rupiah exchange rate affects the JII and the BI rate influences inflation, also the Rupiah exchange rate affects the BI rate. Changes in the value of the rupiah exchange rate significantly affect the price of JII. This is because when the Rupiah depreciates against the US Dollar the stock price automatically drops, because the purchase price depends on the rupiah exchange rate, also because the JII and Rupiah exchange rates continue to fluctuate with periods faster than other macroeconomic variables.

4.6 Vector Auto Regression Test (VAR)

The Vector Auto Regression (VAR) model is one of the most successful, flexible, and easiest models to use for multivariate time series analysis. The VAR model has proven to be very

useful for describing the dynamic behavior of economic and financial time-series data forms and also for forecasting. These models often provide superior estimates for univariate time-series models and simultaneous equations theory based on simultaneous models. The forecast of the VAR model is quite flexible because it can be made conditional on the potential future paths of certain variables in this model.

This study uses significance with a 95 percent confidence value, that is, the t-statistic value for the critical value of 5% is equal to ± 1.99495 which means that, H0 is said to be rejected if the absolute value of t-statistic is greater than the t-ADF value, then the variable is declared significant effect. Testing this VAR estimate using the EViews 10.0 application. The following results are testing the VAR estimation.

Table 7 VAR Test Results

Variable	Coefficient	T- Statistic	Conclusion
LN_JII (-1)	0.886953	15.6621	Significant
Inflation (-1)	-0.004205	-1.15742	not Significant
BI rate (-1)	0.000188	0.02454	not Significant
Ln Kurs (-1)	0.047321	1.13692	not Significant
C	0.151852	0.55536	not Significant
R-squared	0.887694	-	Significant
Adj. R-squared	0.880675	-	Significant

Based on Table 7 it can be seen that in the short term the value of C (constant) is 0.151852 which means that if all the variables had not changed in the previous month, the price of JII would have increased by 0.151852 points. In addition, the R-squared coefficient value of 0.887694 means that 88.76% of the JII variable can be explained by JII, Inflation, SBBI, and Rupiah exchange rates in the previous month, while 11.24% is explained by other variables outside the model. Likewise, the coefficient value Adj. R-squared of 0.880675 means that 88.06% of JII variables can be explained by JII, Inflation, SBBI, and Rupiah exchange rates in the previous month, while 11.94% is explained by other variables outside the model.

Relationship of JII Previous Period and JII

Based on Table 7 it can be seen that in the short term JII the previous period had a positive and significant relationship to changes in JII prices. This is indicated by the partial t-statistic JII (-1) value of 15.6621 which is outside the range of the 5% t-critical value of ± 1.99495. Meanwhile, the JII coefficient value (-1) was 0.886953 which means that if the JII in the previous month increased by one point it would cause an increase in JII this month by 0.886953 points.

Relationship between Inflation and JII

Based on Table 7 it can be seen that in the short term inflation has a negative and not significant relationship to changes in JII prices. This is indicated by the partial t-statistic inflation value of -1,15742 which is within the range of the t-critical value of 5%, which is ± 1.99495. Meanwhile, the inflation coefficient value of -0.004205 which means that if inflation in the previous month increased by one percent it will cause a decrease in JII prices this month by 0.004205 points.

Relationship between BI rate and JII

Based on Table 7 it can be seen that in the short term the BI rate has a positive and not significant relationship to changes in JII prices. This is indicated by the partial t-statistic value of the BI rate of 0.02454 which is within the range of the 5% t-critical value of ± 1.99495. Meanwhile, the BI rate coefficient is 0,000188 which means that if the BI rate in the previous month increased by one percent it will cause an increase in JII this month by 0,000188 points.

Relationship between Rupiah and JII

Based on Table 7 it can be seen that in the short term the Rupiah exchange rate has a positive and not significant relationship to changes in JII prices. This is indicated by the partial t-statistic value of the Rupiah exchange rate of 1.13692 which is within the range of the t-critical value of 5%, which is ± 1.99495. Meanwhile, the Rupiah Exchange Rate coefficient is 0.047321 which means that if the Rupiah Exchange rate one month earlier increased by one Rupiah per US Dollar it would cause an increase in JII prices this month by 0.047321 points.

Impulse-Response Function (IRF) Results

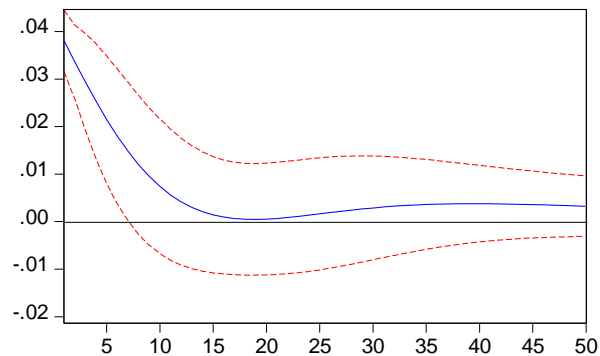IRF JII Variable with JII Previous Period

Figure 6. ISF IRF Results for the Previous Period of JII

The first response analyzed is the response of the JII variable (previous period) to JII itself. From Figure 6, it can be seen that the JII shock of one standard deviation in period 1 reached a response of around 0.038% JII price. From period one to period 19 it can be seen that the JII shock is responded negatively by JII itself, which then looks unaffected by the shock.

Starting in period, shocks to JII resulted in an increase in the JII response and the increase stopped at period 34 which experienced positive shocks of 0.005%. JII's response to the JII shock itself began to reach its equilibrium in period 35 which responded positively to the shock of 0.005% until the end of the period, which despite a slight decline. So it took approximately three years for JII to recover from JII's own shocks.
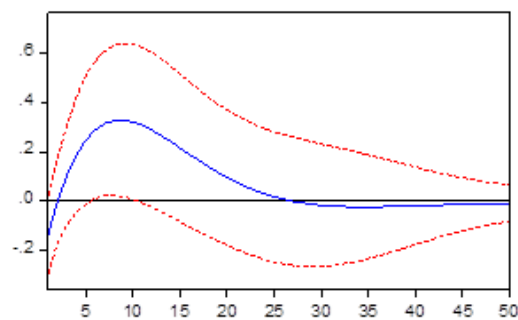
IRF JII Variable with Inflation

Figure 7. Results of IRF Inflation to JII

The next response analyzed is the response of the Inflation variable to JII. From Figure 7, it can be seen that the inflation shock of one standard deviation in period 1 reached a response of around -0.1% of the price of JII. From period one to period 9, it can be seen that the

inflation shock was responded positively by JII, which was then seen reaching its peak. Starting in period 10, shocks from inflation resulted in a decrease in the JII response and the decline stopped in period 35 which experienced a negative shock of 0.2%. The JII response to shocks Inflation began to reach its equilibrium in period 35 which responded negatively to the shock until the end of the period with a slow increase, but remained in the negative zone. So it took approximately three years for JII to recover from inflation shocks.
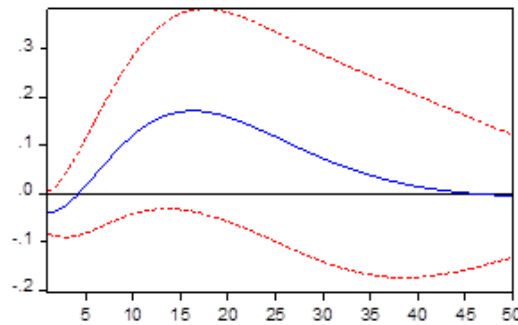
IRF JII Variable with BI Rate

Figure 8. BI Rate IRF results for JII

The next response analyzed is the BI rate variable response to JII. From Figure 8, it can be seen that the BI rate shock of one standard deviation in period 1 reached a response of around -0.05% of the JII price. From period one to period 15 it can be seen that the BI rate shocks responded positively by JII, which then was seen reaching a peak of 0.15%. Beginning with period 15, shocks from the BI rate result in a decrease in the JII response until the end of the period (50 periods) but remain in the positive zone of 0.0001%. JII's response to BI rate shocks is expected to begin to strike a balance for more than 50 periods in the future where the response is not too significant and still paves the way between positive and negative. So it took approximately four years for JII to recover from the BI rate shock.

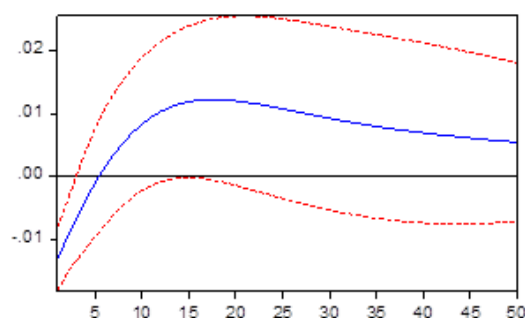IRF JII Variable with Rupiah Exchange Rate

Figure 9. JII IRF Results with Rupiah Exchange Rate

The last response analyzed was the variable response of the Rupiah-US Dollar Exchange Rate to JII. From Figure 9, it can be seen that the shock of the Rupiah-US Dollar exchange rate of one standard deviation in period 1 reached a response of around -0.007% of the price of JII. From period one to period 15 it can be seen that the shaking of the Rupiah-US Dollar exchange rate has been responded positively by JII, which then is seen reaching its peak at 0.01%. Starting in period 15, shocks from the Rupiah-US Dollar exchange rate resulted in a decrease in the JII response and the decline continued until the end of the period (period 50) at 0.005% but remained in the positive zone and began to reach equilibrium. So it took approximately four years for JII to recover from the Rupiah-US Dollar exchange rate shock.

5. Conclusion

Based on the results of the research and discussion in the previous chapter, the conclusions of this study can be explained as follows:

1. The variable of the Jakarta Index in the previous period had a positive influence on the Indonesian Sharia Stock Index, this means that when the Indonesian Sharia Stock Index in the previous period had an increase, it would have an impact on the Jakarta Islamic Index, which also increased, and vice versa.

2. The inflation variable has a negative influence on the Jakarta Islamic Index, this means that when inflation increases will have an impact on the Jakarta Index which will decline, and vice versa.

3. The BI Rate variable has a positive effect on the Jakarta Islamic Index, this means that when the BI Rate increases it will have an impact on the Jakarta Islamic Index which will increase, and vice versa.

4. The Rupiah-US Dollar Exchange Rate variable has a negative influence on the Jakarta Islamic Index, this means that when the Rupiah-US Dollar Exchange Rate increases, it will have an impact on the Jakarta Islamic Index which will decline, and vice versa.

References

Al-Quran Al Karim

Al-Hadith

Abbes, M. B., & Trichilli, Y. (2015). Islamic Stock Markets and Potential Diversification Benefits. Bosa Istanbul Review, *15*(2), 93-105. https://doi.org/10.1016/j.bir.2015.03.001

Ahman, E. & Rohmana, Y. (2012*). Pengantar Teori Ekonomi Mikro*. Bandung: Rizqi Press.

Amalia, Fitri. (2010). *Teaching Materials Course: Macroeconomics*. Diktat. Jakarta.

Ardana, Y. (2016). Analysis of the Effect of Macroeconomic Variables on the Indonesian Sharia Stock Index (May 2011-September 2015). *Journal of Economics, Busines & Entrepreneurship, 10*(1), 76-90.

Arifin, Z. (2014). The Attractiveness of the Islamic Capital Market: Study on the Indonesia Stock Exchange. *Journal of Finance and Banking, 18*(2)*,* 249-257.

Ascarya. (2009). *VAR VECM Module Application*. Jakarta: Center for Central Bank Studies.

Bank Indonesia. (2017, March 5). *BI 7-day Repo Rate Data.* http://www.bi.go.id/en/moneter/bi-7day-RR/data/Contents/Default.aspx.

Bank Indonesia. (2017, March 5). *Reference Exchange Rate (JISDOR).* http://www.bi.go.id/en/moneter/informasi-kurs/reference-jisdor/Default.aspx

Bank Indonesia. (2016, January 12). *BI Rate Data*. http://www.bi.go.id/en/moneter/bi-rate/data/Default.aspx

Bank Indonesia. (2016). *Explanation of BI Rate*. http://www.bi.go.id/en/moneter

Beik, I. S., & Fatmawati, S. W. (2014). Effect of International Sharia Stock Price Index and Macroeconomic Variables on the Jakarta Islamic Index. *Al-Iqtishad: Journal of Islamic Economics, Volume 10* (1), no. 2, 155-178. https://doi.org/10.15408/aiq.v6i2.1228

Chapra, M. U. (2000). *Islam and Economic Challenges*. Jakarta: Gema Insani Press.

Eliza, M., & Ismail, M. (2012). Analisis Pengaruh Variabel Makroekonomi Terhadap Investasi Asing di Indonesia (2000: 1 - 2011: 4). *Jurnal Ilmiah Fakultas Ekonomi dan Bisnis Universitas Brawijaya, 1* (2).

Gujarati, N. D. (2003). *Basic Econometrics Translation*. Jakarta: Erlangga.

https://www.indopremier.com/ipotstock/fiturumum.php?page=multigunachart

http://www.bi.go.id/en/moneter/inflasi/introduction/Contents/Default.aspx.

http://www.idx.co.id/en-us/home/publication/statistic.aspx.

http://www.duniainvestasi.com/bei/prices/stock/ISSI.

Pasaribu, R. B. F., & Firdaus, M. (2013). Analisis Pengaruh Variabel Makroekonomi Terhadap Indeks Saham Syariah Indonesia. *Jurnal Ekonomi dan Bisnis, 7*(2), 117-128.

Pratama, Y. C., & Azzis, A. (2018). Macroeconomic Variables, International Islamic Indices, and The Return Volatility in Jakarta Islamic Index. *Al-Iqtishad: Journal of Islamic Economics Volume 10 (1), January 2018 P-ISSN: 2087-135X; E-ISSN: 2407-8654,* 171 – 188*.*
https://doi.org/10.15408/aiq.v10i1.5550

Suciningtias, S. A., & Khoiroh, R. (2015). Analisis Dampak Variabel Makro Ekonomi terhadap Indeks Saham Syariah Indonesia (ISSI). *In 2015 2nd Conference in Business, Accounting and Management*, *2(1)*, 398-412.