The Effect of International Sharia Stock Movement, Macroeconomic Variable, and Bank Indonesia Policy on Return Jakarta Islamic Index

Afifah Fauziyah[1], Endri Endri[2,*], and Indra[1]

[1]*Institut Tazkia, Bogor, West Java, Indonesia.*

[2]*Universitas Mercu Buana, Jakarta, Indonesia.*

Abstract: This research aim is to analyze the impact of international Sharia stock movement, macroeconomic variables, and Bank Indonesia policy on the Return Jakarta Islamic Index. The global Sharia stocks movement are Dow Jones Islamic Market United States (IMUS), FTSE Bursa Malaysia Hijrah Shariah Index (FTSE), and MSCI World Islamic (MSCI). The macroeconomic variables are the exchange rate, world oil price, inflation, Credit Default Swap (CDS), and foreign exchange reserves. Bank Indonesia's policy is BI-rate. The method used in this research is the error correction model (ECM) to analyze the short-run and long-run impact of international Sharia stock movement, macroeconomic variables, and Bank Indonesia policy on return JII. The result shows that the IMUS, exchange rate, and world oil prices influence the return of JII in the short run. Whereas IMUS, exchange rate, and CDS affect the return JII in the long run.

Keywords: Sharia Stocks Movement, Macroeconomics Variable, Return JII, and Error Correction Model (ECM).

INTRODUCTION

In July 2000, Indonesia officially introduced the ownership of an Islamic capital market index called the Jakarta Islamic Index (JII). Through JII, investors can find the movements of the shares listed in the Sharia Securities List issued by the Capital Market and Financial Institution Supervisory Agency (BAPEPAM- L.K.). On the Indonesia Stock Exchange (IDX), JII is an index concerning Islamic stock investors. According to the IDX website, JII's constituents are limited to the 30 most liquid Islamic equities traded on the IDX and have the most significant market capitalization. Thus, JII is considered a performance parameter for Islamic stocks in the Indonesian Capital Market. No wonder many Indonesian investors, the majority of whom are Muslims, have begun to shift their portfolios to JII shares due to their excellent fundamentals and performance. Therefore, an investor can determine the direction of the Islamic stock market by monitoring the movement of the Jakarta Islamic Index. Investors need deep tactics and analysis to recognize this situation (Suryadi et al., 2021).

REVIEW OF EMPIRICAL EVIDENCE

Various factors influence a stock index. One of them is the factor of global economic conditions. The economic situation of a country is reflected in the capital market, so the movement of a country's capital market can affect the capital market of other countries due to the linkages or cooperation in the economic field between countries (Endri et al., 2021).

This shows that integrating world capital markets allows investors to diversify internationally (Hidayat et al., 2022). One of the diversification strategies for investing in the capital market can be seen through the movement between capital market indices. The presence of shocks emanating from one market has a domino effect on other financial markets. Sakthivel et al. (2012) asserted that knowledge about the basic economy of a country will be transmitted to other markets, thus impacting other stock markets. This shows that the stock market, which is a fundamental factor in a country's economy, has influenced other countries' capital markets. In recent decades, the international Islamic finance market has garnered momentum in attracting international capital flows from Muslim and non-Muslim investors, and the preferred indices are global Islamic indices such as the FTSE, DJIM, and MSCI (Ho et al., 2014). Various studies on the influence of movements in the global Islamic stock market index on the Islamic stock market index in Indonesia show mixed findings (Majid & Shabri, 2018; Nurhayati et al., 2021; Indupurnahayu et al., 2022). Irfan et al. (2021) stated that there was an influence of international Sharia stock indexes; some showed no effect of the international Sharia stock index on the return of JII. Pratama and Azzis found that the B.I. rate, IDR-USD exchange rate, DJIUK index, and FTSMY index influence JII return volatility. The other factors that affect the stock index are macroeconomic variables and Bank Indonesia Policy (Assagaf et al., 2019). Mawardi et al. (2019) prove that the inflation rate, industrial production index, and interest rates influence the Indonesian Sharia Stock Index.

*Address correspondence to this author at Faculty of Economics and Business, Universitas Mercu Buana, Jakarta, Indonesia;
E-mail: endri@mercubuana.ac.id

These include the variable exchange rate, world oil prices, inflation, Credit Default Swap (CDS), foreign exchange reserves, and B.I. rate. Many previous studies have examined this, and the results have been mixed. One of them is the difference in findings from the research results of Widagdo et al. (2020), which states that Islamic stock returns are not influenced by macroeconomic variables, and Endri et al. (2020), which states that Bank Indonesia Policy has significant adverse effect on IDX composite. Whereas Yunita and Robiyanto's (2018) research shows that macroeconomic factors significantly influence JII returns while Bank Indonesia policy has no significant influence on JII returns. Based on these things, the movement of the DJIM, FTSE, and MSCI and changes in exchange rate factors, global oil prices, inflation rates, credit default swaps, foreign exchange reserves, and B.I. rate influence the return Jakarta Islamic Index. Thus, the core objective of this study is to analyze the effect of international sharia stock movement, macroeconomic variables, and Bank Indonesia policy on JII's return.

RESEARCH METHOD

Research Design

This study used an econometric approach, specifically the Error Correction Model (ECM). ECM is a model that includes adjustments to correct for imbalances. ECM was developed by Sargan (1964), which is a regression model. A time series regression model with non-stationary data produces an inaccurate regression, namely a high R-square but many independent variables that are not significant. If the data is not stationary, then the correct estimation model is the ECM.

Data

This research data used is secondary data between January 2017 and December 2021. Data on exchange rates, inflation, B.I. Rate and foreign exchange reserves are obtained through the official B.I. website (www.bi.go.id), CDS data is obtained from the website (www.bloomberg.com), and data on world oil prices is obtained through the website (www. indexmundi.com). At the same time, the DJIM US index, MSCI World Islamic, FTSE Bursa Malaysia Hijrah Shariah Index, and Return Jakarta Islamic Index are sourced from the website (www.investing.com). The software used in this research is Eviews 10 and M.S. Excel.

Data Analysis Procedures

In the ECM model, an Error Correction Term (ECT) element is included in the equation model. The ECM formulation in this study was adjusted to the operational definition of the variable as follows:

ECM formulation for the long term:

$$\Delta \text{Return JII} = \alpha 0 + \alpha 1 \Delta \text{Return JII}_{t-1} + \gamma 0 \text{IMUS}_t + \gamma 1 \Delta \text{IMUS}_{t-1} + \gamma 0 \text{MSCI}_t + \gamma 1 \Delta \text{MSCI}_{t-1} + \gamma 0 \text{FTSE}_t + \gamma 1 \Delta \text{FTSE}_{t-1} + \gamma 0 \text{ER}_t + \gamma 1 \Delta \text{ER}_{t-1} + \gamma 0 \text{OIL}_t + \gamma 1 \text{OIL}_{t-1} + \gamma 0 \text{BI Ratet} + \gamma 1 \text{BI Ratet}_{-1} + \gamma 0 \text{IF}_t + \gamma 1 \text{IF}_{t-1} + \gamma 0 \text{CDS}_t + \gamma 1 \text{CDS}_{t-1} + \gamma 0 \text{CDEV}_t + \gamma 1 \text{CDEV}_{t-1} + \delta (\text{ReturnJII}_{t-1} - \beta \text{IMUS}_{t-1} - \beta \text{MSCI}_{t-1} - \beta \text{FTSE}_{t-1} - \beta \text{ER}_{t-1} - \beta \text{OIL}_{t-1} - \beta \text{BIRatet}_{-1} - \beta \text{IF}_{t-1} - \beta \text{CDS}_{t-1} - \beta \text{CDEV}_{t-1}) + \mu t$$

where $E(\mu t|It-1) = 0$ and $It-1$ contains information from changes in the independent variable and the previous value of the independent variable and dependent variable

ECM formulation for the short term, where the model is without lag from changes in the dependent variable and the independent variable:

$$\Delta \text{Return JII} = \alpha 0 + \gamma 0 \Delta \text{IMUS}_t + \gamma 0 \Delta \text{MSCI}_t + \gamma 0 \Delta \text{FTSE}_t + \gamma 0 \Delta \text{ER}_t + \gamma 0 \Delta \text{OIL}_t + \gamma 0 \Delta \text{BI Ratet} + \gamma 0 \Delta \text{IF}_t + \gamma 0 \Delta \text{CDS}_t + \gamma 0 \Delta \text{CDEV}_t + \delta (\text{ReturnJII}_{t-1} - \beta \text{IMUS}_{t-1} - \beta \text{MSCI}_{t-1} - \beta \text{FTSE}_{t-1} - \beta \text{ER}_{t-1} - \beta \text{OIL}_{t-1} - \beta \text{BIRatet}_{-1} - \beta \text{IF}_{t-1} - \beta \text{CDS}_{t-1} - \beta \text{CDEV}_{t-1}) + \mu t$$

The tests in ECM are as follows:

Stationarity Test.

In this study, Augmented Dickey-Fuller (ADF) was used to determine the stationarity of the data. This is intended to draw conclusions based on the results of the ADF test to compare the ADF statistical value with the critical value of the Mackinnon statistical distribution. The data will be considered stationary if the absolute value of the ADF statistic is greater than the critical value. In comparison, the data will be considered non-stationary when the absolute value of the ADF statistic is less than the critical value. This stationarity test will be carried out for each variable. The hypothesis used is as follows:

H0: Not Stationary

H1: Stationary

Cointegration Test.

The cointegration test on ECM uses two stages of Engle and Granger, wherein the first process, the dependent variable (Yt), and the independent variable (Xt) are not cointegrated, an estimation of the model on the first derivative (first differences) will be carried out. The two stages of Engle and Granger begin with estimating the cointegration parameters by following the standard OLS estimator in both the initial equation and the lag estimator. According to Engle and Granger (1987), we can ignore the initial estimate; this is very much by the efficiency of the parameter estimation in the error correction model, which is not affected by whether to use the OLS estimator on the initial estimator and the lag. Selection will generally affect the error correction parameter. The procedure for changing is a two-stage method of Engle and Granger (Seddighi (2013).

The effect of international Sharia stock movement, macroeconomic variable, and Bank Indonesia policy on return Jakarta Islamic Index

RESULTS OF THE STUDY

Analysis of Factors Affecting Return of JII

Econometric analysis begins with describing the variables and constructing a model, then testing the model to determine whether it meets the classical assumption test and is by the BLUE standard, and then explaining the results of interpreting the ECM model in the long-term and the short-term. Variables that affect JII's return are divided into three: international Islamic stock movements, IMUS, MSCI, and FTSE, and macroeconomic variables, which are the Cointegration Test.

To be able to perform the cointegration test, it is necessary first to test the long-term model, which can be seen in Table **2**.

Which are exchange rates, world oil prices, inflation, credit default swaps, and foreign exchange reserves. Then the Bank Indonesia policy is the B.I. rate. The details of the variables are as follows:

In this model, the dependent variable returns JII, while the independent variables are described as follows:

IMUS, FTSE, and MSCI stock prices at the end of each trading month.

Changes in the exchange rate of the rupiah against the dollar, world oil prices, inflation, the CDS index, foreign exchange reserves, and interest rates (B.I. rate) at the end of each month.

STATIONARITY TEST

A stationary test in the first difference uses Augmented Dickey-Fuller with a probability value of 5%. Stationary testing in this study using Eviews 10 software, so the stationarity test results are given in Table **1**.

Table 1. First Difference ADF Stationarity Test Results.

Variable	Test Critical Value: Level			t-Statistic	Prob.
	1%	5%	10%		
Return JII	-3.552.666	-2.914.517	-2.595.033	-8.053.671	0.0000
IMUS	-3.560.019	-2.917.650	-2.596.689	-6.955.445	0.0000
FTSE	-3.552.666	-2.914.517	-2.595.033	-7.268.623	0.0000
MSCI	-3.552.666	-2.914.517	-2.595.033	-7.901.987	0.0000
Forex	-3.548.208	-2.912.631	-2.594.027	-8.593.130	0.0000
Oil Price	-3.550.396	-2.913.549	-2.594.521	-5.997.224	0.0000
Inflation	-3.555.023	-2.915.522	-2.595.565	-7.844.634	0.0000
BI Rate	-3.548.208	-2.912.631	-2.594.027	-4503207	0.0006
CDS	-3.548.208	-2.912.631	-2.594.027	-6.245.045	0.0000
FER	-3.548.208	-2.912.631	-2.594.027	-7484268	0.0000

Based on the stationary test in Table **1**, the probability value obtained is less than the probability value used, which is 5%, meaning that the return JII, IMUS, FTSE, MSCI, kurs, oil price, inflation, CDS, foreign exchange reserves (FER) and B.I. rate are stationary. Then, proceed with cointegration testing and the ECM model.

Table 2. Estimated Long-Term Model

Variable	Coefficient	t-Statistic	Prob
RMSCI	0.112978	0.430008	0.6690
RIMUS	0.430891	2.041991	0.0464
RFTSE	0.150743	0.930598	0.3565
LOILPRICE	-0.019530	-0.908699	0.3679
LKURS	-0.332321	-1.832520	0.0728
LCDS	0.050098	2.000938	0.0508
LCDEV	0.120516	0.761321	0.4500
LBI_*RATE*	0.047246	0.877868	0.3842
INFLATION	0.015790	0.698954	0.4878
C	1.520205	0.649702	0.5189
R-squared	0.416040		
Adjusted R-squared	0.310928		

From Table **2** above, the long-term model shows the variables that affect JII's return using the absolute value of the 5% and 10% critical test values, which are IMUS, exchange rate, and CDS. The IMUS variable affects JII's stock return of 43.08%, so if the IMUS value increases, JII's return also increases. Then, the exchange rate has an effect of - 33.23% on the return of JII, where if the value of the exchange rate decreases, then it increases the return value of JII. The CDS variable has an effect of 5.01% on JII's return, so every increase in CDS will also increase JII's return.

The R-square value in the long-term model above is 41.60%, meaning that the independent variable is sufficient to interpret the model. However, other variables are not included in this study because this study only focuses on the IMUS, MSCI, FTSE, exchange rate, world oil prices, inflation, CDS, foreign exchange reserves, and B.I. rate variables. Then, this long-term model obtains the error correction term (ECT) value, which is used to perform the Cointegration Augmented Dickey-Fuller test. The results of the cointegration test of this study can be seen in Table **3**.

Table **3** shows that the P-value value is 0.0000, which is smaller than the critical value of 0.05, meaning that the ECT value is stationary. Based on these results, the movement of the ten research variables has a balance or cointegration relationship in the long term with one another. Thus, the data in this study deserves to be tested for the next stage, namely the Error Correction Model.

Table 3. Cointegration ADF Test Results.

Null Hypothesis: ECT01 has a unit root. Exogenous: Constant Lag Length: 0 (Automatic - based on SIC, maxlag=10)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.699323	0.0000
Test critical values:		
1% level	-3.546099	
5% level	-2.911730	
10% level	-2.593551	

*MacKinnon (1996) one-sided p-values.

ERROR CORRECTION MODEL (ECM) TEST

This study conducted the ECM test to determine the short-term relationship between the nine independent variables and JII's return from January 2017 to December 2021. International Islamic stock variables, namely IMUS, MSCI, and FTSE; macroeconomic variables, namely exchange rates, world oil prices, inflation, CDS, and foreign exchange reserves; then Bank Indonesia policy, namely B.I. rate, act as independent variables, and JII returns act as dependent variables. The criterion of an independent variable significantly influencing the dependent variable is if the P-value value of the independent variable is smaller than the specified significance level. In this study, the significance levels used were 5% and 10%. The estimation results using ECM in this study can be seen in Table **4**.

Table 4. Short-Term Model Estimation.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RMSCI)	0.007018	0.163542	0.042914	0.9659
D(RIMUS)	0.479408	0.134209	3.572100	0.0008
D(RFTSE)	0.094876	0.102991	0.921213	0.3615
D(LOILPRICE)	-0.069578	0.041032	-1.695699	0.0964
D(LKURS)	-0.603846	0.291377	-2.072391	0.0436
D(LCDS)	0.023868	0.031906	0.748069	0.4581
D(LCDEV)	0.232449	0.301469	0.771052	0.4445
D(LBI_RATE)	-0.054360	0.155090	-0.350507	0.7275
D(INFLATION)	0.030660	0.020850	1.470470	0.1480
C	0.000468	0.005051	0.092572	0.9266
ECT01(-1)	-0.996443	0.154031	-6.469094	0.0000

R-squared 0.734571
Adjusted R-squared 0.679274

From Table **4** above, the short-term model shows that the variables that affect JII's return using the absolute value of the 5% and 10% test critical values are IMUS, world oil prices, and the exchange rate. The IMUS variable also has an effect in the short term, which gives an effect of 47.94% on JII's return, where every increase in IMUS price will increase JII's return value. Then, world oil prices affect -6.95% on JII's return, whereas if world oil prices increase, it will decrease JII's return. Another variable that has an effect in the short term is the exchange rate, which is -60.38%, meaning that if the exchange rate falls, the return of JII will increase.

In the short-term model above, the R-square value is 73.45%, meaning that the independent variable is sufficient to interpret the model. However, other variables are not included in this study because this study only focuses on the IMUS, MSCI, FTSE, exchange rate, world oil prices, inflation, CDS, foreign exchange reserves, and B.I. rate variables. The table above shows that the ECT value meets the requirements where the condition for a good ECT score is -1<ECT<0. This ECM model shows that the ECT value is between that range, and the P-value is also significant because the P-value is smaller than 0.05, so the requirements for this ECM model are met. In this short-term model, the ECT value is 0.996443, this indicates that towards long-term equilibrium a correction of 0.996443 percent is needed.

RESULTS AND DISCUSSION

The estimation results of the long-term and short-term models show that the movements of Islamic stocks represented by IMUS, FTSE, and MSCI have different effects. Of the three international sharia stocks, only one positively and significantly impacts JII's stock returns, namely IMUS. The results of this study are in line with the study by Daulay et al. (2023), which states that IMUS has a positive effect on JII returns and contrast to research conducted by Aziz et al. (2021) and Prakoso (2022) found that IMUS had a significant adverse effect on JII. Majid and Shabri (2018) and Halim (2022) stated that IMUS had no significant effect on JII returns. Meanwhile, other international sharia stocks, MSCI and FTSE, do not affect JII's stock returns. This result is in line with research by Antonio et al. (2021), which found that the British stock index and the FTSE did not affect the Islamic stock index in Indonesia. Based on the research results, only IMUS shares are integrated with JII shares among the three international Sharia stocks. This indicates that the economic conditions of the United States affect the Indonesian economy. The United States economy, as reflected in its capital market, is the largest economy in the world. Therefore, the Dow Jones Islamic Market Index United States (IMUS) movement can affect almost all world stock indices, including the Jakarta Islamic Index (JII).

Then, for macroeconomic variables, only the exchange rate variable has a significant and negative effect on JII's return, both in the long and short term. Meanwhile, other macroeconomic variables do not have a long-term or short-term effect, except for the CDS variable and the world oil price variable. The CDS variable has a significant positive effect only on the long-term model estimation, and the world oil price variable only has a significant adverse effect on the short-term model estimate.

The exchange rate has the opposite effect, meaning that an increase in the value of the rupiah exchange rate against the United States dollar will cause investors to decline to invest their funds in the JII capital market because investment will be relatively more expensive, with the same dollar value

requiring more rupiah. Thus, the higher the increase in the exchange rate, the worse the performance of the JII capital market will be. The results of this study contradict the research conducted by Endri et al. (2020), which found that the exchange rate had a positive and significant effect on the IHSG, and the research conducted by Robiyanto (2018), which showed that JII's return was positively and not significantly affected by the exchange rate.

CDS has a positive and significant effect, meaning that if the spread of CDS increases, JII's stock returns will increase. This result is in line with the research of Bystrom (2005), which states that this is interesting because it shows the possibility of an inefficient CDS index market, where changes in the index are predicted to be a significant profit opportunity for investors. Thus, the higher the CDS basis point, the higher the JII's stock return. This result contradicts the research of Riyani et al. (2023), Apergis (2017), Chan et al. (2009), and Fung et al. (2008), which found that CDS has a negative and significant effect on stock returns globally.

World oil prices have a negative and significant effect, meaning that any increase in world oil prices will cause a decrease in JII's stock returns. With the increase in world oil prices, the company's production costs will increase and cause the selling price of products to increase (Rheynaldi et al., 2023). When the production costs increase and the selling price of the product increases, the company's profit and performance will experience a decline. The decline in company profits and performance will impact the company's stock price and the expected return. Thus, the higher the world oil price, the lower the return on JII's shares. The results of this study contradict the research conducted by Endri et al. (2021), which states that world oil prices have a significant positive impact on the Islamic stock market index, and research conducted by Fuad and Yuliadi (2021), which shows that the IHSG is negatively but not significantly affected by world oil prices.

Furthermore, on other macroeconomic variables, the results of the estimation test of the long-term and short-term models show that inflation and foreign exchange reserves have no effect on JII's stock returns. This condition indicates that the high or low inflation and foreign exchange reserves do not affect changes in JII's return. The non-influence of inflation on JII's return can be caused by the movement of the inflation rate, which is relatively stable, or in the sense that its movement can be predicted. Based on research data, the inflation rate during the study period has similarities in its movement patterns, so it can be assumed that investors will tend to ignore signals from the inflation rate in their investment decision-making considerations. The results of this study contradict the study by Katmas and Indarningsih (2022) found that inflation had a positive and significant effect on ISSI stock prices, and Sya'bani and Fathoni (2022) and Fathony et al. (2020) showed that inflation had a significant and negative effect on JII stock returns.

Then, the non-influence of the variable of foreign exchange reserves on JII's stock returns can be caused by comparing macroeconomic data between the value of the trading volume of JII's shares and the value of foreign exchange reserves. The value of the trading volume of JII's shares is minimal compared to the value of foreign exchange reserves, so foreign exchange reserves do not significantly affect JII's return. In addition, this can also indicate that investors do not use foreign exchange reserves as a parameter to predict stock returns of the Jakarta Islamic Index (JII). This study's results align with research conducted by Panjawa (2016), who found that foreign exchange reserves have a positive but insignificant effect on JII stock returns. Moreover, contrary to research by Ullah et al. (2017), Lim and Sek (2014) found that foreign exchange reserves positively and significantly affected the Composite stock price index.

In addition, Bank Indonesia policy variables represented by the B.I. rate also show no significant influence on JII returns either through long-term or short-term model estimation tests. This condition can be caused by the basic principles of JII's shares, which are based on sharia and the prohibition of the interest system so that changes in interest rates do not affect JII's returns. This result aligns with research conducted by Rahayu et al. (2021), which shows that the B.I. rate does not affect JII stock returns. This result is different from the findings of Nurhayati and Endri (2021), which stated that the B.I. rate in the short term had a significant positive effect on the fluctuations in the IHSG value, and the research of Endri et al. (2020), which stated that the B.I. rate had a significant adverse effect on the IHSG.

CONCLUSION

In the short term, the factors that significantly affect JII's return are economic conditions represented by the movement of international sharia stocks, the Dow Jones Islamic Market United States Index (IMUS), and macroeconomic variables represented by changes in exchange rates and world oil prices. Meanwhile, other factors, namely the FTSE Bursa Malaysia Hijrah Shariah Index (FTSE), MSCI World Islamic Index (MSCI), inflation, Credit Default Swap (CDS), foreign exchange reserves, and B.I. rate were not found to have a significant effect in the short term. These results indicate that the high or low of the United States Dow Jones Islamic Market index, the exchange rate, and world oil prices play a role in encouraging short-term fluctuations in JII's return. In the long term, the factors that have a significant effect on JII's return are economic conditions represented by the movement of international sharia stocks, the Dow Jones Islamic Market United States Index (IMUS), and macroeconomic variables represented by changes in exchange rates and Credit Default Swaps (CDS). Meanwhile, other factors, namely the FTSE Bursa Malaysia Hijrah Shariah Index (FTSE), MSCI World Islamic Index (MSCI), world oil prices, inflation, foreign exchange reserves, and B.I. rate, were not found to have a significant effect in the long term. These results indicate that the high or low Dow Jones Islamic Market United States index, the exchange rate, and the Credit Default Swap drive long-term fluctuations in JII's return.

This research is helpful for investors in making investment decisions in the stock sector and for the government to develop the Islamic stock market in Indonesia. Thus, this research can make it easier for investors to make a profit or buy and sell shares that produce returns as expected by looking at IMUS and CDS index movement. Moreover, it gives information to the government, which needs to make an effective strategy for making the JII stock market utterly free

from the influence of changes in exchange rates and world oil prices.

REFERENCES

Apergis, N. (2017). The Role of Sovereign CDS Spreads for Stock Prices: Evidence from the Athens Stock Exchange Over a 'Default'Period. In *The Greek Debt Crisis: In Quest of Growth in Times of Austerity* (pp. 153–175). Cham: Springer International Publishing.

Antonio, M. S., Rusydiana, A. S., Soeparno, W. S. I., Rani, L. N., Pratomo, W. A., & Nasution, A. A. (2021). The Impact of Oil Price and Other Macroeconomic Variables on The Islamic and Conventional Stock Index in Indonesia. *International Journal of Energy Economics and Policy*, *11*(5), 418–424. https://doi.org/10.32479/ijeep.10911

Assagaf, A., Murwaningsari, E., Gunawan, J., & Mayangsari, S. (2019). The effect of Macro Economic variables on stock return of companies that listed in stock exchange: Empirical evidence from Indonesia. *International Journal of Business and Management*, *14*(8), 108-116.

Azis, M., Juliana, A., Junaid, M., & Tarsyan, T. (2021). Interaction of International Sharia Stock Indices, Exchange Rates and Gold Prices against Jakarta Islamic Index (JII). In *Proceedings of the 3rd Beehive International Social Innovation Conference, BISIC 2020, 3-4 October 2020, Bengkulu, Indonesia*.

Bystrom, H. (2005). Credit default swaps and equity prices: The iTraxx CDS index market, working paper, Department of Economics, Lund University.

Chan, K. C., Fung, H. G., & Zhang, G. (2009). On the relationship between Asian credit default swap and equity markets. *Journal of Asia Business Studies*, *4*(1), 3-12.

Daulay, S. C. P., Soemitra, A., & Lubis, F. A. (2023). Integration Analysis of the International Sharia Stock Price Index to the Jakarta Islamic Index 2018-2022 Period. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *6*(2), 899-909. https://doi.org/10.31538/iijse.v6i2.3661

Endri, E., Rinaldi, M., Arifian, D., Saing, B., & Aminudin, A. (2021). Oil price and stock return: Evidence of mining companies in Indonesia. *International Journal of Energy Economics and Policy*, *11*(2), 110-114.

Endri, E., Abidin, Z., Simanjuntak, P, T., & Nurhayati, I.(2020). Indonesian Stock Market Volatility: GARCH Model. *Montenegrin Journal of Economics*, 16(2), 7-17. DOI: 10.14254/1800-5845/2020.16-2.1

Engle, R. F., & Granger, C. W. (1987). Cointegration and error correction: representation, estimation, and testing. *Econometrica: Journal of the Econometric Society*, pp. 251–276.

Fathony, M., Khaq, A., & Endri, E. (2020). The Effect of Corporate Social Responsibility and Financial Performance on Stock Returns. *International Journal of Innovation, Creativity and Change*, *13*(1), 240–252.

Fuad, F., & Yuliadi, I. (2021). Determinants of the composite stock price index (IHSG) on the Indonesia stock exchange. *Journal of Economics Research and Social Sciences*, *5*(1), 27-41.

Fung, H-G., Sierra, G.E., Yau, J., & Zhang, G. (2008,).Are the U.S. stock market and credit default swap market related? Evidence from the CDX indices, *Journal of Alternative Investments* **11**, 43–61. DOI 10.3905/jai.2008.708849

Halim, S. (2020). Analysis of the effect on inflation, interest rate, dow jones Islamic Malaysia Index and profitability on stock prices as selected as Indonesia Sharia Stock Index. *Journal of Islamic Accounting and Finance Research, 2*(2), 259-294; DOI: https://dx.doi.org/10.21580/jiafr.2020.2.2.6357

Hidayat, R., Anggraini, D., Riyani, Y., & Endri, E. (2022). Optimal Sharia Portfolio Selection to Outperform the Stock Market in the Post-Pandemic Era. *Quality Access to Success, 23*(187), 287-294. https://doi.org/10.47750/QAS/23.187.35

Ho, C. S. F., Abd Rahman, N. A., Yusuf, N. H. M., & Zamzamin, Z. (2014). Performance of global Islamic versus conventional share indices: International evidence. *Pacific-Basin Finance Journal*, *28*, 110-121. https://doi.org/10.1016/j.pacfin.2013.09.002

Indupurnahayu, I., Nurhayati, I., Endri, E., Marlina, A., Yudhawati, D., & Muniroh, L. (2022). Islamic Bank Merger and Economic Crisis: Event Study Analysis. *Quality Access to Success, 23*(187), 65-72. https://doi.org/10.47750/QAS/23.187.08

Irfan, M., Kassim, S., & Dhimmar, S. (2021). Impact of Covid-19 on Islamic stock markets: an investigation using threshold volatility and event study models. *International Journal of Islamic Economics and Finance (IJIEF)*, *4*(1), 121-148.

Katmas, E., & Indarningsih, N. A. (2022). The Effect of B.I. Interest Rate, Exchange Rate, and Inflation on The Indonesian Sharia Stock Index (ISSI). *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *5*(2), 768-782.

Lim, S. Y., & Sek, S. K. (2014). Exploring the inter-relationship between the volatilities of exchange rate and stock return. *Procedia economics and finance*, *14*, 367-376.

Majid, M. S. A., & Shabri, M. (2018). Who Co-moves the Islamic Stock Market of Indonesia-the US, U.K. or Japan?. *Journal of Islamic Economics*, *10*(2), 267-284. DOI: http://dx.doi.org/10.15408/aiq.v10i2.7288

Mawardi, I., Widiastuti, T., & Sukmaningrum, P. S. (2019). The impact of macroeconomic on Islamic stock prices: Evidence from Indonesia. *KnE Social Sciences*, 499-509.

Nurhayati I, Endri E, Aminda RS, Muniroh L. (2021). Impact of COVID-19 on Performance Evaluation Large Market Capitalization Stocks and Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 56. https://doi.org/10.3390/joitmc7010056

Nurhayati, I., & Endri, E. (2020). A new measure of asset pricing: Friction-adjusted three-factor model. *The Journal of Asian Finance, Economics and Business (JAFEB)*, *7*(12), 605-613.

Panjawa, J. L. (2016). The Effectiveness of Monetary Policy Towards Stock Index Case Study: Jakarta Islamic Index 2006-2014. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, *17*(1), 100-107.

Prakoso, D. (2022). Impact of The Global Stocks Index on The Shariah And Conventional Stocks Index in Indonesia. *Islamic Economics Methodology*, *1*(1),1–9. https://doi.org/10.58968/iem.v1i1.113

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*, *10*(1), 171-188.

Rahayu, H. C., Lestari, E. P., & Kuniawati, T. R. (2021). The Effect of Book Value, Debt to Equity Ratio, Roa, Interest Rate and Exchange Rate at Jakarta Islamic Index (JII). *El-Qish: Journal of Islamic Economics*, *1*(1), 25-40.

Rheynaldi, P. K., Endri, E., Minanari, M., Ferranti, P. A., & Karyatun, S. (2023). Energy Price and Stock Return: Evidence of Energy Sector Companies in Indonesia. *International Journal of Energy Economics and Policy*, *13*(5), 31–36. https://doi.org/10.32479/ijeep.14544

Riyani, Y., Mardiah, K., Mahyus, M., Kusmana, E., Andriana, S., Nengzih, N., Soepriyadi, I., & Endri, E. (2023). Determinants of Indonesian Capital Market Reaction. *WSEAS Transactions on Systems, 22*, 360-367. DOI: 10.37394/23202.2023.22.39

Robiyanto, R. (2018). The Effect of Gold Price Changes, USD/ IDR Exchange Rate Changes and Bank Indonesia (B.I.) Rate on Jakarta Composite Index (JCI)'s Return and Jakarta Islamic Index (JII)'s Return. Jurnal Manajemen dan Kewirausahaan, 20(1), 45-52. https://doi.org/10.9744/ jmk.20.1.45-52

Sya'bani, M. J. R., & Fathoni, M. A. (2022). The Impact of Macroeconomic and Fundamental Ratios Against Sharia Stock Returns at JII. *European Journal of Islamic Finance*, *9*(2), 27–34.

Sakthivel, P., Bodkhe, N., & Kamaiah, B. (2012). Correlation and volatility transmission across international stock markets: a bivariate GARCH analysis. *International Journal of Economics and Finance*, *4*(3), 253–264. DOI:10.5539/ijef.v4n3p253

Sargan, J. D. (1964). Wages and prices in the United Kingdom: a study in econometric methodology. *Econometric analysis for national economic planning*, *16*, 25-54.

Seddighi, H. (2013). *Introductory econometrics: a practical approach*. Routledge.

Suryadi, S., Endri, E., & Yasid, M. (2021). Risk and Return of Islamic and Conventional Indices on the Indonesia Stock Exchange. *Journal of Asian Finance, Economics, and Business, 8*(3), 23-30. https://doi.org/10.13106/jafeb.2021.vol8.no3.0023

Ullah, G. M. W., Islam, A., Alam, M. S., & Khan, M. K. (2017). Effect of macroeconomic variables on stock market performance of SAARC countries. *Asian Economic and Financial Review*, *7*(8), 770-779.

Yunita, Y., & Robiyanto, R. (2018). the Influence of Inflation Rate, Bi Rate, and Exchange Rate Changes To the Financial Sector Stock Price

Index Return in the Indonesian Stock Market. *Jurnal Manajemen Dan Kewirausahaan*, *20*(2), 80-86. https://doi.org/10.9744/jmk.20.2.80–86

Widagdo, B., Jihadi, M., Bachtiar, Y., Safitri, O. E., & Singh, S. K. (2020). Financial Ratio, Macro Economy, and Investment Risk on Sharia Stock Return. *Journal of Asian Finance, Economics and Business*, *7*(12), 919-926

Received: Oct 05, 2023 Revised: Oct 08, 2023 Accepted: Oct 12, 2023