

# Empirical Study About Islamic Stock Index Case in Indonesia

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**Abstract**—This study was intended to test whether the external factors represented by Bank Indonesia Sharia Certificate (SBIS), Exchange Rate, Inflation and BI Rate significantly influence the Indonesia Sharia Stock Index (ISSI) during the period January 2015 to December 2018. This type of research is an explanatory research with quantitative approach. This study uses monthly time series data of each variable. The data analysis method uses multiple linear regression by first testing the classic assumptions using SPSS version 23. The results of this study showed that Bank SBIS have significant influence and positive relation toward ISSI and BI Rate have significant influence and negative relation toward ISSI. Inflation and Exchange Rate is not significant influence toward ISSI.

**Keywords:** *ISSI, SBIS, Exchange Rate, inflation, BI Rate*

## I. INTRODUCTION

Indonesian sharia stock transactions over during the past 10 years have a tendency to dominate the movement of the country's stock market this can be proved that since 2011 the number of successful sharia shares grew 170%. While in 2018 the performance of the Indonesian Sharia Stock Index (ISSI) contributed 65%, followed by a 52% market cap contribution, 53% transaction volume, 46% value and 65% frequency compared to IDX's performance. Since it was launched in 2011 to January 2019, ISSI's stock return has grown by 54%. However, when it was compared to neighboring countries such as Malaysia based on IDX data, the share of sharia shares in the Indonesian capital market has only reached 65% of the total number of issuers, while in Malaysia the share of sharia shares has reached 76% of all shares. Born from the same source namely the 1997 Asian financial crisis, the Islamic capital markets of Indonesia and Malaysia are chasing one another, despite the distance away for Indonesia which is somewhat lagging behind. This raises the question whether the Indonesian Islamic capital market is currently lagged behind?? Although it is still lagged behind Malaysia, the good news is awareness of making the Islamic capital market a priority choice or preference in Indonesia has been increased. Such increased awareness cannot be separated with the issue of macroeconomic factors. An increase and decrease in the value of Islamic stocks is seen in an index. The true index shows the indicator or size as something. In the world of capital markets, an index of shares is an imaginary portfolio that measures changes in prices of a market or a portion of that market [1]. When the stock index moves up, it means the price of most of

the stocks is measured by the index moves up. Conversely, if the stock index moves down, most of the index constituent stocks move down. Good performance of the economy which is supported by the stability of macroeconomic factors will be able to attract investors to invest their funds in the capital market so that the volume of trade in the stock market will increase and will be followed by the strengthening of the stock price index and become the benchmark of the capital market's performance [2]. Observing significant fluctuations in the value of the Indonesian Sharia Stock Index during the period 2015 to 2018 this study aims to re-analyze several external factors which are macroeconomic variables such as SBIS, Exchange Rates, Inflation and Bi Rate that are it is possible to influence the strengthening or weakening of the Indonesian Sharia Stock Index.

The establishment of SBIS as a monetary controller or policy change which is made by Bank Indonesia is able to influence Islamic banks or Islamic capital markets [3]. SBIS is an alternative investment in addition to invest in Islamic stocks which also provides a return on investment returns. When the SBIS reward rate is high, it will give a signal to investors. Investors tend to choose investment alternatives that can provide a more profitable return with a safer risk compared to investing in stocks. When investors shift their investment in SBIS, it will cause the price of sharia shares to decrease and the amount of market capitalization will decrease. When the amount of market capitalization decreases, it will affect the decline in ISSI. It can be concluded that SBIS has a negative effect the Indonesian Sharia Stock Index.

The rupiah exchange rate is one of the variables that is able to influence the movement of stock indexes in the capital market [4]. When the rupiah exchange rate weakens or depreciates, it will cause inflation to soar, namely an increase in the prices of raw materials whose impact increases the burden or costs incurred by the company more, so that the company's revenue and profits decline. With declining corporate profits, giving a negative signal to investors because the profits distributed to shareholders will decrease. In this case, investors will tend to release their shares which cause the Islamic stock index to decline. Meanwhile, if the rupiah exchange rate strengthens or is appreciated, the prices of raw materials will decrease and the company's operating expenses incurred will decrease, so that the company's revenue and profits will increase. Then it will give a positive signal to

investors because the profits are distributed to shareholders will increase, and investors will continue to invest in shares that cause the Islamic stock index to increase [5]. Therefore, the exchange rates influences of ISSI

Inflation increases company revenues and costs [6]. Inflation has a strong positive impact in driving the fluctuation of stock price [4]. If the increase in costs is higher than the increase in prices that can be enjoyed by the company, then it can reduce the company's profitability assuming sales continue to decline and increase the risk of investing. If there is the decline in profitability of the company is bad news for the company because investors consider that investing in the capital market is not attractive and has a higher risk [7,8]. Declining investor interest in investing in the capital market can cause a fall in stock prices and reduce ISSI. Conversely, when it goes down or low it can increase profitability where operating costs are reduced and the selling prices of property and real estate companies are fixed. The increased profitability of the company provides a positive signal for investors that causes investors to invest [9]. When investor interest increases, the ISSI will also increase. Therefore, that inflation affects the ISSI.

The interest rate is the value, level, price or profit are given to investors from the use of investment funds based on the calculation of economic value within a certain time period [2]. Important interest rates are taken into account because in general investors always expect greater investment returns [10]. An increase in the interest rate can attract investors who had previously invested in shares to invest in the form of savings or deposits and keep their funds in the bank, then the interest rate that is too high can affect the company's cash flow, so the opportunity to invest in Islamic stocks is not attractive. As for investors, they might prefer another way to invest their money in terms of deposit rather than invest them in terms of stock with consideration that they can minimize the risk and avoid unnecessary loss [4]. So if the BI Rate increases it will trigger a decline in prices and sales of Islamic shares, but stock buying activity will increase. Conversely, when the BI Rate decreases, it will trigger an increase in prices and sales of Islamic shares, but stock buying activity will decrease. Thus the rise or fall of the BI Rate will have an impact on the ups and downs of sharia stock prices and sharia stock activity on the capital market. Therefore, that the BI Rate affects the Indonesian Sharia Stock Index.

**II. RESEARCH METHODS**

This study uses quantitative research methods. Quantitative research is the most effective model to be used considering that it supports and provides the fundamental understanding and relationship between empirical observation and mathematical expression of quantitative relationships [11]. The data will be analyzed by SPSS. This study uses monthly time series data of each variable. The data analysis method uses multiple linear regression by first testing the classic assumptions. In this study there are four independent variables namely Bank Indonesia Sharia Certificates, Exchange Rates, Inflation and BI Rate, and one dependent variable is Indonesian Sharia Stock Index. The measurement of variable can be seen in the table below:

**TABLE I. MEASUREMENT VARIABLE**

Variable	Measurement
ISSI	Closing Price
SBIS	Nominal Value of SBIS x (Period of SBIS / 360) x Rate of return SBIS
Exchange Rate	Ln Kurs Rupiah
Inflation	Inflation Rate
BI Rate	Interest Rate

The population in this study is Indonesian Islamic stock index in Jakarta Islamic Index (JII). The sample measurement technique use is the purposive sampling method. The sample size is 48 during the period January 2015 to December 2018.

**III. RESULTS**

Based on the results of statistical data processing regarding the multiple linear regression test results can be seen in the table below:

**TABLE II. MULTIPLE LINEAR REGRESSION RESULTS**

Model	B	Sig
(Constant)	221,048	,000
SBIS	-,164	,027
Exc.Rate	2,808E-5	,992
Inflation	121,792	,474
BI Rate	-1046,205	,000

Source : data processing results, 2019

Based on table 1, the multiple linear regression equation in this study is:

$$ISSI = 221,048 - 0,164 SBIS + 2,808E-5 Exchange Rate + 121,792 Inflation - 1046,205 BI Rate \quad (1)$$

The test results regarding the correlation coefficient and the coefficient of determination are shown in the following model summary table:

**TABLE III. MODEL SUMMARY**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,813 <sup>a</sup>	,660	,629	9,336454

<sup>a</sup>. Predictors: (Constant), BI Rate, Exchange Rate, SBIS, Inflation

Source: data processing results, 2019

Based on the summary model table it is known that the coefficient of determination (Adjusted R Square) is 0.629, this means that the contribution of the independent variable in explaining the variation in changes to the variable depend was 62.9% and the remaining 37.1% was explained by other variables.

**IV. DISCUSSION**

**A. Effects of Bank Indonesia Sharia Certificates on the Indonesian Sharia Stock Index**

Based on the results of the analysis of SBIS on ISSI obtained a significance level of SBIS of 0.027 <0.05 with a regression coefficient indicating a negative direction then H1 is accepted, so it can be concluded that SBIS has a negative

influence on ISSI. The results of this study prove that when the SBIS return rate increases, it gives a signal to investors so that it has an impact on decreasing ISSI. Investors tend to choose investment alternatives that can provide a more profitable return with a safer risk that is compared to investing in stocks [12]. When investors divert investments in SBIS, it will cause the price of sharia shares to be decrease and the amount of market capitalization will decrease. When the amount of market capitalization decreases it will affect the decline in ISSI.

#### *B. Effects of Exchange Rates on the Indonesian Sharia Stock Index*

Based on the results of the analysis of the exchange rate against ISSI obtained a significance level of exchange rate of  $0.992 > 0.05$  thus  $H_2$  is rejected, so it can be concluded that the exchange rate has no influence on ISSI. The exchange rate is one indicator of a country's economic stability [13]. If the demand for the rupiah exchange rate is relatively less than the supply of rupiah, then this exchange rate will depreciate and vice versa. For investors, the depreciation of the rupiah against the dollar indicates that the outlook for the Indonesian economy is declining. Countries with good economic stability usually have stable currencies and their movements. Countries with poor economic stability, their currencies tend to move erratically and tend to weaken [14,15].

Observations made on the exchange rate data over the past 5 years have tended to decline, and vice versa in the majority of the Indonesian Syariah Stock Index data also experienced a decline. This shows that the decline in the exchange rate does not impose an increase in the Indonesian Sharia Stock Index as the mindset developed in this study. This is also shown by the results of descriptive statistical tests which show that variations in changes in exchange rate variables and the Indonesian Syariah Stock Index show nearly the same amount of data to each other, then the data are not varied, so that changes in the value of the exchange rate variables do not have an impact on increasing or decrease in the Indonesian Syariah Stock Index. So based on these conditions in this study cannot prove the influence of the exchange rate on the Indonesian Syariah Stock Index.

#### *C. Influence of Inflation on Indonesia's Sharia Stock Index*

Based on the results of inflation analysis on ISSI obtained a significance level of exchange rate of  $0.474 > 0.05$  thus  $H_3$  is rejected, so it can be concluded that inflation has no influence on ISSI. Observations made during the last 5 years show that inflation tends to decline, as well as the ISSI data which the majority has a tendency to decrease. This resulted in a decrease in inflation that did not cause an increase in the Indonesian Sharia Stock Index. This is also shown by the descriptive statistical test data that shows those variations in changes in inflation variables and the Indonesian Sharia Stock Index show almost the same amount of data to each other, then the data is not varied. Based on the data conditions, the variation of changes in the inflation variable does not affect the increase or decrease in the Indonesian Sharia Stock Index. Inflation rate does not affect the investor's decision to invest in shares directly or it is not occurred in a relatively short period of time

[16]. When inflation is announced and there is an increase or decrease, the impact on the Islamic stock market will not be felt at that time. However, if inflation rises continuously unnaturally, it will disrupt economic conditions and slowly the stock price index will surely go down. Thus it can be concluded theoretically that investors do not use inflation rate signals as a material consideration in making investment decisions.

#### *D. The Effect of the BI Rate on the Indonesian Sharia Stock Index*

Based on the results of the analysis of the BI Rate against ISSI, the significance level of the BI Rate of  $0,000 < 0.05$  with a regression coefficient indicates a negative direction is accepted, so that it can be concluded that the BI Rate has a negative effect on ISSI. The interest rate becomes an important loan interest reference for the company, because high interest rates will burden the company [5]. In addition, high interest rates will cause deposit interest to increase and cause investors to prefer deposits as an alternative investment with lower risk compared to investments in the form of shares. Then the increase in the BI Rate will trigger a decline in prices and sales of Islamic shares, but stock buying activity will increase. Conversely, when the BI Rate decreases, it will trigger an increase in the price and sale of Islamic shares, but stock buying activity will decrease. Thus the rise or fall of the BI Rate will have an impact on the ups and downs of sharia stock prices and sharia stock activity on the capital market.

## V. CONCLUSION

Bank Indonesia Sharia Certificate and BI Rate are one of the factors that influence the Indonesia Sharia Stock Index. The increase in SBIS yields and the BI Rate has an impact on the reduction of ISSI, this is because investors are likely to choose a more profitable investment return with a relatively lower level of risk compared to stocks. While the exchange rate and inflation are not proven to be one of the factors that influence the Indonesian Sharia Stock Index, because the variations in changes in the exchange rate and inflation cannot explain variations in changes in the Indonesian Sharia Stock Index. This research is only conducted on the Indonesian Sharia Stock Index, for further research can be done by comparing the Indonesian Sharia Stock Index with sharia stock indexes in other countries, in order to know the performance of the Indonesian sharia capital market which is possible to be one of the factors that can influence the development of the Stock Index Sharia Indonesia. Further researchers can also use internal variables to be able to measure the company's financial performance, extend the observation period to obtain more representative data so that several significant factors can be obtained on the ISSI.

## REFERENCES

- [1] Z. Anwer, W. Azmi and S.M. Ramadili Mohd, "How do Islamic equities respond to monetary actions?," *Int. J. Emerg. Mark.*, vol. 14, no. 4, pp. 503–522, 2019.

- [2] O.D. Elly and A.E. Oriwo, "The Relationship between macro economic variables and stock market performance in Kenya," *DBA Africa Manag. Rev.*, 2012.
- [3] I. Wahyudi and G.A. Sani, "Interdependence between Islamic capital market and money market: Evidence from Indonesia," *Borsa Istanbul Rev.*, vol. 14, no. 1, pp. 32–47, 2014.
- [4] L. Simbolon and Purwanto, "The Influence of Macroeconomic Factors on Stock Price: The Case of Real Estate and Property Companies," pp. 19–39, 2018.
- [5] M.B.A. Imdadullah and P. Hayatabad, "Impact Of Interest Rate, Exchange Rate And Inflation On Srock Returns Of Kse 100 Index," *International Journal Economic*, pp. 142-155, 2012.
- [6] S. Suciningtias and R. Khoiroh, "Analisis Dampak Variabel Makro Ekonomi Terhadap Indeks Saham Syariah Indonesia," in *2nd Conference in Business, Accounting, and Management*, 2013, vol. 2, no. 1, pp. 398–412.
- [7] I.O. Osamwonyi and E.I. Evbayiro-Osagie, "The Relationship between Macroeconomic Variables and Stock Market Index in Nigeria," *J. Econ.*, vol. 3, no. 1, pp. 55–63, 2012.
- [8] S. Bahloul, M. Mroua, and N. Naifar, "The impact of macroeconomic and conventional stock market variables on Islamic index returns under regime switching," *Borsa Istanbul Rev.*, vol. 17, no. 1, pp. 62–74, 2017.
- [9] S. A. Ross, "Determination of Financial Structure: The Incentive-Signalling Approach.," *Bell J Econ*, 1977.
- [10] M.S. Albaity, "Impact of the Monetary Policy Instruments on Islamic Stock Market Index Return," *SSRN Electron. J.*, 2012.
- [11] Sugiyono, *Metode Penelitian Bisnis (Pendekatan Kuantitatif, Kualitatif, Kombinasi dan R&D) in Metodologi Penelitian*, 2017.
- [12] Y. Shi, K. Ahmed, and S.R.P. Shi, "Determinants of stock market development and price volatility in ASEAN plus three countries: The role of institutional quality," *Int. J. Financ. Econ.*, no. April 2018, pp. 1–13, 2019.
- [13] S. Patel, "The effect of Macroeconomic Determinants on the Performance of the Indian Stock Market," *NMIMS Manag. Rev.*, 2012.
- [14] M.S. Antonio, H. Hafidhoh, and H. Fauzi, "The Islamic Capital Market Volatility: A Comparative Study Between in Indonesia and Malaysia," *Bul. Ekon. Monet. dan Perbank.*, 2013.
- [15] N. Jamaludin, S. Ismail and S. Ab Manaf, "Macroeconomic variables and stock market returns: Panel analysis from selected ASEAN countries," *International Journal of Economics and Financial Issues*, vol. 7, no. 1, pp. 37-45, 2017.
- [16] M.S. Albaity, "Impact of the Monetary Policy Instruments on Islamic Stock Market Index Return," *SSRN Electron. J.*, pp. 0–29, 2012.