

Inflation And Exchange Rate On Indonesia Sharia Stock Index (ISSI) 2019-2022 Period

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ABSTRACT

This research was conducted with the aim of finding out how much influence inflation and the exchange rate have on Indonesia sharia stock index (ISSI) for the 2019-2022 period. This research is quantitative research with the type of data used is secondary data of the *time series data type*. The method used is the multiple linear regression method with data processing using the Eviews12 program. The data taken is data from each variable from the beginning of 2019 to the end of 2022, based on quarters 1, 2, 3 and 4 with a sample of 16 data. In this research, the author carried out two tests, namely the classical assumption test as a condition for fulfilling the assumptions of the OLS method and hypothesis testing to analyze the influence of inflation and exchange rates on ISSI. The conclusion of this research is that inflation has a significant positive effect and the exchange rate has a significant negative effect.

Keywords: Exchange Rate, Indonesia Sharia Stock Index, Inflation

INTRODUCTION

Currently, the terms investment and capital investment are two terms that are well known in business activities and legislation. Investment is an investment activity, either in the form of money or valuable assets, to an institution or party with the aim of making a profit. It is recorded that investment achievements in Indonesia in 2022 will reach 1,207 T, which exceeds the target of 1,200 T (Junida, 2023). In Islam, all property and wealth essentially belongs to Allah SWT, which is then handed over to humans to be managed, utilized and developed. Because allowing wealth to accumulate is not justified (Setiawan, 2018). Efforts that can be made to develop assets are by investing. The capital market is an activity related to securities, both in terms of public offerings, trading, public companies and institutions. Because economic activity and investment business in Islam is a form of worship, the sharia capital market is present as a means for those who want to invest. The sharia capital market has the potential to develop the financial industry and sharia products because of its position as the country with the largest Muslim population in the world (Primadona, et al., 2022).

Table 1. Development of Indonesia Sharia Shares on the IDX 2019-2022

YEAR	JII	ISSI	JII70
2019	2,318,565.69	3,744,816.32	2,800,001.49
2020	2,058,772.65	3,344,926.49	2,527,421.72
2021	2,015,192.24	3,983,652.80	2,539,123.39
2022	2. 155,449.41	4,786,015.74	2,668,041.87

Source: Data processed, 2023

The development of the sharia capital market in Indonesia is very rapid and is an alternative form of business to sharia investment. The sharia capital market emerged after the issuance of Sharia Mutual Funds on July 3 1997 by PT. Danareksa Investment Management. Some time later, precisely on July 3 2000, the Jakarta Islamic Index was presented, the result of collaboration



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between the Indonesia Stock Exchange and PT. Danareksa Investment Management. And followed by the Indonesia Sharia Stock Index (ISSI) on May 12 2011 (OJK, 2023) . Even though it is relatively new, it turns out that ISSI has faster stock development compared to other Sharia Stock Indexes. In Table 1 above, it can be seen that the development of ISSI shares has increased more than JII and JII 70, this can be seen from the number of shares invested by investors in ISSI. Even though shares experienced a decline in 2020, they could rise again in 2021 (OJK, 2023) . The rise and fall of share prices can be influenced by several factors, such as inflation and the exchange rate.

In the world of investment, inflation has a big influence on increases and decreases which will influence the monetary authority in making policies, thereby influencing investors in placing their investment funds (Kamal, Kasmawati, Rodi, Thamrin, & Iskandar, 2021) . Inflation is a phenomenon where the price of a good or commodity increases continuously. High inflation can reduce company profitability which results in a decrease in share prices in a company. This decline in shares could pose a risk to investors' purchasing power for shares in a company, where investors will demand an additional inflation premium to increase compensation resulting from a decrease in purchasing power (Anwar & A., 2020) . Meanwhile, the exchange rate is the nominal amount of money in a country that must be spent to get foreign currency. Decreasing share prices due to stock selling due to decreased profits make investors less interested in investing (Primadona et al., 2022) . A decrease in share prices can also reduce the amount of return given to investors (Kamal, et al., 2021) . So changes to the price of this currency can later have an impact on changes in stock prices.

Several studies that have been conducted provide different conclusions. First, research by Fuadi (2020) concluded that inflation had a significant negative impact on ISSI while the exchange rate did not. Second, research by Anwar & A. (2020) , concluded that inflation has a significant effect on ISSI, but the exchange rate does not. And the results of Triuspitorini's research, (2021) , concluded that inflation and the exchange rate had no impact on the share prices of the sharia index and ISSI. From several different research results, the author was motivated to carry out this research, with the aim that the results of this research can provide updates and be useful for everyone.

LITERATURE STUDY

Indonesia Sharia Stock Index (ISSI)

The sharia stock index is a statistical measure that describes the mobility of a set of sharia stock prices which are then selected based on predetermined criteria. The selection of sharia shares is carried out by the OJK by creating a Sharia Securities List (DES), which means that the IDX does not carry out stock selection, but uses the DES as the basis. The aim is to make it easier for investors to find a basis for investing. BEI continues to expand its sharia stock index, taking into account the needs of industry players in the capital market. And it has been proven that currently, there are 5 sharia stock indexes on the Indonesia capital market.

So far, sharia investment in the Indonesia capital market is only synonymous with *the Jakarta Islamic Index* (JII), which only consists of 30 sharia shares. Even though the sharia securities in the sharia capital market are not only JII, there are various types of sharia stock securities, such as: sharia bonds and sharia mutual funds (Setyani, 2017) . ISSI was launched on 12 May 2011. ISSI is an indicator of the performance of the sharia stock market listed on the IDX, whose constituents are on the Sharia Securities List (DES) published by the OJK and are also listed on the main board and development board of the BEI. The ISSI constituents continue to be carried out twice a year, namely in May and November following the DES *review schedule*, so that there are always sharia shares coming in and out of the constituents. The ISSI calculation method is the same as the IDX stock index calculation method using December 2007 as the base year (BEI, 2023).

Inflation

According to Pratama Rahardja and Mandala Manurung, inflation is a condition where prices experience a general and continuous increase (Setyani, 2017). Inflation is an increase in the price of



commodity goods in general as a result of the unsynchronization of commodity procurement, such as: in the production process, determining prices, printing money and so on with people's income (Salim, et al., 2021). Inflation is a continuous increase in the price of commodity materials as a result of several factors, causing the prices of other goods to rise as well. This inflation can arise as a result of supply pressure (*cost push inflation*), demand (*demand pull inflation*) and inflation expectations. Based on Fuadi (2020), inflation has a negative impact on the Indonesia Sharia Stock Index. Anwar & A., (2020) stated that inflation has an effect on the Indonesia Sharia Stock Index. Meanwhile, Primadona et al. (2022), also stated that inflation has no effect on the Indonesia Sharia Stock Index. So the author suspects that:

H1: Inflation has a positive and significant influence on the Indonesia sharia stock index for the 2019-2022 period

Exchange Rates

The exchange rate is a record of the market price of foreign currency in domestic currency prices (Setyani, 2017). The exchange rate is the nominal amount of domestic money that is issued to obtain foreign currency (Lipsey, 1992). An increase in the exchange rate is called *appreciation* while a decrease in the exchange rate is called *depreciation*. Maybe we often hear or see on social media and other mass media, they often report that the dollar is currently "strengthening" or "weakening". Statements like this refer to exchange rate developments. If the exchange rate *appreciates*, it means that the currency is currently strengthening, so you can exchange more foreign money. However, if the exchange rate experiences *depreciation*, it means that the current currency is weakening so that it cannot exchange more foreign money (Mankiw, 2003). Changes in the exchange rate cause the company's income, expenses and operational costs to change, thus having an impact on share prices. Based on research by Triuspitorini, (2021), it is stated that the exchange rate has no effect on the Indonesia Sharia Stock Index. Primadona et al., (2022), also stated that inflation has no effect on the Indonesia Sharia Stock Index. Meanwhile, Anwar & A., (2020) stated that the exchange rate influences the Indonesia Sharia Stock Index. So the author suspects that:

H2: Exchange rate hasn't had a positive and significant influence on the Indonesia sharia stock index for the 2019-2022 period

METHOD

This research is quantitative research, with secondary data collected from various sources (Siyoto & Sodik, 2015), such as: annual report data on the Indonesia sharia stock index contained in the OJK (www.ojk.go.id), inflation and exchange rate reports in BI (www.bi.go.id), and other official sites. The research sample consisted of 16 data from the entire population based on Q1, Q2, Q3 and Q4 in the 2019-2022 period. The data is in the form of numbers and the results obtained will be calculated using the help of the Eviews12 program.

Data Analysis Method

This research uses a multiple regression method for *time series data*. The multiple regression model for *time series data* in this research is:

$$Y_t = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + e_t$$

Information:

Y = Indonesia Sharia Stock Index

α = regression constant

e = Disturbing variable/error

X_1 = Inflation

X_2 = Exchange Rate

t = time



RESULTS AND DISCUSSION

Results

Descriptive Statistical Analysis

This test is carried out to describe data by providing a description of a research object through the existing population and sample (Sugiyono, 2019).

Table 2. Results of Descriptive Statistical Analysis

Indonesia Sharia Stock Index		Inflation	Exchange Rates
Mean	3682596.	2.781875	14619.63
Median	3722144.	2.560000	14332.00
Maximum	4786016.	5.950000	16367.00
Minimum	2688658.	1.330000	13901.00
Std. Dev.	571244.6	1.432421	646.7517
Observations	16	16	16

Source: Data processed, 2023

From the tests that have been carried out, the mean, median, maximum, drinking and standard deviation values for each variable are obtained as in Table 2 above.

Classic Assumption Test

Normality Test

This test is carried out using 2 methods (Widarjono, 2018) , namely:

Through the *Residual Histogram* , by looking at the form of the *probability distribution function* (PDF) of the random variable. If the shape of the graph is like a bell in the t distribution which, when divided by two, has the same part , it can be said that the model has a normal distribution.

Through the *Jarque-Bera (JB) Test* , by looking at the *JB probability value* . The criterion is if the *probability value* JB is $> 5\%$ then the model has a normal distribution, but if the *probability value* JB $< 5\%$ then the model has abnormal distribution.

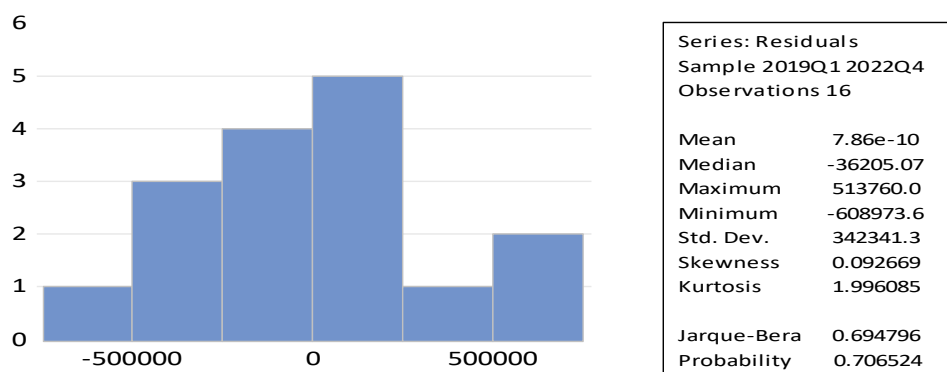


Figure 1. Results of Normality Test

Source: Data processed, 2023

From the tests that have been carried out, it is known that the *probability value* of JB is $0.706524 > 5\%$. So it can be ensured that the model is normally distributed.

Multicollinearity Test

This test was carried out using the *Partial Correlation Method between Independent Variables* . The decision making criteria is that when the correlation coefficient value is > 0.85 , there is multicollinearity, but if the correlation coefficient is < 0.85 , there is no multicollinearity.

Table 3. Results of Multicollinearity Test

	ISSI	Inflation	Exchange Rates
ISSI	1,000000	0.693300	-0.043462
Inflation	0.693300	1,000000	0.452201
Exchange Rates	-0.043462	0.452201	1,000000

Source: Data processed, 2023

From the tests that have been carried out, it is known that the coefficient value between variables is more than 0.85, this proves that there is no multicollinearity found in this model.

Heteroskedasticity Test

This test was carried out using the *White Test*. The decision making criteria are if the *Prob. Chi-square value* is > 5% there is no heteroscedasticity, but if the value of *Prob. Chi-square* < 5% indicates heteroscedasticity.

Table 4. Results of Heteroskedasticity Test

Obs*R-squared	4.614025	Prob. Chi-square(5)	0.4648
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Source: Data processed, 2023

From the tests that have been carried out, it is known that the Prob. Chi-square value is 0.4648 > 5%. So heteroscedasticity was not found in this model.

Autocorrelation Test

This test is carried out using the *Breusch-Dogfrey Method* or *LM Test*. The decision making criteria are when the *Prob. Chi-square value* is > 5% there is no autocorrelation, but when the *Prob. Chi-square value* is < 5% there is autocorrelation in the regression model.

Table 5. Results of Autocorrelation Test

Obs*R-squared	5.144045	Prob. Chi-square(2)	0.0764
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Source: Data processed, 2023

From this table, it is known that the Prob. Chi-square value is 0.0764 > 5%. So no autocorrelation was found in this model.

Multiple Regression Models**Table 6. Multiple Regression**

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	8482741.	2322040	3.653142	0.0029
Inflation	357408.8	74317.84	4.809192	0.0003
Exchange Rates	-396.3448	164.5986	-2.407947	0.0316

Source: Data processed, 2023

After it is proven that all the assumptions in the OLS method are met, the next step is to look for a regression model from the data used. Using the help of the Eviews 12 program, the following regression model was obtained.

$$Y = 8482741 + 357408.8 \text{ Inflasi} + (-396.3448)\text{Kurs}.$$

The multiple regression model equation above provides the following interpretation. If the inflation and exchange rate values are 0, then the constant value of the Sharia Stock Index (ISSI) is 8482741. The inflation regression coefficient is 357408.8, meaning: if inflation increases by 1%, the Sharia



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Stock Index (ISSI) will increase by 357408.0 assuming other variables are constant. The exchange rate regression coefficient is -396.3448, meaning: if the exchange rate increases by 1%, the Sharia Stock Index (ISSI) decreases by -396.3448 assuming other variables are constant.

Hypothesis Testing

Test t

This test was carried out to find out whether in this study the inflation and exchange rate variables had a significant partial effect or not. Provided that if $P > \alpha$ (5%) H_a is rejected, but if the value $P < \alpha$ (5%) H_a is accepted.

Table 7. Results of t Test

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	8482741.	2322040	3.653142	0.0029
Inflation	357408.8	74317.84	4.809192	0.0003
Exchange Rates	-396.3448	164.5986	-2.407947	0.0316

Source: Data processed, 2023

From the tests that have been carried out, it is known: Inflation (X1) has a t-statistic value of 4.809192 and a Prob value. $0.0003 < 5\%$, this proves that H_a is accepted. So inflation has a significant positive effect on ISSI. The exchange rate (X2) has a t-statistic value of -2.407947 and a Prob value. $0.0316 < 5\%$, this proves that H_a is accepted. So the exchange rate variable has a negative and significant influence on ISSI.

F Test

This test was created to find out whether in this study the variables had an effect simultaneously or not. With the following conditions: if the P value $> \alpha$ (5%) H_0 is accepted, but if the P value $< \alpha$ (5%) H_a is accepted.

Table 8. Results of F Test

Prob(F-statistic)	0.001286
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Source: Data processed, 2023

From the tests that have been carried out, it is known that the P value is $0.001286 < 5\%$, so that H_a is accepted and the independent variable has a simultaneous influence on the dependent variable.

Determination Coefficient Test R^2

This test was carried out to measure the extent of the model's skill in describing the variance of the independent variables, with an R^2 value between 0 and 1 ($0 < R^2 < 1$). The smaller the R^2 value the model's skill in describing the independent variables is very limited.

Table 9. Results of Determination Coefficient Test R^2

R-square	0.640851	Mean dependent var	3682596.
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Source: Data processed, 2023

From the tests that have been carried out, it is known that the R-square value is 0.640851 or 64.0851%. This proves that the model has the ability to explain variations in the independent variables of 64.0851%.

Discussion

Effect of Inflation On The Indonesia Islamic Stock Index (ISSI)

The research results show that the Indonesia Sharia Stock Index (ISSI) as the dependent variable is significantly influenced by inflation as the dependent variable. This is proven by the t test results in table 8 with the Prob value. $0.0003 < 5\%$. The results of this research are in line with previous



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research conducted by (Anwar & A., 2020) which stated that inflation had a significant positive effect on ISSI. The rise and fall of the inflation rate can influence investors to invest in the Islamic capital market. Because high inflation can reduce company profitability, resulting in a decrease in share prices in the company. However, the results of this research contradict previous research conducted by Fuadi (2020) and (Triuspitorini, 2021), which stated that inflation had a significant negative impact or even no impact on ISSI.

Effect Exchange Rate On The Indonesia Islamic Stock Index (ISSI)

The research results show that the Indonesia Sharia Stock Index (ISSI) as the dependent variable is significantly influenced by the exchange rate as the independent variable. This is proven by the t test results in table 8 with the Prob value. $0.0316 < 5\%$. The results of this research are in contrast to research conducted by Anwar & A., (2020); Fuadi (2020); & Triuspitorini (2021), which states that the exchange rate has no impact on ISSI.

The rise and fall of the exchange rate can affect ISSI, where the currency exchange rate can represent the exchange price level from one currency to another country's currency in various forms of transactions including investment so that it can have an influence on stock price movements. This also proves that companies that are members of the Indonesia Sharia Stock Index often carry out international transactions, so that exchange rate changes have a negative relationship to the ISSI when it experiences weakening and reduces investors' interest in investing.

CONCLUSION

Based on research that has been carried out using the eviews12 program, the results show that inflation and the exchange rate have a partial and simultaneous effect on the Indonesia sharia stock index, although in this case the exchange rate variable has a negative influence on the Indonesia Sharia Stock Index. For researchers who want to conduct tests with similar topics and titles, it is recommended to add other variables, such as: world gold prices, interest rates, the amount of money in circulation or other economic variables. By increasing the number of samples and paying attention to the time period, the research to be carried out will be better and more accurate. For investors who have or will make transactions in sharia shares, you should pay more attention to all existing and latest information, especially on inflation and exchange rate issues that occur both domestically and abroad.

References

- Anwar, MS, & A., AD (2020). Analysis of the Effect of Inflation and Exchange Rates on the Indonesia Sharia Stock Index (ISSI) 2014-2018. *I-Finance: A Research Journal on Islamic Finance*, 6 (1), 7–14. <https://doi.org/https://doi.org/10.19109/ifinance.v6i1.5288>
- BEI. (2023). Indonesia Sharia Stock Index. Retrieved April 27, 2023, from Indonesia Stock Exchange website: <https://www.idx.co.id/id>
- Fuadi, A. (2020). Inflation and Rupiah Exchange Rate Against the Indonesia Sharia Stock Index. *Pelita Bangsa Business Accounting Journal*, 5 (1), 1–12. <https://doi.org/10.37366/akubis.v5i01.102>
- Junida, A. Irma. (2023). Passing Target, Investment Realization in 2022 Reaches IDR 1,207.2 Trillion. Retrieved April 28, 2023, from January 24 2023 16:02 IWST website: <https://www.antaraneews.com/berita/3362649/lalui-target-realization-investasi-2022-capai-rp12072-triliun>
- Kamal, M., Kasmawati, Rodi, Thamrin, H., & Iskandar. (2021). The Influence of the Rupiah Inflation Rate and Exchange Rate (KURS) on the Indonesia Sharia Stock Index (ISSI). *Tabarru' Journal: Islamic Banking and Finance*, 4 (2), 521–531. [https://doi.org/10.25299/jtb.2021.vol4\(2\).8310](https://doi.org/10.25299/jtb.2021.vol4(2).8310)
- Lipsey, R. G. (1992). *Introduction to Macroeconomics*. Jakarta: Erlangga.
- FSA. (2023). Indonesia Sharia Stock Index Annual Report. Retrieved April 27, 2023, from





- Financial Services Authority website: <https://www.ojk.go.id/id>
- Primadona, M., Harahap, I., & Harahap, RD (2022). The Influence of Economic Growth, Inflation and Exchange Rates on the Indonesia Sharia Stock Index (ISSI). *Perbanas Journal of Islamic Economics & Business* , 2 (2), 128–135. <https://doi.org/10.56174/pjieb.v2i2.46>
- Salim, A., Fadilla, & Purnamasari, A. (2021). The Effect of Inflation on Indonesia's Economic Growth. *Ekonomika Sharia: Journal of Sharia Economic Thought and Development* , 7 (1), 17–28. <https://doi.org/10.36908/esha.v7i1.268>
- Setiawan, A. (2018). Property and Ownership in Islam. Retrieved December 26, 2023, from Gadjah Mada University Faculty of Economics and Business website: <https://pkebs.feb.ugm.ac.id/2018/07/02/harta-dan-kepemilikan-dalam-islam/>
- Setyani, O. (2017). The Influence of Inflation and Exchange Rates on the Indonesia Sharia Stock Index. *Islamiconomic: Journal of Islamic Economics* , 8 (2), 213–238. <https://doi.org/10.32678/ije.v8i2.76>
- Siyoto, S., & Sodik, M.A. (2015). *Basic Research Methodology* (1st ed.). Yogyakarta: Literacy Media Publishing.
- Sugiyono. (2019). *Quantitative qualitative research methods and R&D* (1st ed.). Bandung: Alfabeta.
- Tripuspitorini, F.A. (2021). Analysis of the Effect of Inflation, Rupiah Exchange Rate, and BI-Rate on Indonesia Sharia Stock Index Prices. *Journal of Islamic Banking Management* , 4 (2), 112–121. <https://doi.org/10.32627/maps.v4i2.172>
- Widarjono, A. (2018). *Introductory Econometrics and its Applications accompanied by Eviews Guide* (5th ed.). Yogyakarta: UPPM STIM YKPN.

