The Analysis of Macroeconomic Factors in The Sharia Stock Index Performance: Comparison Between Indonesia and Malaysia

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Abstrak,

Penelitian ini bertujuan untuk mengetahui pengaruh faktor ekonomi makro terhadap kinerja indeks saham syariah di Indonesia dan Malaysia selama periode 2013-2018. Sumber data penelitian ini adalah sekunder. Data yang dikumpulkan menggunakan metode dokumentasi dan dianalisis menggunakan beberapa regresi linier dengan program EVIEWS 8. Hasil dari penelitian ini bahwa nilai tukar tidak berpengaruh terhadap kinerja indeks saham syariah di Indonesia, sedangkan nilai tukar memiliki pengaruh negatif terhadap kinerja indeks saham syariah di Malaysia, artinya pengaruh negatif tersebut mendukung ketika mata uang mengalami depresiasi, sehingga akan menaikkan ekspor yang dilakukan oleh perusahaan eksportir. Inflasi tidak mempengaruhi kinerja indeks saham syariah di Indonesia, meskipun di Malaysia, inflasi memiliki pengaruh positif terhadap kinerja indeks saham syariah, artinya inflasi yang meningkat akan meningkatkan indeks harga saham. Suku bunga dan Indeks produksi tidak memiliki pengaruh pada kinerja indeks saham syariah di Indonesia dan Malaysia.

Kata Kunci*: Ekonomi Makro, Kinerja, Indeks Saham Syariah, Indonesia, Malaysia*

Abstract,

This study aims to determine the effect of macroeconomic factors on the performance of the Sharia stock index in Indonesia and Malaysia during 2013-2018. The data source for this study is secondary. The data was collected using documentation and analysed using several linear regressions with the EVIEWS 8 program. The results of this study are that the exchange rate does not affect the performance of the Sharia stock index in Indonesia. In contrast, the exchange rate harms the performance of the Sharia stock index in Malaysia, meaning that the negative effect is supported when the currency depreciates, so that it will increase exports carried out by exporting companies. Inflation does not affect the performance of the Sharia stock index in Indonesia. However, in Malaysia, inflation positively affects the performance of the Sharia stock index, meaning that increasing inflation will increase the stock price index. Interest rates and production indexes do not affect the performance of the Sharia stock index in Indonesia and Malaysia.

Keywords*: Macroeconomics, Performance, Sharia Stock Index, Indonesia, Malaysia*

INTRODUCTION

Sharia finance sectors prepare many efforts to become a major in the financial sector. Ben Bouheni, Ammi, & Levy (2016) It was found that several conventional financial sectors have renamed the Sharia finance sector to attract more extensive customers. Hence, the Sharia finance sectors, such as the money market and capital market, have grown significantly, especially in Muslim countries (Itang, 2014). Consequently, each Sharia finance sector has differences in capabilities and performance. One of the factors affecting the development of the Sharia financial sector is macroeconomic variability (Muhammad, 2019).

Theoretically, Deyshappriya (2017); Ross (1976) based on Arbitrage Pricing Theory (APT) found that macroeconomic factors consist of industrial production index, inflation, and interest rates that influence the stock market. Empirically, macroeconomic variables affecting the stock market index is a theory and literature established in financial economics. Some studies Abugri (2008); Asprem (1989); Assefa & Mollick (2017); Mollick & Assefa (2013) have examined and evaluated the relationship of macroeconomic variables to stock market performance, specifically interest rates, exchange rates, and inflation.

The phenomenon that occurred in Sharia Stock, for example, related to the Sharia stock index, in 2018 was marked by global economic uncertainty due to the trade war between the United States and China, as well as the normalisation of monetary policy by the United States Federal Reserve which aggressively raised interest rates. This caused significant pressure on the stock markets in developing countries, including Indonesia and Malaysia. The Sharia stock index experienced a fairly sharp decline, although according to efficient market theory, the Sharia market should have more resistance to this uncertainty. In 2018, Indonesia's Jakarta Islamic Index (JII) fell by around 5.3%, while the IHSG (Composite Stock Price Index) fell by around 2.5% in the same year. Meanwhile, the FTSE Bursa Malaysia Hijrah Shariah Index fell by around 10.5% compared to a decline of around 6.9% in the FTSE Bursa Malaysia KLCI. This shows that, although Sharia stocks are usually considered to have lower volatility, the Sharia indexes in both countries were more vulnerable to global economic uncertainty at that time.

The findings adiningtyas (2018); Agestiani & Sutanto (2019); Alam & Rizvi (2016); Beik & Fatmawati (2014); Kewal (2012) showed that macroeconomic variables such as inflation, interest rates, exchange rates, and industrial production index significantly influenced the Sharia stock index. Meanwhile, Ardana (2016); Bolton (1962); Saragih & Sirait (2015); Zhao, Azali, Karbhari, & Lau (2018) the relationship between the exchange rate and inflation and the stock index was negative and insignificant. Most of the studies are focused on developed countries such as the United States, the United Kingdom, and Japan (Blair,

Poon, & Taylor, 2002; Cifter, 2015; FAMA, 1990; Fama & Gibbons, 1982; Jones, Olson, & Wohar, 2017; Mandelker & Tandon, 1985; Poon & Taylor, 1992).

Exploration of macroeconomic variables with the Sharia stock market in developing countries is still limited. No studies have been conducted in Indonesia and Malaysia, particularly on economic growth. Previous researchers have said that the relationship between the Sharia stock index and interest rates is not cointegrated (Dooty & Islam, 2014; Santoso, Ningsih, & Paramitha, 2018). In addition, Yusof & Majid (2007) they confirm that the exchange rate affects the Sharia stock index, and they also found that if the interest rate rises either domestically or internationally, the Muslim investor will buy more Sharia stocks, so the price of Sharia stocks would increase.

This study is based on Islamic Financial Theory, which emphasises that interest rates are forbidden in Islamic law because Islamic transactions must be free from interest. Other researchers have said that Sharia stock indexes are part of the economy, so the influence of interest rate changes may affect them indirectly. Furthermore, this study aims to investigate how Sharia stock index performance is influenced by macroeconomic variables, principally the exchange rate, inflation, interest rates, and index of industrial production.

LITERATURE REVIEW

Classical Macroeconomic Theory

This theory underlies the analysis of macroeconomic factors such as inflation, interest rates, exchange rates, and GDP that affect the stock market. According to this theory, changes in macroeconomic variables can create uncertainty and affect investment performance, including sharia stocks (Mishkin, F. S, 2019). Classical economic theory states that macroeconomic changes such as GDP growth, inflation, and interest rates have a direct impact on the capital market, including sharia stocks. In particular, strong economic growth should improve the performance of sharia stock indices through increased corporate profitability. While classical theory assumes a direct relationship, several studies on sharia indices have found that the relationship between macroeconomic variables and sharia indices is often weaker or different than conventional indices due to additional factors such as religious sentiment and stricter sharia investment regulations.

Exchange Rate and Sharia Stock Index Performance

The change of macroeconomic variables have different impact on stock index performance, for example one of stocks have a positive effect and other stocks have a negative impact (Pratama, Ahman, & Mediawati, 2018; Vikaliana, 2018). This study uses the exchange

rate as an independent variable to measure how the role of exchange rate effects on sharia stock index performance in Indonesia and Malaysia. The price of stock index would be negatively affected if exchange rate increased excessively because it can cause inflation, so the volatility of stock market can be increased the exchange rate in the country (Choi, Jiang, Kang, & Yoon, 2012; Choi & Yoon, 2015). In this study, the exchange rate variable is considered to have a positive influence on Sharia stock index performance in Indonesia and Malaysia.

Hypothesis 1 : There is a significant positive influence between exchange rate and and the sharia stock index performance.

Inflation and Sharia Stock Index Performance

The increase in inflation is relatively negative signal to the stock index (Brand, 2001), as it will increase the cost of the company so that the company's profitability will decrease. Hence, directly, inflation leads to a decrease in the profitability and purchasing power of money, whereas indirectly, inflation affects the change in interest rates. The study of Irawan & Warjiyo (2007) found that rising inflation can lower capital gains resulting in reduced profits gained by investors. The high rate of inflation on the financial sector is impeding to effectively allocate resources (Boyd, Levine, & Smith, 2001). Furthermore, Boyd et al. (2001); Feldstein (1978); Omran & Pointon (2001); Pindyck et al. (1984); Shanken & Weinstein (2006); Wang & Wang (2009) declared that inflation had a relationship with the stock index. The study from Isa, Hasan, & Abdullah (2012) proved that inflation, interest rates, industrial production, reserves, exchange rates, and international monetary policy have an effect on sharia stock index. Therefore, the inflation variable is used to see how much inflation affects the performance of sharia stock index in Indonesia and Malaysia.

Hypothesis 2 : There is a significant negative influence between inflation and and the sharia stock index performance.

Interest Rate and Sharia Stock Index Performance

Interest rate is used to control investment, inflation, unemployment, and influence economic performance (Hardaker & Singh, 2011; Jabarin, Nour, & Atout, 2019). The influence of interest rate and exchange rate of sharia stock index performance has been a concern for some governments, banks, investors, and academics, since the failure of many financial sectors attributed to adverse influences from their fluctuations are mainly interest rates Araújo, Pereira, Mota, Latorre, Krieger, & Mansur (2004); Kasman, Vardar, & Tunç (2011); Muktadir-al-Mukit (2013) found a significant positive influence between the interest rate and stock index. In monetary policy, interest rates will rise and increase the cost of the company's capital, but the decline in the exchange range can lead to lower inflation (Gautam, 2017). Each exchange rate change has a relationship with the fluctuations in the stock price, because it

affects directly on the stock market and indirectly affects the bond market based on the regret of the interest rate (Choi et al., 2012; Choi & Yoon, 2015).

Setiawanta & Hakim (2019) confirm that the interest rate has a negative influence on the stock index, it means that the increase in interest rate can affect the investors to divert their investment into the banking sector. The Investors will sell their shares, so that stock demand declines and the stock price index also decreases. Earlier research revealed that the interest rate affects the volatility of conventional stock markets but does not affect the sharia stock market (Yusof & Majid, 2007). Therefore, the interest rate significantly affects the volatility of the sharia stock market, so this variable is used to measure how much interest rate is affected by the sharia stock t index performance in Indonesia and Malaysia.

Hypothesis 3 : There is a significant negative influence between the interest rate and the sharia stock index performance.

Industrial Production Index and Sharia Stock Index Performance

The industrial production index is one of the economic indicators that calculates the real production output of the manufacturing, mining and other factories of industrial sectors such as oil and gas and electricity. Previous studies have found that variable industrial production indexes have a significant positive influence on sharia stock index (Adiningtyas, 2018; Agestiani & Sutanto, 2019; Alam & Rizvi, 2016; Beik & Fatmawati, 2014). In this study, industrial production indexes are used as independent variables in which to measure how large the impact of industrial production index variables on the sharia stock index performance in Indonesia and Malaysia.

Hypothesis 4 : There is significant negative influence between industrial production index and sharia stock index performance.

METHODS

The implications of macroeconomic variables on the sharia stock index performance have been analyzed in this study. This study used a quantitative research with causality design is a study that uses a quantitative approach to test the influence of one variable on another variable. The population in this study is all stock price data for any sharia stock index, exchange rate, inflation, interest rate, and industrial production index. Meanwhile, the sample was limited during the 2013-2018 period and the sample in this study was 67. The data source of this study is secondary. Data collected using documentation method, and data would be analyzed using multiple linear regression with Eviews 8 program. To test the proposed hypothesis, a model of multiple linear regression equations in this study was as follows.

$$SSI = \alpha + \beta_1 ER + \beta_2 INF + \beta_3 IR + \beta_4 IPI + \varepsilon \ ....(1)$$

Description:

SSI = Sharia stock index performance

ER = Exchange Rate

INF = Inflation

IR = Interest Rate

IPI = Industrial Production Index

α = Constants

β = Coefficient

ε = Error

RESULTS AND DISCUSSION

Table 1 shows that the sharia stock index in Indonesia has an average, standard deviation, maximum value, and minimum value of 611.8584; 63.04004; 728.2000; 477.5100; and it implies that the standard deviation is smaller than the average, and the gap between the maximum and minimum values of sharia stock index (SSI) is low. Related with independent variables, the average value of the exchange rate (ER), the inflation (INF), the interest rate (IR), and the industrial production index (IPI) amounted to 11547.24; 5.663284; 6.774254; and 1.111075 where the average value is greater than the standard deviation.

Table 1. Descriptive Statistics

	N	Mean	Std. Dev.	Median	Max.	Min.
SSI	67	611.8584	63.04004	604.6100	728.2000	477.5100
ER	67	11866.90	1850.327	11866.90	14896.10	9032.000
INF	67	5.663284	1.598338	5.470000	8.790000	3.210000
IR	67	6.774254	0.728622	6.750000	7.750000	5.750000
IPI	67	1.111075	0.088275	1.128000	1.290000	0.915000

Source : Data Processed, 2018

Table 2 indicates that the sharia stock index in Malaysia has an average, deviation standard, maximum value, and minimum value of 2,971,379; 196.3932; 2,071,330; 1,369,170; and implies that the standard deviation is smaller than the average, and the gap between the maximum and minimum values of sharia stock index (SSI) is low. Related with independent variables, the average value of the exchange rate (ER), the inflation rate (INF), the interest rate (IR), and the industrial production index (IPI) is 3.384931; 1.082657; 3.074627; and 1.123229 where the average value is greater than the standard deviation and the existence of the gap between the maximum and minimum values of the independent variable is low.

Table 2. Descriptive Statistics

|	N	Mean	Std. Dev.	Median	Max.	Min.
SSI	67	1794.294	196.3932	1812.360	2071.330	1369.170
ER	67	3.384931	0.417353	3.210500	4.445500	2.955500
INF	67	1.082657	0.040035	1.079000	1.148000	1.018000
IR	67	3.074627	0.144435	3.000000	3.250000	2.750000
IPI	67	1.123229	0.083973	1.115000	1.287000	0.945000

Source : Data Processed, 2018

The normality test result of sharia stock index in Indonesia is shown in figure 1. The figure demonstrates that the probability value of 0.684 is greater than 0.05, so the data is normally distributed.

Figure 1. Testing of Histogram Statistical-Normality Test of

Sharia Stock Index in Indonesia
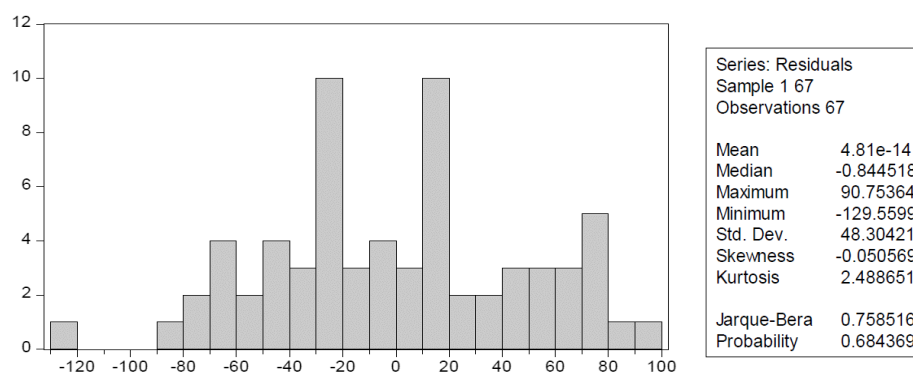
The normality test result of sharia stock index in Malaysia is shown in figure 2. The figure presents that the probability value of 0.684 is greater than 0.05, so the data is normally distributed.

Figure 2. Testing of Histogram Statistical-Normality Test of Sharia Stock Index in Malaysia
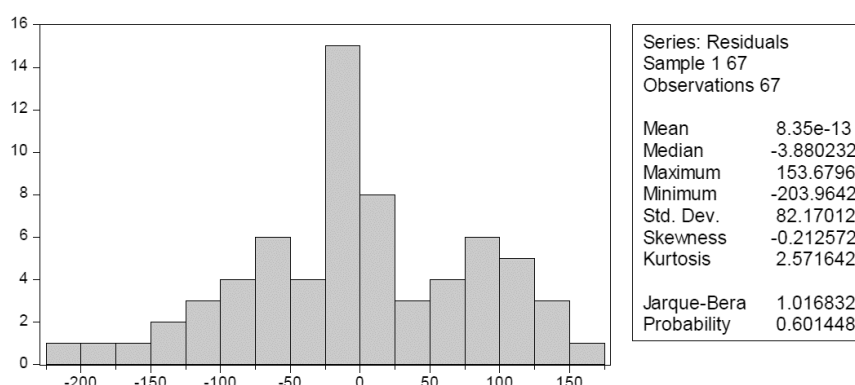
Multicollinearity test result of sharia stock index in Indonesia are illustrated in table 3. The table represents that the output of colleration matrix between variables is less than 0.90 where it can be concluded that there is no multicollinerity between independent variables.

Table 3. Correlation Matrix

	ER	INF	IR	IPI
ER	1.000000	0.180533	0.709341	0.848995
INF	0.180533	1.000000	0.522276	0.093953
IR	0.709341	0.522276	1.000000	0.618630
IPI	0.848995	0.093953	0.618630	1.000000

Source : Data Processed, 2018

Multicollinearity test result of sharia stock index in Malaysia are illustrated in table 4. The table designates that the output of colleration matrix between variables is less than 0.90 where it can be resumed that there is no multicollinerity between independent variables.

Table 4. Correlation Matrix

	ER	INF	IR	IPI
ER	1.000000	0.883286	0.727924	0.788131
INF	0.883286	1.000000	0.829220	0.809877
IR	0.727924	0.829220	1.000000	0.769342
IPI	0.788131	0.809877	0.769342	1.000000

Source : Data Processed, 2018

Hesteroscedasticity test result of sharia stock index in Indonesia is represented in table 5. The output of heteroscedasticity test results using White Test. The table indicates that the value of Obs*R-square has a chi-square probability value of 0.1768 and it is greater than 0,05. The decision is that there is no heteroscedasticity problem in the regression model.

Table 5. Heteroscedacity Test using White Test

F-statistic	1.613165	Prob. F (4,62)	0.1822
Obs*R-square	6.315725	Prob. Chi-Square (4)	0.1768
Scaled explained SS	5.038964	Prob. Chi Square (4)	0.2833

Source : Data Processed, 2018

Hesteroscedasticity test result of sharia stock index in Malaysia is served in table 6. The output of heteroscedasticity test results using White Test. The table performs that the value of Obs*R-square has a chi-square probability value of 0.3272 and it is greater than 0.05; so it can be inferences that there is no heteroscedasticity problem in the regression model.

Table 6. Heteroscedacity Test using White Test

F-statistic	1.14400	Prob. F (14,52)	0.3449
Obs*R-square	15.77678	Prob. Chi-Square (4)	0.3272
Scaled explained SS	10.61636	Prob. Chi Square (4)	0.7159

Source : Data Processed, 2018

Autocorrelation test in this study uses Durbin Waston Test (DW Test). The decision making for autocorrelation is looking at Durbin Waston table that is dU < DW < 4-dU. Therefore, the value of dU is 1.7617. Autocorrelation test result of sharia stock index in Indonesia obtained that the value of DW is 2.110090, so DW value is at 1.7617 < 2.110090 < 2.2383. it deduces that the data does not autocorrelation problems. Autocorrelation test result

of sharia stock index in Malaysia obtained that the value of DW is 2.2004260, so DW value is at 1.7617 < 2.110090 < 2.2383. it deduces that the data does not autocorrelation problems.

*Coefficient of Determination (*Adjusted R^2) result of sharia stock index in Indonesia can be seen in table 7. It indicates that adjusted R-square value is 0.8731 and suggestes that the ability of the independent variable in describing the dependent variable of 87.31%, meanwhile 12.69% is clarified by other variable that is not examined in this study.

Table 7. Coeficient of Determination Result

R-square	0.882857	Mean dependent var	613.8939
Adjusted R-square	0.873095	S.D. dependent var	61.26413
S.E. of regression	21.82459	Akaike info criterion	9.090460
Sum square resid	28578.77	Schwarz criterion	9.289519
Log likelihood	-293.9852	Hannan-Quinn criter.	9.169118
F-statistic	90.43862	Durbin-Waston stat	2.110090
Prob (F-statistic)	0.000000		

Source : Data Processed, 2018

Adjusted R^2 result of sharia stock index in Malaysia can be looked at table 8. It presents that adjusted R-square value is 0.944267 and suggestes that the ability of the independent variable in explaining the dependent variable of 94.4%, meanwhile 5.58% is clarified by other variable that is not analyzed in this study.

Table 8. Coeficient of Determination Result

R-square	0.944267	Mean dependent var	1795.570
Adjusted R-square	0.939623	S.D. dependent var	197.6180
S.E. of regression	48.55823	Akaike info criterion	10.68991
Sum square resid	141474.1	Schwarz criterion	10.88897
Log likelihood	-346.7671	Hannan-Quinn criter.	10.76857
F-statistic	203.3133	Durbin-Waston stat	2.200426
Prob (F-statistic)	0.000000		

Source : Data Processed, 2018

F test result of sharia stock index in Indonesia can be refered in table 9. The table explains that F count is 90.43862 with a probability value of 0.000000 where the probability value is less than 0.05; then the regression coefficeint on the independent variable (ER, INF, IR, IPI) is not equal to zero, so independent variable affect simultaneously the dependent variable.

Table 9. F Test Result

R-square	0.882857	Mean dependent var	613.8939
Adjusted R-squared	0.873095	S.D. dependent var	61.26413
S.E. of regression	21.82459	Akaike info criterion	9.090460
Sum square resid	28578.77	Schwarz criterion	9.289519
Log likelihood	-293.9852	Hannan-Quinn criter.	9.169118
F-statistic	90.43862	Durbin-Waston stat	2.110090
Prob (F-statistic)	0.000000		

Source : Data Processed, 2018

F test result of sharia stock index in Malaysia can be looked at table 10. It describes that F count is 203.3133 with a probability value of 0.000000 where the probability value is less than 0.05; then the regression coefficeint on the independent variable (ER, INF, IR, IPI) is not equal to zero, so independent variable affect simultaneously the dependent variable.

Table 10. F Test Result

R-square	0.944267	Mean dependent var	1795.570
Adjusted R-squared	0.939623	**S.D. dependent var**	197.6180
S.E. of regression	48.55823	**Akaike info criterion**	10.68991
Sum square resid	141474.1	**Schwarz criterion**	10.88897
Log likelihood	-346.7671	**Hannan-Quinn criter.**	10.76857
F-statistic	203.3133	**Durbin-Waston stat**	2.200426
Prob (F-statistic)	0.000000		

Source : Data Processed, 2018

Regression Model

Data eximinated using Eviews 8 program. The result of multiple linear regression on sharia stock index in Indoneisa are illustrated in table 11.

Table 11. Result of Multiple Linear Regression

Variables	Coeficient	SE	t-Statistic	Prob.
C	176.3627	155.7453	1.132379	0.2618
ER	0.006061	0.012091	0.501300	0.6179
INF	2.311744	4.789577	0.482661	0.6310
IR	-13.00618	14.64500	-0.888097	0.3779
IPI	396.4824	229.5580	1.727155	0.0891

Source : Data Processed, 2018

The table interprets that multiple linear regression equation is:

$$\textbf{SSI} = \textbf{176.3627} + \textbf{0.006061 ER} + \textbf{2.311744 INF} - \textbf{13.00618 IR} + \textbf{396.4824IPI} + \boldsymbol{\varepsilon}$$

Data eximinated using Eviews 8 program. The result of multiple linear regression on sharia stock index in Malaysia are showed in table 11.

Table 11. Result of Multiple Linear Regression

Variables	Coeficient	SE	t-Statistic	Prob.
C	-1361.291	547.8759	-2.484671	0.0157
ER	-806.1209	53.50769	-15.06544	0.0000
INF	5866.014	901.3748	6.507852	0.0000
IR	-118.7488	129.5440	-0.916667	0.3629
IPI	-90.38485	301.0986	-0.300184	0.7650

Source : Data Processed, 2018

The table explains that multiple linear regression equation is:

$$SSI = -1361.291 - 806.1209\,ER + 5866.014\,INF - 118.7488\,IR - 90.38485\,IPI + \varepsilon$$

Partial test result (t- test) of sharia stock index in Indonesia can be found in table 11. The table proves that tcount of the exchange rate (ER) variable on the sharia stock index is 0.501300 with a significance level of 0.6179. It is greater than 0.05, so we can determined that there is a positive and significant influence between the exchange rate and the sharia stock index being rejected.

The t value on the inflation variable (INF) is 0.482661 with a significance level of 0.6310. It is greater than 0.05, hence the hypothesis that there is a significant negative influence between the inflation rate and the sharia stock index being rejected. The t value of the variable interest rate (IR) is-0.888097 with a significance level of 0.3779. It is greater than 0.05, so hypotheses stating that there is a significant negative influence between the interest rate and the sharia stock index are rejected. Meanwhile, the t value of the industrial production index (IPI) variable is 1.727155 with a significance level of 0.0891 > 0.05, hence the hypothesis that there is a significant positive influence between the industrial production index (IPI) and sharia stock indices are rejected.

Partial test results (t-test) of sharia stock index in Malaysian can be seen in table 12. The table confirms that the t value of the exchange rate (ER) variable on the sharia stock index is -15.06544 with a significance level of 0.0000 < 0.05; thus, it means that there is a positive and significant influence between the exchange rate and the sharia stock index being rejected.

The t value on the inflation variable (INF) is 6.507851 with the equivalent significance of 0.000 < 0.05. Hence the hypothesis that there is a significant negative influence between the inflation and the sharia stock index being rejected. The value of t in the variable interest rate (IR) is 0.916667 with a significance level of 0.3629 > 0.05, so hypotheses stating that there is a significant negative influence between the interest rate and the sharia stock index are rejected. Meanwhile, t value of the industrial production index (IPI) is -0.300184 with a significance level of 0.7650 > 0.05. Therefore, the hypothesis that there is a significant positive influence between the industrial production index (IPI) and Sharia stock indices are rejected.

Discussion

The result of hypothesis testing results in an independent variable on the dependent variable can be found in table 13.

Table 13. Result of Hypothesis Testing

		Sharia Stock Index	
		Indonesia	Malaysia
ER	t count	0.0061	-806.12
	Sig.	0.6179	0.0000
INF	t count	2.3117	5866.01
	Sig.	0.6310	0.0000
IR	t count	-13.006	-118.74
	Sig.	0.3779	0.3629
IPI	t count	396.482	-90.385
	Sig.	0.0891	0.7650

Source : Data Processed, 2018

Exchange Rate Affects Sharia Stock Index

This study uses the exchange rate as an independent variable to measure how the role of exchange rate effects on sharia stock index performance in Indonesia and Malaysia. The price of stock index would be negatively affected if exchange rate increased excessively because it can cause inflation, so the volatility of stock market can be increased the exchange rate in the country (Choi, Jiang, Kang, & Yoon, 2012; Choi & Yoon, 2015). The results evidence that the exchange rate (ER) contributed differently to each country. The exchange rate contributes positively to the sharia stock index in Indonesia, while the exchange rate contributes negatively to the sharia stock index in Malaysia. Theoretically, exchange rate has a positive effect on the stock price index, and the exchange rate in a strengthened country will increase the value of the stock price index in a country (Handayani & Oktavia, 2018; Pratama et al., 2018). When the exchange rate increased, investor will see the condition and choose to invest in the capital market.

Whereas, the exchange rate negatively affects the sharia stock index suggests that a decline in the exchange rate of a country will raise the sharia stock index (Apituley, 2018; Devkota & Panta, 2018; Muktadir-al-Mukit, 2013; Vikaliana, 2018; Yunzhong, 2011). The negative contributions support when a currency is depreciation, so it will raise the exports made by the exporter company. The increase in the company's performance means that it will impact on the increase in profits earned by the company, so that the company's profit will be increased, and the stock price index is considered positive by investors. The value of significance in the exchange rate variable significantly affects the sharia stock index in Malaysia and has no effect on the sharia stock index in Indonesia.

Inflation influence on Sharia Stock Index

The study of Irawan & Warjiyo (2007) found that rising inflation can lower capital gains resulting in reduced profits gained by investors. The study from Isa, Hasan, & Abdullah

(2012) proved that inflation, interest rates, industrial production, reserves, exchange rates, and international monetary policy have an effect on sharia stock index. The results examined that inflation (INF) had a positive influence on sharia stock price index in Indonesia and Malaysia. Theoretically, inflation contributes negatively to the stock index, because the increase in inflation will lower the stock price index of a country (Campbell & Vuolteenaho, 2004; Stock et al., 2019). Meanwhile, inflation has a positive influence on sharia stock price index, meaning that rising inflation will increase the stock price index (Phaneuf, Sims, Gardy Victor, & Victor, 2015). If inflation is high, the price level will increase so the business becomes profitable. The significance value between inflation variables and sharia stock index in Malaysia presents significant influence, while the inflation variable has no significant effect on the sharia stock index in Indonesia.

Impact of Interest Rate on Sharia Stock Index

In monetary policy, interest rates will rise and increase the cost of the company's capital, but the decline in the exchange range can lead to lower inflation (Gautam, 2017). The results stated that the interest rate (IR) negatively impacted the sharia stock index in Indonesia and Malaysia. Theoretically, the interest rate has a negative influence on the stock index which means that the increase in interest rate will lower the value of the stock price index in a country (Sukmana, 2018). While, the significance value between the interest rate and the sharia stock index in Indonesia and Malaysia shows no significant influence. This research is in line with research some researchers found that the interest rate had no influence and had a significant negative relationship to the stock index (Adiningtyas, 2018; Agestiani & Sutanto, 2019; Alam & Rizvi, 2016; Beik & Fatmawati, 2014; Mohamad, Hussin, & Razak, 2012). Earlier research revealed that the interest rate affects the volatility of conventional stock markets but does not affect the sharia stock market (Yusof & Majid, 2007).

Effect of Industrial Production Index on Sharia Stock Index

In this study, industrial production indexes are used as independent variables in which to measure how large the impact of industrial production index variables on the sharia stock index performance in Indonesia and Malaysia. The results proved that the industrial production index (IPI) contributed positively to the sharia stock index in Indonesia and Malaysia. Theoretically, the index of industrial production has a positive influence on the stock price index, which means that the increase in the industrial production index will increase the value of the stock price index in a country (Amarasinghe, 2016). Hence, the industrial production index has no effect on the sharia stock index in Indonesia and Malaysia showed that.

CONCLUSION

This study examines the impact of macroeconomic variables on the sharia stock index performance in Indonesia and Malaysia using the panel data method. Data for 67 registered sharia stock markets from two countries (Indonesia and Malaysia). The study period used was 2013-2018. The finding of this study proves that the exchange rate had an insignificant positive influence on sharia stock index in Indonesia, and had a significant negative influence on sharia stock indices in Malaysia. The inflation rate is not significantly to the sharia stock index in Indonesia, while inflation has a significant positive impact on sharia stock index in Malaysia. The Interest rate is positively insignificant to the sharia stock index in Indonesia and Malaysia. The index of industrial production has been positively insignificant to the sharia stock index in Indonesia, while in Malaysia, industrial production index negatively affect the sharia stock index.

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