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Article

# **Can Sharia Finance Affect Indonesia's Economic Growth?**

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**Abstract:** This study determines the effect of sharia bank financing, sharia mutual funds, sharia shares and Sukuk on Indonesia's economic growth in the long and short term and analyzes the balanced relationship between the independent variable and the dependent variable using the ARDL method. Stationarity testing using the Augmented Dickey-Fuller Stationary (ADF) approach, from March 2011 to September 2021. The results found that the long-term estimation of Sukuk has a positive and significant effect on economic growth while sharia bank financing, mutual funds and sharia stocks have no impact on economic growth. In the short term, the Sharia bank financing variable has a positive and significant impact on economic growth. Then, the results of the bound test estimate show that there is a short-term and long-term equilibrium relationship. Through the results of this study, it is hoped that it can be used as material for consideration by investors in making decisions to invest in the sharia financial market and to the government, it can be used as material for evaluating economic policies so that investment in sharia finance in Indonesia is growing.

Keywords: economic growth; sharia shares; sharia banking financing; sharia mutual funds; Sukuk.



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### 1. Introduction

The Indonesian economy tends to fluctuate, this is due to the influence of economic shocks in Indonesia and abroad. Indonesia has experienced major macroeconomic shocks in the last 25 years. The shock occurred in 1998 which caused a macro imbalance. The forex market and the capital market do not go hand in hand, investment in financial assets has increased dramatically while the accumulation of physical assets has decreased (Sari & Fakhruddin, 2014). In addition, the 2008 crisis caused by the subprime mortgage impacted the financial sector in the United States (Sugema, 2012). The financial market industry, especially Islamic finance, is an important issue and often becomes an object of study to cope with global economic turbulence. This is due to some systems in sharia finance known to have a positive effect in many ways that differ from conventional systems or aspects which refer to aspects of capital or capitalization that only benefit one side (Ibrahim, 2015). However, the Islamic financial market in Indonesia is still not much in demand by the Indonesian people to invest.

Based on the Indonesian Sharia Financial Report in 2018 presented by the Financial Services Authority (OJK), the Islamic banking market share has only reached 5,96 percent, the Non-Sharia Bank Financial Industry (IKNB) is 4,12 percent and the Sharia Capital Market (excluding sharia shares) is 15,30 percent of the total share of the national financial market with total assets 1.287,55 trillion. Indonesia's Islamic Financial Assets grew by 13,97 percent trillion from the previous year, as much as IDR 1.129,77 trillion. The main goal of investors to invest profitably is by choosing the right strategy in product selection because investing in profitable products is important in market growth. Especially for Muslim investors who do not only focus on the benefits of investing but also pay attention to the suitability of the product to sharia values. The Islamic capital market mechanism is different from the general economic capital market. It is following applicable rules and complies with the rules written in the Qur'an. This important reason can influence the decision of Muslim investors to invest in Islamic financial products (Suriani et al., 2018).

Indonesia is the world's largest Muslim country, with 87.18 percent of the Muslim population (Badan Pusat Statistik, 2010). This is a potential market for Indonesia's Islamic finance industry. The Islamic capital market is one of the Islamic finance industries that is rapidly developing in Indonesia. A capital market plays an important role in a country's economy because of its two functions: economic and financial. The presence of the capital market is expected to increase economic activity because the capital market provides alternative funding for companies to operate on a larger scale, which will increase company income and the overall prosperity of the community (Sari & Fakhruddin, 2014). One of the sharia securities that have been issued in the Indonesian capital market as an investment facility is sharia bonds or Sukuk. In September 2002, PT Indonesian Satellite Corporation (Indosat) issued the first Sukuk in Indonesia, with a value of IDR. 175 billion. Other large corporations followed Indosat's lead. By the end of 2008, the total value of corporate Sukuk issuance had reached \$4.76 trillion. Mudharabah accounted for IDR 740 billion (88 % of the Sukuk utilised in the 2002-2004 period, with ijarah accounting for IDR 100 billion (12 %). Between 2004 and 2007, ijarah accounted for IDR 2.194 trillion (92%) while mudharabah accounted for IDR 200 billion (8%) of total revenue (Darmadji & Fakhruddin, 2012).

Sukuk can be regarded as a new instrument in sharia payments that are very useful for investors. Sukuk can be used as a tool to mobilize capital as well to increase enthusiasm for investors. Besides, it is also a new alternative for investors' investment (Luthfi, 2019). The purpose of the Sukuk issuance is to diversify the investor base, encourage the development of Islamic financial markets, create benchmarks in the Islamic financial market, optimize the use of state property or companies, and use public funds that have not been caught by the bond system or conventional banking (Fatah, 2011). Islamic stocks, in addition to Sukuk, are fast rising, with sharia shares listed on the Jakarta Islamic Index (JII) on the capitalization of the Indonesia Stock Exchange Market until 2019, showing that the outstanding number of sharia shares reached IDR 2.318.565,69 billion, according to OJK.

The development of investment in Islamic finance needs to be evaluated because it will affect the performance of the financial sector and have implications for economic growth and development (Lee et al., 2022). Islamic finance is alternative financing in the real sector to support the process of economic development in Indonesia by issuing sharia capital markets and sharia bank financing. The number of Indonesians who are predominantly Muslim is a significant issue in this study, but there are still few people involved in economic activities in Islamic finance. Based on this issue, the purpose of this research is to investigate the impact of sharia shares, Sukuk, sharia mutual funds, and sharia financing on the level of Indonesian economic growth in the long and short term, as well as how their relationship balances with the rate of Indonesian economic growth. Suriani et al. (2018) explained that the Sukuk market is more stable than the bond market in the economy. The research explains that the Sukuk market is only affected and caused by the Granger exchange rate, while the bond market is significantly affected by interest rates, exchange rates, and price levels. The discovery of the independence of the Sukuk market from interest rates further, confirms that Sukuk trading in Indonesia is in line with the principles of Islamic finance.

Suriani et al. (2018), Suriani et al. (2019) and Zahara et al. (2020) explained that Indonesia's macroeconomic variables are the JII variable had a positive and significant effect on the exchange rate in the long run. Short-term estimation results for Malaysia only variable interest rates have a negative and significant effect on Malaysian sharia shares. The results of the testing of the causality of the Indonesian sharia stock market and the five macroeconomic variables namely interbank interest rates (JIBOR), inflation, exchange rates, and foreign exchange reserves are one-way related. Unlike the case with Malaysia, the KLIBOR Interest Rate has a two-way relationship to Malaysian Sharia Shares. Certainty the right monetary policy will drive the development of the Indonesian economy. The results of this study can be useful for evaluating the development of sharia investment in order to avoid crisis shocks and macroeconomic impacts that occur at any time, both in Indonesia and Malaysia.

It is concluded from the research above that the novelty of the study of Islamic finance is important to be developed. This study is different from the previous studies mentioned in advance, that not only examines the sharia capital market through sharia stock securities instruments, Sukuk, and mutual funds but also investigates other variables such as Islamic bank financing. In addition, this study does not only analyze the influence of Islamic finance on economic growth but also investigates the relationship between Islamic capital market instruments, and Islamic bank financing by determining short-term and long-term relationships between variables. It is expected that the prospect of Islamic finance which is growing every year will have a positive impact and be significant on Indonesia's economic growth.

#### 2. Literature Review

The relationship between Islamic finance to economic growth can be interpreted as an investment relationship. It uses Islamic stock variables, Sukuk, Islamic mutual funds through Islamic capital market instruments, and Islamic financing through banking instruments. This investment relationship has a positive influence on economic growth. Investment can also be interpreted as an expense or shopping investment capital or companies to buy goods capital and paraphernalia to increase goods and services production ability that are available in the economy. Harrod-Domar's theory states that investment is the key to economic growth (Sukirno, 2011). Investment effect the demand for aggregate through the creation of income and aggregate supply through increased production capacity. According to endogenous growth theory, the role of investment in physical and human capital also determines long-term economic growth. Saving and investing can promote long-term economic growth (Mankiw, 2012). According to this theory, if a country's aggregate production grows, investment returns will rise. It is assumed that private and public investment in human capital or resources can generate external economies (positive externalities) and increase productivity, thus offsetting the scientific trend of declining returns to scale. Although technology is still acknowledged to play a significant role, the endogenous growth model asserts that technology does not need to be highlighted to explain the process of generating long-term economic growth.

Several studies have looked into the numerous connections between capital market developments and Indonesia's economic growth. According to Suriani et al., (2021), sukuk has a two-way causal link with economic growth through asset prices and exchange rate channels, however there is no causal association between Sukuk and inflation through asset prices and exchange rate channels. Through asset prices and exchange rate channels, sukuk are also explained to have a causal relationship with monetary policy variables, interest rates, and stock prices. According to Boubakari & Jin (2010), there is a positive relationship between the stock market and economic growth in a number of countries where the stock market is liquid and active. However, causality is rejected in countries with a small and less liquid stock market.

Furthermore, Prasetyo et al. (2013) demonstrated that in the short term, the stock market capitalization value and the real exchange rate have a significant effect. In the long run, variables such as stock market capitalization value, share value traded, and real exchange rate have a significant impact. This demonstrates that the capital market has an impact on Indonesia's economic growth. Abduh & Azmi Omar (2012) showed that Islamic finance in Malaysia already has an important role in the economic sector by collecting and distributing funds effectively for investment. Islamic banking can contribute to the real sector by performing intermediary functions such as collection and distribution to direct investment activities. Dirgantoro (2021) concluded that the relationship between Islamic banking and Indonesia's economic growth (GDP) does not show a two-way relationship (causality), where Islamic banking does not affect economic growth and economic growth has no Granger effect on Total Financing. This shows that the variables between the performances of Islamic banking will not be able to fully contribute to economic growth if the economy does not grow well.

Subsequent research by Yadirichukwu & Chigbu, (2014) explains that there is an inverse relationship, in the long run, the relationship between new issues (TONIS) and GDP in the long term is considered negative, but the long-term relationship between total listings on the stock market and GDP is observed to be inversely proportional to GDP. Also, the inverse relationship between transaction value and GDP. Supporting previous research by Fadhilah (2017) using Vector Autoregression (VAR) analysis combined with the Vector Error Correction (VECM) analysis method suggests that in the long term, the capital market has a significant effect on real investment. The results of the economic growth equation show that the short-term stock capitalization and NSP have a significant effect on economic growth, in the long term all capital market variables have a significant effect on economic growth.

Likewise, the results of research by Ningsih & Waspada, (2018) show a positive relationship between the Dow Jones Islamic Market Index Stock Return, Money Supply (LNM2)) and the Jakarta Islamic Index,

and a negative relationship with the FTSE of the Malaysia Hijrah Shariah Index (FHSI) stock return, Exchange Rate, Consumer Price Index (CPI), and BI Rate on the Jakarta Islamic Index.

Long-term research by Nordin & Nordin (2016) showed that both the stock market and the debt market have a positive and significant influence on the Malaysian economy. The stock market was discovered to have a greater impact on the Malaysian economy than the debt market. Because both markets have a significant and positive impact on the Malaysian economy, policymakers should take appropriate steps to fully capitalize on the opportunities created by both markets, particularly stock market liquidity conditions, which influence investors' financial and investment decisions. Coşkun et al. (2017) investigated the relationship between economic growth and the level of development of capital market sub-components such as mutual/pension funds, corporate bonds, stock markets, and government bonds in Turkey 2006:M1 and 2016:M6. The findings of this study show that capital market development and economic growth have a long-term co-integration relationship, as well as a unidirectional causality that runs from capital market development to economic growth. This study also finds that capital market development has a symmetrical effect on economic growth, with government bond market development being negative but the aggregate index of other sub-components being positively related to economic growth, using ARDL, Markov Switching Regression, and Kalman Filter models.

From 1971 to 2013, Khetsi (2014) evaluated the impact of capital markets on economic growth in South Africa. The findings suggest that economic growth and the South African stock market have a beneficial association. In addition, countries should concentrate on variables that contribute to the development of capital markets, such as financial institution development. Based on the results of the research above, we get empirical facts that there is a relationship between Islamic finance and economic growth. This relationship occurs through Islamic capital market instruments and Islamic banking variables. The increase in investment has a positive effect on economic growth. Based on the description above, the following hypotheses were developed:

**Hypothesis 1** (H1): There is a significant positive effect of sharia bank financing, sharia shares, sharia mutual funds, and Sukuk on economic growth in Indonesia.

**Hypothesis 2** (H2): There is a short and long-run effect of sharia bank financing, sharia shares, sharia mutual funds, and Sukuk on economic growth.

#### 3. Materials and Methods

There are just four independent variables and one dependent variable in this study. In this investigation, variables were observed as objects. Sharia bank financing, Sharia mutual funds, Sharia shares, and Sukuk are the independent variables in this study. Indonesia's economic growth is the dependent variable. The data in this study is quantitative and contains numbers. The data comes from secondary sources such as the Central Statistics Agency (BPS) and the Financial Services Authority's public reports (OJK). The time frame for this study is January 2011 to September 2022. The monthly data on sharia bank funding, sharia mutual funds, sharia shares, and Sukuk is based on a 127-month sample. The autoregressive distributed lag (ARDL)-ECM is used in this investigation. It's a model in which one or more past values (lags) of variables bound to variables in the explanation are included. The autoregressive and distribution lag models are linear regression models that consider short-term to long-term response times from variable bound to one-unit change in mark variable explanation (Gujarati, 2022). Then, if observable variables shape anything set mutually variable cointegrated, a correction model error (Error Correction Model/ECM) is an appropriate dynamic model for seeking for a brief balance period. Furthermore, when cointegrated variables supported by Error Correction Term (ECT) are used, the correction model error will be a valid model (Salomo & Hutabarat, 2007). The general form of the ARDL model in this study is as follows:

$$LogGDP_{t} = a_{0i} + \sum_{i=1}^{n} a_{1i} \Delta LogGDP_{t-1} + \sum_{i=1}^{n} a_{2i} \Delta LogSBF_{t-1} + \sum_{i=1}^{n} a_{3i} \Delta LogSMF_{t-1} + \sum_{i=1}^{n} a_{4i} \Delta LogSS_{t-1} + \sum_{i=1}^{n} a_{5i} \Delta LogSUKUK_{t-1} + \beta_{1i} LogGDP_{t-1} + \beta_{2i} LogSBF_{t-1} + \beta_{3i} LogSMF_{t-1} + \beta_{4i} LogSS_{t-1} + \beta_{5i} LogSUKUK_{t-1}$$
(1)

In this study, the short-term estimation is as follows:

$$\Delta LogGDP_{t} = a_{0i} + \sum_{i=1}^{n} a_{1i} \Delta LogGDP_{t-1} + \sum_{i=1}^{n} a_{2i} \Delta LogSBF_{t-1} + \sum_{i=1}^{n} a_{3i} \Delta LogSMF_{t-1} + \sum_{i=1}^{n} a_{4i} \Delta LogSS_{t-1} + \sum_{i=1}^{n} a_{5i} \Delta LogSUKUK_{t-1} + \alpha_{5i}ECT_{t-1} + \varepsilon_{1t}$$

$$(2)$$

Meanwhile, the long-term estimation as seen from the AIC value of each variable is as follows:

$$LogGDP_{t} = \beta_{01} + \beta_{11}LogGDP_{t-1} + \beta_{21}LogSBF_{t-1} + \beta_{31}LogSMF_{t-1} + \beta_{41}LogSS_{t-1} + \beta_{51}LogSUKUK_{t-1} + \varepsilon_{t}$$

$$(3)$$

Where GDP is growth economics, SBF is Islamic bank financing, SMF is sharia mutual funds, SS is Islamic stocks and Sukuk are Islamic bonds as well as 1 to 5 is the coefficient period short, 1 to 5 is coefficient period length, t is the year, and i is lag order, as well as  $\varepsilon$  are error terms. All variables are bound, and the free unit used is a billion.

#### 4. Results

#### 4.1. Stationarity Test

Stationarity testing is significant in time series data before analysis. Most of the macro data have a trend so it gives spurious results. One of the impacts of skipping this stationarity test is the wrong results and an impact on policy implications. In this study, researchers used a root testing unit using the ADF approach. The testing result is displayed in Table 1.

Variable	Augmented Dickey-Fuller (ADF)			Phillips-I	Phillips–Perron			
variable	Level	Prob	First-diff	Prob	Level	Prob	First-diff	Prob
Log GDP	-4.220*	0.000	-	-	-9.936*	0.000	-	-
Log SBF	-9.711*	0.000	-	-	-9.936*	0.000	-	-
Log SMF	-2.185	0.493	-10.645*	0.000	-2.456	0.348	-10.647*	0.000
Log SS	-6.551*	0.000	-	-	-6.533*	0.000	-	-
Log Sukuk	-1.677	0.755	-10.632*	0.000	-1.798	0.7000	-10.635*	0.000

Table 1. Result of Unit Root Testing

Note: \*\*\*, \*\* represents a significant at the level 1 percent and 5 percent.

Table 1 describes the stationarity test carried out using Augmented Dickey-Fuller (ADF) on the variables studied, such as GDP, sharia bank financing, sharia mutual funds, sharia shares and Sukuk. Based on the ADF test, the GDP, sharia bank financing, and sharia shares variable are stationary at the level place. Furthermore, the variables of sharia mutual funds and Sukuk are stationary in the first difference with a significance level of 1 percent. The results of this test give different stationarity results, which makes the use of the ARDL model very appropriate in this study. as well as the Phillips–Perron test results which show the correct model regression results.

#### 4.2. Optimal Lag Variable

An optimal lag test is very essential in the ARDL approach. Lag explains how long the influence of a variable is on other variables. Therefore, it is necessary to test the optimal lag length of each path. The inertia test uses the Akaike Information Criterion (AIC). The research looks at the smallest value.

Table 2. The Result of Optimal Lag-Length Selection Criteria

Model	AIC	ARDL
1	4.110*	4,3,4,0,0
2	4.414	4,4,4,0,0
3	4.115	4,3,1,0,0
4	4.116	4,3,4,4,1

5	4.119	4,3,4,3,0
Note: *	is the model that corresp	onds to the smallest lag.

Table 2 explains that there are five best models from the results of processing Eviews. Selection of the best model using AIC. The model criteria are good if the AIC value is the smallest (D. N. Gujarati & Porter, 2013). The smallest value is obtained in model 1 with a 4.110 AIC value. The ARDL column describes the lag used for research where the first number is the lag for the dependent then followed by the independent lag.

#### 4.3. Bound Testing (Cointegration Test)

Cointegration testing in research is needed to see whether there is a long-term balance between the independent variable and the dependent variable. For this cointegration test, a bound test is used which has several advantages, namely, it can be integrated into different orders of I(0) or I(1), or the number of samples used is small.

Table 3. The Result of Bound Testing
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Model	F-Statistic	Lower Bound 5%	Upper Bound 5%	Conclusion		
F (GDP/SBF, SMF, SS & Sukuk)	11.97**	2.56	3.49	Cointegration		
Note: ** is significant at the level 5 percent or $p < 0.05$						

\*\* is significant at the level 5 percent or p < 0.05.

Table 3 shows the result of cointegration testing using the bound approach. The results show that the f-stat value is 11,97 where this value is greater than the lower bound and upper bound at the 5 percent level. So, it can be concluded that Ho is rejected, and there is cointegration, or a short-term, to a long-term relationship.

#### 4.4. Classic Assumption Results

The results of the classical assumption test are as follow:

Table 4. Result of Classical A	Assumption for Normal	ity, Heteroscedastici	y, Autocorrelation

Test	Probability	Threshold	Decision
Jarque Bera	0.106	> 0.05	Normal
Chi-Square Breusch-Pagan-Godfrey	0.941	> 0.05	No Heteroskedasticity
Chi-Square Breusch-Godfrey	0.216	> 0.05	No Autocorrelation

Note: \*\* is significant at the level 5 percent or p < 0.05.

Table 5. Result of Classical Assumption for Multicollinearity

	LGDP	LPBS	LREKS	LSAS	LSUKUK	Decision
LGDP	1.000000	-0.105331	-0.060647	-0.151491	-0.121670	
LPBS	-0.105331	1.000000	0.578402	0.643957	0.612371	
LREKS	-0.060647	0.578402	1.000000	0.771743	0.810578	No Multicollinearity
LSAS	-0.151491	0.643957	0.771743	1.000000	0.889310	
LSUKUK	-0.121670	0.612371	0.810578	0.889310	1.000000	

Note: **\*\*** is significant at the level 5 percent or p < 0.05.

Table 4 and 5 describe the results of the classical assumption test and has met the normality assumption because the probability value of 0.106 is greater than alpha 0.05, this indicates that the distribution of the data is normally distributed. Then the regression results show that there is no heteroscedasticity because the probability value of 0.941 is greater than alpha 0.05. Likewise, the autocorrelation test shows that there is no autocorrelation in the regression results because the probability value of 0.216 is greater than alpha 0.05 and the results of the Multicollinearity test show that the correlation value between independent variables is greater than alpha 0.05. Therefore, this model has met the requirements of the classical assumptions.

#### **4.5 Linearity Results**

The linearity test results are as follow:

Table 6.	The	Result	of I	Linearity	Testing

	Value	df	Probability
t-statistic	0.594353	121	0.5534
F-statistic	0.353256	(1, 121)	0.5534
Likelihood ratio	0.370232	1	0.5429

Note: **\*\*** is significant at the level 5 percent or p < 0.05.

On the basis of the linearity test carried out by the Ramsey-RESET test, the F-statistics probability of 0.553 > 0.05 (5%) can be concluded that there is no problem with linearity.

#### 4.6. Long-Term Estimate and Short-Term Estimation Results

The discussion of the first estimation of the ARDL model is to look at the long-term economic growth model. The results of this long-term and short-term estimation can be seen in the following table (Table 6). The results estimation period length on variable Islamic bank financing has an effect negative to growth economy where increase variable this by 1 percent reduce growth economy by 1.281 percent. This thing signifies that Islamic bank financing yet capable give of contributing to the economy in Indonesia. Research results from this are in line with research conducted by Widyastuti & Arinta (2020) and Afandi & Amin (2019), which concludes that financing banking for working capital and financing investment does not influence the growth Indonesian economy. However different from the results study conducted by El Ayyubi et al. (2017) and Setiawan (2019) that financing Islamic banking is an influential positive to the growth economy.

The next variable Islamic mutual funds found influential positively in the growth economy whereas the increased variable caused an increased growth economy by 0.290 percent. However, the contribution from variables this not yet grown following hope Thing this could be seen from probability that is not significant. This result is following what was found by Marsi & Wardani, (2020) that variable Islamic mutual funds are influential positive to the growth Indonesian economy. Different from (Irawan & Siregar, 2019a) conclude that variable Islamic mutual funds don't influence a growth economy. Temporary that Islamic stocks are influential negative to a growth economy. If Sharia stocks increase by 1 percent so growth economy experiences an impact drop of 10.252 percent. Research results from the following done by Jannah, (2019) show that the Islamic stock market does not influence a growth economy. This thing is different from research conducted by Irawan & Siregar (2019b) and Marsi & Wardani (2020), which concluded that variable Islamic stocks are influential positive to the growth Indonesian economy.

Long-term				
Variable	Coefficient	Std. Error	t-stat	Prob
Log SBF	-1.281	0.881	-1.453	0.149
Log SMF	0.29	0.535	0.542	0.588
Log SS	-10.252	3.879	-2.642	0.009*
Log Sukuk	6.596	1.912	3.449	0.000*
С	54.579	18.17	3.003	0.003
Short-term				
DLog GDP t-1	0.528	0.118	4.476	0.000***
DLog GDP t-2	0.041	0.088	0.473	0.637
DLog GDP t-3	0.555	0.074	7.445	0.000***
DLog SBF	-0.121	0.495	-0.246	0.806
DLog SBF t-1	1.317	0.572	2.299	0.023**
DLog SBF t-2	1.507	0.495	3.042	0.002**
DLog SMF	-1.997	1.034	-1.931	0.056
DLog SMF t-1	-1.681	1.047	-1.605	0.111

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DLog SMF t-2	-1.203	1.06	-1.134	0.259
DLog SMF t-3	-2.378	1.064	-2.234	0.027**
CointEqt-1 *	-1.091	0.125	-8.671	0.000***

Note: \*\*\*, \*\* represents a significant at the level 1 percent and 5 percent.

Then sukuk was found in a period long influential positive. Is known increase in sukuk by 1 percent will upgrade the growth economy in a period long by 6.596 percent. This shows the contribution variable this to growth economy enough exhilarating. Finding this supported by Suriani et al., (2021) found that sukuk has a connection in upgrade growth economy through policy variable monetary as level interest and price share through asset price and value exchange. Finding interaction dynamic between sukuk and variables economy other give implication important policy for development domestically, especially in the sukuk market in the global Islamic capital market. However, Thing this is different from the results of research conducted by Irawan & Siregar (2019b, 2019a) where for sukuk variable is not influential to the growth economy.

After ARDL estimation the Step next is to estimate ECM. ECM estimation results are carried out for knowing the influence of variable lag and knowing the balance. ECMt-1 is level speed adjustment to balance period short going to period long. one ECM conditions are marked negative explaining occur convergence. If obtained positive so divergent or avoid from point balance (Salomo & Hutabarat, 2007).

In Table 6 also shows the results of the economic growth model's short-term estimation. At the 1% level, the effect of the GDP lag shows a positive and significant effect. As a result of the 0.52 percent boost from the previous period, the economic impulse will increase. Different results can be found when estimating Sharia bank financing variables in the short term. Sharia bank financing had a negative impact in the beginning, but it had a positive impact in the previous period. The effect of the previous lag, on the other hand, is quite strong, with estimated coefficients of 0.041 and 0.555 percent, respectively. This is also consistent with the findings of Setiawan (2019) and Iryanto et al. (2020), who found that Sharia bank financing for consumption, working capital, and investment had a negative effect on Indonesia's economic growth.

The variable lag of Sharia mutual funds exhibits the same characteristics. As long as the lag applied to Sharia mutual funds variables has a negative effect. This explains why Sharia mutual funds are detrimental to economic growth. This is consistent with previous research, according to WIDODO, (2018), who discovered that Sharia mutual funds have no effect on the level of economic growth. However, this study contradicts the findings of Marsi & Wardani (2020), who found that Islamic mutual funds have a positive effect on economic growth. Finally, there is a discussion of ECM in the short-term analysis. One of the requirements of ECM is that it be both negative and significant. The negative sign denotes convergence or movement toward the equilibrium point. According to the estimation results, the ECM coefficient value was -1.091 and was significant at the 1% level. Indirectly, the results of the short-term economic growth estimate will lead to the long-term estimate within one month.

#### 4.7. Testing the Model Stability

Stability model testing (CUSUM and CUSUMQ) is necessary to figure out the consistency of estimates throughout the year studied, especially in using the ARDL model.

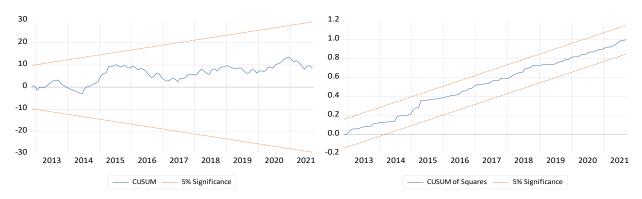


Figure 1. The Result of CUSUM & CUSUMQ

The test results of these two models do not exceed the 5 percent significance line or accept H0, indicating the estimated model obtained is quite good and feasible to use. The description of CUSUM and CUSUMQ can be seen in Figure 1. which explains the consistent estimation results over time.

#### 5. Conclusions

In conclusion, this study indicated that the economic growth in the previous period influences economic growth in the current period. Furthermore, the variables of Islamic bank financing and Islamic stocks have a negative long-term impact on economic growth. This indicates that these two variables have not been able to contribute to the Indonesian economy. The variables of Sharia mutual funds and Sukuk were then discovered to have a positive impact. It is well known that a 1% increase in sharia mutual funds and Sukuk boosts economic growth by 0.290 and 6.596 percent, respectively. This demonstrates that this variable has a significant impact on economic growth by allowing Indonesians to participate in its development.

The economic growth model produces short-term estimates. The effect of the GDP lag is both positive and significant. This explains why the economic impulse will be stronger than it was one period ago. Different results are obtained when the short-term estimation of Sharia bank financing variables is examined. Sharia bank financing had a negative impact in the early period, but it had a positive impact in the previous period. The effect of the previous lag, on the other hand, is quite large, with an estimated coefficient of 0.030 percent. The variable lag of Sharia mutual funds exhibits the same characteristics. So long as the lag applied to the Sharia mutual fund variable has a negative effect. As a result, the short-term imbalance can be corrected within one month. Indirectly, the results of the short-term economic growth estimate will lead to the long-term estimate within one month.

The Sharia financial market is a variable Sharia financial instrument that can be used as an alternative to monetary policy in assessing the effectiveness of sharia financial instruments in promoting economic development. According to the findings of this study, it is critical to promote the Sharia financial market to ensure Indonesia's long-term economic development, such as by providing community education and socialization programs about the critical role of the Sharia capital market and Sharia banking in helping to increase investment contributions to the national economy. It is hoped that the findings of this study will be used as a basis for investors to consider when making decisions to invest in the Islamic financial market and that the findings will be used by the government to evaluate economic policies, resulting in increased interest in Sharia finance in Indonesia, as evidenced by the results of the Cointegration Bound.

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