

THE CAUSALITY RELATIONSHIP OF STATE SUKUK WITH ECONOMIC GROWTH IN INDONESIA AND MALAYSIA

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Abstract: Economic growth is an indicator of the success of a country's development. The higher the economic growth, the higher the welfare of society. Issuance of State Sharia Securities (SBSN) or State Sukuk as one of the APBN sources and is used to finance economic development in order to increase Gross Domestic Product (GDP). This research aims to determine the causality and long-term relationship between Government Sukuk (SBSN) and Economic Growth (GDP) in Indonesia and Malaysia. The method used in this research is the Vector Autoregression (VAR) model with quarterly data from 2009 to 2018. It is concluded that the relationship between SBSN and Indonesia's GDP is a unidirectional relationship where State Sukuk influences Indonesia's GDP. There is no causal relationship, either unidirectional or bidirectional, between Government Sukuk and Malaysian GDP. There is a long-term relationship between Government Sukuk and GDP in Indonesia and Malaysia. The importance of developing sukuk encourages financial inclusion, stimulates investment and economic growth.

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Introduction

In increasing economic growth, each country invests in various things, not only increasing the production of goods and services from year to year, but also investing in other things such as educational development, technological development, improvements in health, improvements in available infrastructure and improvements in community income and prosperity. Therefore, economic development includes various aspects of changes in economic activity.

Economic growth is an indicator of the success of a country's development. The higher the economic growth, the higher the social welfare (Sukirno, 2000: 13). Therefore, economic growth requires investment in economic development. Capital investment activities produce

investments that will continue to increase the capital stock. Increasing the capital stock will increase productivity as well as production capacity and quality, which in turn can encourage economic growth and increase labor absorption and improve the welfare of society.

Theoretically, the level of economic growth is positively correlated with investment as stated by the classical economist Adam Smith, namely the process of capital accumulation (Jhingan, 2007: 82). Smith considers the cultivation of capital to be an absolute condition for economic development, thus the problem of economic development broadly is human ability to save and invest more capital. Thus the level of investment will be determined by the level of savings and fully invested savings.

The opinion of other economists regarding economic growth, such as John Stuart Mill, considers economic development as a function of land, labor and capital (Jhingan, 2007: 105). Josep Alois Schumpeter believes that economic development is primarily created by the initiative of innovative entrepreneurs or entrepreneurs (Sukirno, 2007: 251). Keynes suggested that the government increase spending because it viewed the government as an independent agent capable of stimulating the economy through public works. During a recession, an increase in government spending (G) will encourage consumption (C) and investment (I), and therefore increase national income (Y) (Jhingan, 2003: 133-134).

The economic growth of each country can usually be seen from its national income, which means the value of goods and services produced in a country in a particular year and conceptually this value is called gross domestic product (GDP). This value can be calculated according to current prices (i.e. prices in effect in the year in which GDP is calculated) and according to fixed prices, i.e. prices in effect in the base year.

By calculating according to fixed prices, real national income calculated from year to year describes the actual development of production of goods and services in the economy. Thus, the level of economic growth describes the development of economic activities that occur in a particular year. It describes the extent to which goods and services have increased in a particular year when compared with the previous year.

Indonesia and Malaysia, as countries with predominantly Muslim populations, are trying to develop sharia-based investments in an effort to increase their economic growth. As a Muslim and a country with a Muslim majority population, of course the government must facilitate the needs of its people in making transactions and investing in accordance with Islamic law in order to avoid usury, gharar, maysir and other things that are prohibited in Islam.

One of the investment instruments issued by the Indonesian and Malaysian governments to support their economic growth is state sharia securities or state

sukuk. State Sharia Securities, hereinafter abbreviated as SBSN, or can be called State Sukuk, are SBN issued based on sharia principles, as proof of participation in SBSN assets, both in rupiah and foreign currency (PBI No.17/19/PBI/ 2015). The issued state sukuk becomes one of the sources of the APBN to be used later in the development of a country with the hope of increasing economic growth and improving the welfare of its people.

In the issuance of State Sukuk (SBSN), there are several important elements, including 1) The parties involved in the issuance, including; government, third parties who facilitate the issuance (Special Purpose Vehicle), Sharia Compliance Endorsement (SCE) to guarantee that SBSN complies with sharia principles, SBSN holders which are investors and Bank Indonesia as paying agent responsible for receiving and paying funds from the SBSN issuance. 2) Object of publication, which includes; State Property (BMN)/project and SBSN transaction funds. Lastly, 3) Agreements based on contracts which function as the basis for transactions (underlying transactions) (Amin, 2016).

One of the most important elements in the issuance of State Sukuk (SBSN) is the object of issuance, whether in the form of state property (BMN)/projects or SBSN transaction funds. This is what makes SBSN interesting because it contains objects to be transacted (underlying assets). Sukuk issued by the state are usually used for infrastructure development such as bridges, freeways (toll roads), Hajj dormitories, railway lines, and many others for the benefit of society in general.

The development of state sukuk in Indonesia after the issuance of Law no. 19 of 2008 concerning Government Sharia Securities in early 2009, the government issued retail Government Sukuk (SBSN) series SR-001 and global sukuk SNI 14. For the issuance of global Government Sukuk (SBSN) amounting to 650 million US dollars, it was over subscribed up to 7 times fold or 4.7 billion US dollars. Meanwhile, corporate sukuk issuance in 2009 amounted to IDR 2.070 trillion. An increase of 34.94 percent compared to 2008 of IDR 1.534 trillion.

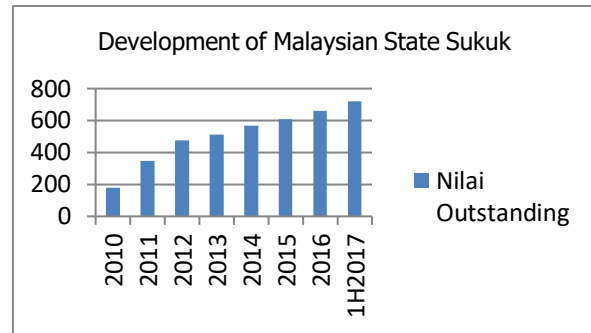


Source: Financial Services Authority 2019

Figure 1.1: Development of Indonesian Sovereign Sukuk

As of the end of December 2016, the number of Government Sukuk (SBSN) in circulation was 53 or 32.70% of the 159 total outstanding government securities. If viewed from the nominal value side, the outstanding value of Government Sukuk (SBSN) reached IDR 411.37 trillion with a proportion reaching 14.82% of the total outstanding value of government securities of IDR 2,775.93 trillion. From year to year, the development of state sukuk shows positive movements. With this increase in state sukuk issuance, Indonesia is included in the top five sukuk issuing countries in the global market (OJK, 2019).

In Malaysia, the development of sukuk has been very rapid in financing Malaysia's economic development, starting with the issuance of RM 125 million by Shell MDS Sdn. Bhd. In 1990, the Malaysian sukuk market continued to grow in terms of volume and experience. Malaysia is a leading country in the development of sharia finance. Malaysia has become the largest sukuk market considering the fact that almost 70% or \$62 billion of the total global sukuk issuance until the end of 2007 was issued in Malaysia. Meanwhile, the total issuance of corporate sukuk until 2007 had reached RM 30 billion (Financial Stability and Payment Systems Report, 2007).



Source: IIFM Sukuk Report 2018

Figure 1.2: Development of Malaysian Sovereign Sukuk

The Sukuk market in Malaysia continues to grow supported by Malaysia's conducive issuance environment, facilitative policies for investment activities and comprehensive Islamic financial infrastructure. Malaysia maintained its leadership by country with a market share of 28.8% in the first half of 2017. Malaysia recorded RM138.7 billion (+20.6% yoy) of sukuk issuance at the end of October 2017. This growth was led by increased issuance by quasi-government (+ 32.2% or RM 38.2 billion), government (+ 17.7% or RM 46.5 billion) and corporate sector (+ 17.7% or RM 54.0 billion). Malaysia not only leads the sukuk market in terms of its volume, but also in terms of innovative and competitive variations in sukuk structures in order to attract a wider range of investors (IIFM Sukuk Report, 2018).

The availability of financing sources is very important in a country's economic development. Sharia financing sources are increasingly developing over time, in fact the development is not only in areas dominated by Muslim-populated countries, the development of sharia financing sources now covers a world scale. This is because the development of sharia finance has become a driver of economic development that connects the financial sector and the real sector. Sukuk, which in transactions require an underlying asset that is required to have economic value, allows sukuk to stimulate growth in the financial sector and the real sector which will increase Indonesia's Gross Domestic Product (GDP).

Houcem and Salem (2017) explain that the development of the sukuk market has encouraged financial inclusion, which stimulates investment and economic growth. Bidisha, Rudra and Mete (2011) in their

research explained that there is a significant influence between financial development and economic growth in Indonesia, Singapore, the Philippines, China and India, while Thailand has a two-way influence between financial development and economic growth. Kassim (2016) explains that Islamic finance is starting to make an important contribution to the real economy by carrying out the role of financial intermediation to collect and channel funds for investment activities.

Investment in State Sharia Securities (SBSN) or commonly known as State Sukuk is the government's effort in several ways, including 1) Expanding the base of state budget financing sources; 2) Encourage the development of sharia financial markets; 3) Creating benchmarks in the Islamic financial market; 4) Diversification of investor base; 5) Developing alternative investment instruments; 6) Optimizing the use of State Property; and 7) Utilizing public funds that have not been captured by the conventional banking system.

This research tries to prove empirically that State Sukuk (SBSN) has a two-way relationship with Economic Growth, especially in the world's largest Muslim countries so that in the long term the government can use State Sukuk (SBSN) as an alternative source of state financing that avoids continuous usury. continuously so that it can replace the Government Securities (SBN) that have been used so far, and as an investment option for both Muslim and non-Muslim communities.

Literature Review

To find out the extent of this research, the researcher collected several previous studies related to this research. This research tries to look at the causality and long-term relationship between State Sharia Securities or Government Sukuk and Economic Growth in Indonesia and Malaysia using the Vector Autoregression (VAR) analysis tool.

Previous research conducted by Smaoui and Nechi (2017), investigated the impact of sukuk market development on economic growth using a sample consisting of all sukuk issuing countries in the 1995-2015 period. This research suggests that the development of the sukuk market is

conducive to economic growth, even after controlling for various measures of financial market development, institutional quality, and classical determinants of economic growth. This research concludes that the development of the sukuk market has encouraged financial inclusion, which stimulates investment and economic growth.

Bidisha, Rudra and Mete (2011) investigated the causal relationship between financial development and economic growth for Thailand, Indonesia, Malaysia, the Philippines, China, India and Singapore in the period 1979-2009. This research shows that in the cases of Indonesia, Singapore, the Philippines, China and India financial development influences economic growth, while in the case of Thailand there is a two-way causal relationship between variables. The results further show that in the case of Malaysia financial development does not affect economic growth.

Rihab and Gazdar (2014) tried to compare the effects of Islamic financial developments and conventional financial developments on economic growth for five GCC countries (Bahrain, Kuwait, Qatar, Saudi Arabia and the UAE). Using generalized least squares, OLS, and panel data framework for the period 1996-2011. This research shows that Islamic finance leads to growth in five GCC countries, but no significant relationship is observed between the development of conventional finance and economic growth. The findings of this research suggest the need to accelerate financial reforms for Islamic finance and to increase the efficiency of the Islamic financial system as well as to stimulate savings/investment and, in the long term, influence economic growth.

Zirek, Duygu, Fusun and Hassan (2016) investigated the impact of Islamic banking variables on economic growth in 14 member countries of the Organization of Islamic Countries during the period 1999-2011. This research looks at short-term and long-term relationships using the VAR panel method. The results of this research show a positive and significant relationship between Islamic finance and economic growth. This relationship is related to several macroeconomic variables such as capital stock, unemployment, inflation, and government spending. This research shows

that increasing the share of Islamic deposits, assets and loans in total banking instruments results in increased economic growth. In the long term, economic growth responds positively to shocks to Islamic instruments, namely deposits, investment and sharia measures.

Nader and Shawkat (2016) investigated the dynamics of co-movement and the causal relationship of returns on GCC sukuk (Islamic bonds) with global financial difficulties and various uncertainty factors (including financial markets, commodities and economic policy uncertainty indices), this study uses quantile regression analysis. The empirical results show that these global financial, economic and oil policy uncertainties have a negative impact and causality effect on GCC sukuk returns, which are limited to lower quantiles. Global financial distress has a negative impact and causality effect on GCC sukuk but only for the top quantile (when sukuk returns are high). Interestingly, GCC sukuk returns are not affected by conventional bond market and gold market uncertainty. For comparison purposes, this study examines the impact of global financial stress and uncertainty factors on the global sukuk index, which is much broader than the GCC index, and finds that this index is mainly affected by global conventional bond market uncertainty. The results of this study indicate that GCC sukuk are more sensitive to global uncertainty factors, especially in the tail distribution, which offers investors different investment alternatives and portfolio diversification opportunities.

Widodo (2018) tries to see the influence of the sharia capital market on Indonesia's economic growth. The methods used are Vector Autoregressive (VAR) and Vector Error Correction Model (VECM). The results of this research are that sharia shares have a significant positive effect on GDP in the long term, but have no effect in the short term with a contribution to GDP of 30%. Sukuk have a significant positive effect on GDP in the short term, but have no effect in the long term with a contribution of 14% to GDP. Sharia mutual funds have no effect on GDP, both short and long term.

This research is a development research from previous research, especially those related to State Sukuk and Economic

Growth. Previous studies have looked more at the unidirectional influence of each macroeconomic variable, such as the influence of macroeconomic variables on demand for Sovereign Sukuk. Meanwhile, this research is about the two-way influence between the State Sukuk variable and Economic Growth in Indonesia and Malaysia. The reason for this research stems from the researcher's self-awareness of the development of Sharia Economics in general, especially in Indonesia and the researcher's interest in the characteristics of sukuk issued by each country.

Method

Judging from the nature of the data, the type of research used in this research is a quantitative research method. Quantitative research is a research approach that requires a lot of use of numbers, starting from data collection, interpretation of that data, and the appearance of the results (Arikunto, 2006: 11). The data that has been collected is then processed through a process in such a way as to produce information that is useful for decision making. This research explains the causal relationship between State Sukuk (SBSN) and Economic Growth in Indonesia and Malaysia. The analytical tool used in this research is the Vector Autoregression (VAR) model with the help of Eviews 7 software. The population in this research is the State Sukuk (SBSN) issued by Indonesia and Malaysia and the Economic Growth of the two countries.

The sample is a portion of the population. The sample consists of a number of members selected from the population. In other words, some, but not all elements of the population form the sample (Sekaran, 2017: 54). The sample for this research is the outstanding State Sukuk (SBSN) of Indonesia and Malaysia, as well as the economic growth of Indonesia and Malaysia for the quarterly period from 2009 to 2018.

The analysis uses quantitative methods to see the interdependence between existing variables using Vector Autoregression (VAR), according to the opinion of Widarjono (2007: 372) who says "VAR is a model that is able to analyze the interdependence relationship of time series variables. The VAR model assumes that all economic

variables are interdependent with each other."

This model is often used as a forecasting system related to time series data and to analyze the dynamic impact of random disturbances on system variables. The VAR approach is carried out by forming a model structure by treating each endogenous variable in the system as a function of all the lagged values of the endogenous variables in the system (Sugiyanto, 2007: 7.15).

Results and Discussion

1. Descriptive analysis

Descriptive analysis is used to see the development of a variable used in the research studied by the author. This research uses Vector Autoregression (VAR) research, where each variable is assumed to be an independent variable. The variables used in the research that the author wants to examine are State Sukuk (SBSN) and Economic Growth in Indonesia and Malaysia. Before conducting further research using Vector Autoregression (VAR), the data will first be presented using descriptive statistics. Descriptive statistics is a part of statistics that studies how to collect data and present it in a form that is easier and quicker to understand (Subagyo & Djarwanto, 2005). Descriptive statistics can be presented in the form of average values (mean), standard deviation, maximum and minimum values (Ghozali, 2011). The following are the data characteristics of the two variables:

Table 4.1: Descriptive Statistics Results for SBSN and GDP Variables Indonesia.

Variabel	SBSN (Milyaran Rupiah)	GDP (Milyaran Rupiah)
Mean	228126,6	2073984,
Median	168786,5	2081092,
Maximum	650798,5	2684194,
Minimum	8404,000	1317409,
Std. Dev.	201116,5	359414,5
Skewness	0,729559	-0,266860
Kurtosis	2,223128	2,308052
Observations	40	40

From table 4.1 we can see that the average Government Sukuk (SBSN) in Indonesia for the period 2009 to 2018 was 228,126.6. Then for the maximum value of 650,798.5 the minimum value is 8,404.0 and with a standard deviation of 201,116.5.

As for the GDP variable, the average value from 2009 to 2018 was 2,073,984. The maximum value is 2,684,194. Meanwhile, the minimum value is 1,317,409 with a standard deviation of 359,414.5.

Table 4.2: Descriptive Statistics Results for SBSN and GDP Variables Malaysia.

Variabel	SBSN (RM Million)	GDP (RM Million)
Mean	9362.352	241560.2
Median	8846.050	246147.0
Maximum	21122.90	322600.0
Minimum	1056.000	128259.0
Std. Dev.	6435.317	50045.17
Skewness	0.272263	-0.767910
Kurtosis	1.678984	3.238553
Observations	40	40

Source: Eviews 7 Sports Results, 2019

The output of the processed data shows that the average value of the State Sukuk (SBSN) variable in Malaysia in the period 2009 to 2018 was 9,362,352. Then the highest value is 21,122.90. the lowest value was 1,056.0 with a standard deviation of 6,435.317.

For data on the GDP variable from 2009 to 2018, it shows that the average value is 241,560.2. The highest value for the GDP variable is 322600.0. The lowest value is 128,259.0 with a standard deviation value of 50,045.17.

2. Data Stationarity Test

Stationary is a condition of time series data where the average, variance and covariance of these variables are completely unaffected by time (Juanda & Junaidi, 2012). The stationarity and unit root testing methods that will be used here are three types of methods, including Augmented Dickey Fuller (ADF), Dickey-Fuller (DF), and Philips-Perron (PP). The procedure for finding out whether data is stationary or not is by comparing the t-statistic value with the critical value. If the t-statistic statistical value is greater than the critical value then the data is stationary, but if the t-statistic value is smaller than the critical value then the data is not stationary.

Table 4.3: Results of the Stationarity Test of Indonesian Government Sukuk (SBSN) Data

Uji	Prob	ADF	Test critical values
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Augmented Dickey Fuller		test statistic	1% Level	5% Level	10% Level
ADF Pada Level	0.99	-0.14	-4.22	-3.53	-3.20
ADF Pada 1st Difference	0.00	-7.22	-4.22	-3.53	-3.20
Uji Dickey Fuller	Prob	DF test statistic	Test critical values		
DF Pada Level	-	-1.39	-3.77	-3.19	-2.89
DF Pada 1st Difference	-	-6.96	-3.77	-3.19	-2.89
Uji Philip Pheron	Prob	PP test statistic	Test critical values		
PP Pada Level	0.99	-0.21	-4.21	-3.52	-3.19
PP Pada 1st Difference	0.00	-11.81	-4.21	-3.53	-3.19

From table 4.3, the results of the stationarity test of Indonesian Government Sukuk (SBSN) data, it can be seen that the Indonesian SBSN variable is not stationary at level level in several types of tests that researchers carried out with the statistical probability value having to be <0.05 and with the t-statistic value having to be more greater than MacKinnon's critical value. The SBSN variable requires a unit root test again at the 1st difference level and it can be seen that the statistical probability value is smaller than 0.05. It can be concluded that the government sukuk (SBSN) data is stationary at the 1st difference level.

Table 4.4: Results of the Stationarity Test of Indonesian Economic Growth Data (GDP).

Uji Augmented Dickey Fuller	Prob	ADF test statistic	Test critical values		
ADF Pada Level	0.96	0.15	-3.63	-2.94	-2.61
ADF Pada 1st Difference	0.00	-3.96	-3.63	-2.94	-2.61
Uji Dickey Fuller	Prob	DF test statistic	Test critical values		
DF Pada Level	-	2.09	-2.63	-1.95	-1.61
DF Pada 1st Difference	-	-2.76	-2.63	-1.95	-1.61
Uji Philip Pheron	Prob	PP test statistic	Test critical values		
PP Pada Level	0.59	-1.98	-4.21	-3.52	-3.19
PP Pada 1st Difference	0.06	-3.41	-4.21	-3.53	-3.19
PP Pada 2nd Difference	0.00	-7.81	-4.22	-3.53	-3.20

PP Pada Level	0.25	-2.07	-3.61	-2.93	-2.60
PP Pada 1st Difference	0.00	-6.75	-3.61	-2.94	-2.60

In table 4.4 above for the Indonesian GDP variable it turns out that it is not stationary at level level in several types of stationary tests that were carried out and the test was carried out again at the 1st difference level. It can be concluded that the Indonesian GDP variable is stationary at the 1st difference by looking at the statistical probability value which is smaller than 0.05 or comparing the t-statistic value which is greater than the critical value.

Table 4.5: Stationarity Test Results for Malaysian Government Sukuk Data (SBSN).

Uji Augmented Dickey Fuller	Prob	ADF test statistic	Test critical values		
ADF Pada Level	0.38	-2.38	-4.25	-3.54	-3.2
ADF Pada 1st Difference	0.01	-4.21	-4.24	-3.54	-3.20
Uji Dickey Fuller	Prob	DF test statistic	Test critical values		
DF Pada Level	-	-2.79	-3.77	-3.19	-2.89
DF Pada 1st Difference	-	-3.37	-3.77	-3.19	-2.89
Uji Philip Pheron	Prob	PP test statistic	Test critical values		
PP Pada Level	0.59	-1.98	-4.21	-3.52	-3.19
PP Pada 1st Difference	0.06	-3.41	-4.21	-3.53	-3.19
PP Pada 2nd Difference	0.00	-7.81	-4.22	-3.53	-3.20

The Malaysian Government Sukuk (SBSN) variable shows that it is stationary at the 1st difference level in the Augmented Dickey Fuller and Dickey Fuller test types, but in the Philip Pheron test it is only stationary at the 2nd difference. It can be concluded that the data is stationary at the 1st difference by looking at the probability value which is smaller than 0.05 and can also be seen by looking at the t-statistic value which is greater than the critical value.

Table 4.6: Stationarity Test Results for Malaysian Economic Growth Data (GDP).

Uji Augmented Dickey Fuller	Prob	ADF test statistic	Test critical values		
			1% Level	5% Level	10% Level
ADF Pada Level	0.86	-0.55	-3.63	-2.94	-2.61
ADF Pada 1st Difference	0.00	-4.30	-3.63	-2.94	-2.61

Uji Dickey Fuller	Prob	DF test statistic	Test critical values		
			1% Level	5% Level	10% Level
DF Pada Level	-	1.49	-2.63	-1.95	-1.61
DF Pada 1st Difference	-	-4.51	-2.63	-1.95	-1.61

Uji Philip Pheron	Prob	PP test statistic	Test critical values		
			1% Level	5% Level	10% Level
PP Pada Level	0.18	-2.27	-3.61	-2.93	-2.60
PP Pada 1st Difference	0.00	-6.72	-3.61	-2.94	-2.60

The Malaysian GDP variable when testing the unit root test was also not stationary at the level level and the test was carried out again at the 1st difference level. Results were obtained which showed that the data was stationary at the 1st difference level, by looking at the probability value which was smaller than 0.05 and could also by looking at the t-statistic value which is greater than the critical value.

To estimate VAR/VECM, stationary data is needed at the same level between variables, both data for Indonesia and Malaysia. Looking at the results of the stationary test above, this research uses data at the stationary level of the 1st difference. Determining what model to use on this data will then be subjected to a cointegration test to see the long-term relationship between variables so that conclusions can be drawn on the model used.

3. Optimal Lag Test

Determining the optimal lag is very important in the Vector Autoregression (VAR) model, this is because a variable is also influenced by the variable itself, apart from being influenced by other variables. The first step in this test is to form the VAR equation to get the optimum lag.

The information criteria for determining the appropriate lag length is to use the Final Prediction Error (FPE) model selection criteria, Akaike Information Criteria (AIC), Schwarz Information Criteria (SIC), and Hannan-Quinn Information Criterion (HQ). Selection of lag using these criteria will be seen from the presence of stars (*) in the model criteria and at what lag.

Table 4.7: Optimal Lag Test Results on SBSN and Indonesian GDP variables

Lag	FPE	AIC	SC	HQ
0	3.57	53.00	53.08	53.03
1	4.78	46.38	46.64	46.47
2	4.62	46.34	46.78	46.50
3	2.70*	45.80*	46.41*	46.01*

Source: Eviews 7 Sports Results, 2019

Table 4.8: Optimal Lag Test Results on SBSN and Malaysian GDP variables.

Lag	FPE	AIC	SC	HQ
0	6.02	44.31	44.39	44.34
1	1.66	40.72	40.98	40.81
2	1.30*	40.47*	40.90*	40.62*
3	1.37	40.51	41.12	40.73

Source: Eviews 7 Sports Results, 2019

The Vector Auto Regression (VAR) model will be estimated with different lag levels and then the smallest value or the most asterisks will be used as the optimal lag value. From the table above we can see that the lowest values of FPE, AIC, SC, and HQ produced show lag 3 for Indonesian data and lag 2 for Malaysian data as shown by the asterisk (*). From the test results it can be concluded that the optimal lags in this study are lag 3 and lag 2.

4. VAR Stability Test

The estimated system of Vector Autoregression (VAR) equations that has been formed needs to be tested for stability through a VAR condition stability check in the form of a roots of characteristic polynomial for all variables used multiplied by the number of lags of each VAR. Based on the test results, a VAR system is said to be stable if all the roots have a modulus smaller than one.

Table 4.9: VAR Stability Test

Indonesia	
Root	Modulus
0.936851	0.936851

-0.033825 - 0.882402i	0.883050
-0.033825 + 0.882402i	0.883050
0.859567	0.859567
-0.135872 - 0.430596i	0.451524
-0.135872 + 0.430596i	0.451524
No root lies outside the unit circle. VAR satisfies the stability condition.	
Malaysia	
Root	Modulus
0.921518	0.921518
0.711302 - 0.353098i	0.794121
0.711302 + 0.353098i	0.794121
-0.104822	0.104822
No root lies outside the unit circle. VAR satisfies the stability condition.	

The results of VAR stability testing in Indonesia and Malaysia show that the VAR system built is stable. As we can see in the table above, the modulus value is below one.

5. Johansen Cointegration Test

Based on the lag length above, we carried out a cointegration test to find out whether there will be balance in the long term, that is, there will be similar movements and stability of the relationship between the variables in this study or not. In this research, the cointegration test was carried out using the Johansen's Cointegration Test method. The cointegration testing criteria in this study are based on trace statistics. If the trace statistic value is greater than the critical value of 5 percent then the alternative hypothesis stating the amount of cointegration is accepted so that it can be known how many equations are cointegrated in the system.

Table 4.10: Cointegration Test Results

Indonesia				
Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.*
None *	0.68	49.57	15.49	0.00
At most 1 *	0.18	7.56	3.84	0.00
Malaysia				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.*
None *	0.30	18.50	15.49	0.01
At most 1 *	0.13	5.16	3.84	0.02

Based on the trace statistic and maximum eigen statistic values which are greater than the critical value of 5 percent. From the table above we can see that between the

State Sukuk (SBSN) variable and the GDP variable in Indonesia and Malaysia there is a cointegration relationship or in other words there is a long-term relationship.

6. Granger Causality Test

The Granger Causality Test is carried out to see whether two variables have a relationship with each other. In other words, whether a variable has a two-way or only one-way relationship with other variables is significant, because each variable in the research has the opportunity to be an endogenous or exogenous variable. The bivariate causality test in this study used the VAR Granger Causality Test and used a significance level of five percent or <0.05.

Table 4.11: Granger Causality Test Results

Indonesia			
Null Hypothesis	F-Statistic	Prob.	Keterangan
GDP does not Granger Cause SBSN	2.79678	0.0571	H _a ditolak
SBSN does not Granger Cause GDP	4.16401	0.0140	H _a diterima
Malaysia			
GDP does not Granger Cause SBSN	0.33439	0.7182	H _a ditolak
SBSN does not Granger Cause GDP	0.08873	0.9153	H _a ditolak

The results of the Indonesian Granger Causality Test show that the GDP variable does not statistically influence the State Sukuk (SBSN) variable with a probability of 0.0571 so we reject the alternative hypothesis. The SBSN variable statistically significantly influences the GDP variable with a probability of 0.0140 so we accept the alternative hypothesis. Thus, it is concluded that there is only one-way causality between the SBSN variable and the GDP variable in Indonesia.

The results of the Malaysian Granger Causality Test show that the GDP variable does not statistically influence the State Sukuk (SBSN) variable and vice versa the SBSN variable does not statistically influence the GDP variable as evidenced by the respective probability values being greater than 0.05, namely 0.7182 and 0.9153. Both results accept the null hypothesis so it is concluded that there is no causality whatsoever for the two variables SBSN and GDP.

7. VECM Model Estimation

From the results of the cointegration test, it turns out that there is cointegration between the State Sukuk (SBSN) variable and Economic Growth in Indonesia and Malaysia. So this research was continued by using the Vector Error Correction Model (VECM) to determine the short-term behavior of a variable relative to long-term behavior.

Table 4.12: T-table results

T-tabel	
1%	2.42857
5%	1,68595
10%	1,30423

Table 4.13: VECM Estimation Results for Indonesian SBSN Variables in the Short Term

Variabel	Koefisien	t-Statistik
CointEq1	0.019818	0.75913
D(GDP(-1))	-0.031954	-0.64836
D(GDP(-2))	-0.108864	-2.61695*
D(GDP(-3))	0.026330	0.49109
D(SBSN(-1))	0.225059	1.28675
D(SBSN(-2))	-0.046885	-0.25636
D(SBSN(-3))	0.325118	1.75264*
C	13577.54	2.34479*

In table 4.13 above, we can explain statistically that the State Sukuk (SBSN) variable is influenced by the GDP (-2), SBSN (-3), and Constanta variables. Judging from the t-statistic value which is greater than the t-table value, the proposed model with the significance variable is:

$$D(SBSN) = 2.61695 * GDP(-2) - 1.75264 * SBSN(-3) + 2.34479 * C$$

Table 4.14: VECM Estimation Results for Indonesian GDP Variables in the Short Term

Variabel	Koefisien	t-Statistik
CointEq1	-0.400616	-6.67069*
D(GDP(-1))	-0.307140	-2.70904*
D(GDP(-2))	-0.617956	-6.45745*
D(GDP(-3))	-0.473469	-3.83882*
D(SBSN(-1))	0.655528	1.62922
D(SBSN(-2))	-0.115826	-0.27531
D(SBSN(-3))	0.329434	0.77199
C	65651.19	4.92854*

Based on table 4.14, we can see that the GDP variable is statistically influenced by the variables CointEq1, GDP (-1), GDP (-2), GDP (-3), and Constanta because the t-statistic value of the variable is above the t-table in the research. This. The model that

will be proposed with the significance variable is:

$$D(GDP) = -6.67069 * CointEq1 - 2.70904 * GDP(-1) - 6.45745 * GDP(-2) - 3.83882 * GDP(-3) + 4.92854 * C$$

Table 4.15: Long-Term VECM Estimation Results for Indonesia's GDP Variable

SBSN	
Koefisien	-1.210472
t-Statistik	-10.2807*
C	-1831815.

In the table above we can see that the State Sukuk (SBSN) variable influences GDP in the long term with a t-statistic value of -10.2807 which is greater than the t-table value in this study. This means that if there is an increase in SBSN, it will cause a decrease in Indonesia's GDP by 10.2807.

Table 4.16: VECM Estimation Results for Malaysian SBSN Variables in the Short Term

Variabel	Koefisien	t-Statistik
CointEq1	-0.002253	-3.07123*
D(GDP(-1))	-0.016566	-0.49753
D(GDP(-2))	-0.010960	-0.32910
D(SBSN(-1))	0.495705	3.11208*
D(SBSN(-2))	0.251004	1.42609*
C	44.38501	0.09308

From table 4.16 above, we can see that there are several variables that influence the State Sukuk (SBSN) variable, namely the variables CointEq1, SBSN(-1), and SBSN(-2), known from the t-statistics of each of these variables which is greater than t-Table in this study. The model that will be proposed with the significance variable is:

$$D(SBSN) = -3.07123 * CointEq1 + 3.11208 * SBSN(-1) + 1.42609 * SBSN(-2)$$

Table 4.17: VECM Estimation Results for the Malaysian GDP Variable in the Short Term

Variabel	Koefisien	t-Statistik
CointEq1	-0.005466	-1.43101*
D(GDP(-1))	-0.148378	-0.85592
D(GDP(-2))	-0.256104	-1.47708*
D(SBSN(-1))	-0.174740	-0.21071
D(SBSN(-2))	0.393697	0.42963
C	7050.671	2.84005*

Based on table 4.17 above, we can conclude that the Malaysian GDP variable is statistically influenced by the variables CointEq1, GDP(-2), and Constanta, by looking at the t-statistics of each of these variables which is greater than the t-table in

this study . The model that will be proposed with significant variables is:

$$D(\text{GDP}) = -1.43101 * \text{CointEq1} - 1.47708 * \text{GDP}(-2) + 2.84005 * C$$

Table 4.18: Long-Term VECM Estimation Results for the Malaysian GDP Variable

	SBSN
Koefisien	97.26422
t-Statistik	3.52612*
C	-1203447

In table 4.18 above, we can see that the State Sukuk (SBSN) variable influences the GDP variable in the long term with the t-statistic value for the SBSN variable being 3.52612 which is greater than the t-table value in this study. This means that if there is an increase in SBSN, it will also cause an increase in Malaysia's GDP of 3.52612.

8. Impulse Response Function (IRF)

Carrying out the analysis by looking at the IRF output of the proposed VAR model will make it easier for us to interpret and reason about the VAR model. We need this IRF to find out how a variable responds to shocks from itself or from other variables. IRF describes the rate of shock of a variable on other variables so that through this IRF, we can know the duration of the influence of a shock on one variable on other variables.

The vertical axis in IRF analysis shows the standard deviation value which is used to measure how big a response a variable will give when a shock occurs to another variable. Meanwhile, the horizontal axis shows the future period of the response given to the shock. If the response is above the horizontal axis with a standard deviation value of 0.0 then the shock has a positive influence. And conversely, if it is below the horizontal axis, the effect is negative. The closer the line of observation is to the horizontal axis, the smaller the response that occurs due to shock and vice versa.

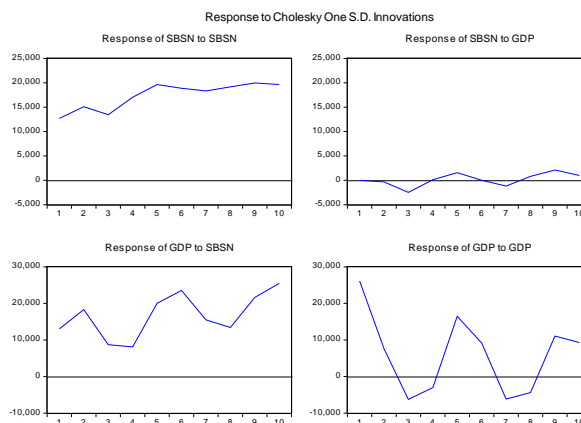


Figure 4.1: Impulse Response Function Indonesia

The Response of SBSN to SBSN Indonesia graph is the response given by the Government Sukuk (SBSN) to the variable shock itself. We can observe that the response of the SBSN variable to the variable shock itself at the beginning of the period has a positive impact between standard deviation values of 10,000 to 15,000, increasing until the second period and decreasing and increasing again until the end of the tenth period. The response of the SBSN variable to the variable shock itself is a positive response.

The Response of SBSN to GDP graph shows the response of the State Sukuk (SBSN) variable to the shock caused by the GDP variable in Indonesia. At the beginning of the movement, the negative impact of the SBSN response was slightly below the horizontal axis, until the highest negative impact was in the third period, and until the end of the SBSN variable response period there were positive, negative and finally positive again until the tenth period. The closer the line of observation is to the horizontal axis, the smaller the response that occurs due to shock.

The Response of GDP to SBSN graph shows the response of the GDP variable to the shock that occurred in the State Sukuk (SBSN) variable in Indonesia. The response of the GDP variable at the beginning of the positive period increased until the second period, decreased and leveled off until the fourth period, there was an increase again until the fifth and sixth periods, until the end of the tenth period the GDP response continued to increase which previously decreased in the eighth period.

The Response of GDP to GDP graph in Indonesia depicts the response of GDP to

the variable shock itself. The movement of the GDP variable towards the shock given by the variable itself had a high positive impact in the first period with a standard deviation value of almost 30,000, after that it decreased drastically and had a negative impact until the third period, increased sharply again from the fourth to the fifth period, there was another negative decline, and had a positive impact again until the end of the last period.

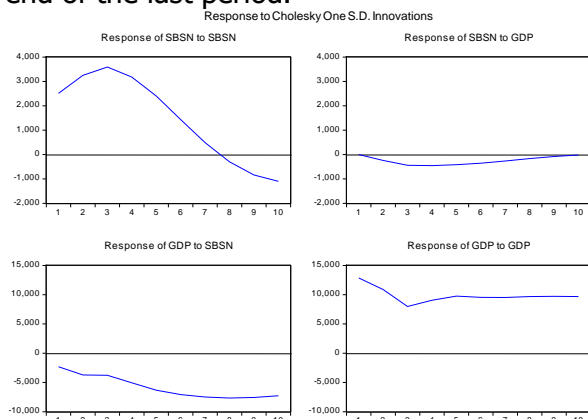


Figure 4.2: Impulse Response Function Malaysia

The Response of SBSN to SBSN Malaysia graph explains the response of State Sukuk (SBSN) to the shock caused by the variable itself. After we observe that in the first period the SBSN response was positive, increased until the third period and then decreased until the seventh period and responded negatively until the last period, namely the tenth.

The Response of SBSN to GDP graph shows the response of the State Sukuk (SBSN) variable to the shock that occurred in the Malaysian GDP variable. The shock given by the GDP variable does not have a big impact on the SBSN variable looking at the line pattern on the horizontal axis or trend line, until the ninth period the SBSN variable then responds negatively to the shock given by the GDP variable, and in the last period the response is still negative even though the value is small.

The Response of GDP to SBSN graph illustrates the impact of the shock given by the State Sukuk (SBSN) variable on the GDP variable. In the first period, the response from GDP due to the shock that occurred in the SBSN variable had a negative impact and the impact became increasingly negative until the end of the period.

As for the Response of GD to GDP Malaysia graph, it is the response of the GDP variable to the shock of the variable itself. The movement pattern of the GDP variable initially had a positive and high impact with a standard deviation value above 10,000, but decreased until the third period and in the final period the observation line pattern was horizontally positive until the end of the observation period.

9. Forecast Error Decomposition Variance (FEDV)

Forecast Error Decomposition of Variance (FEDV) analysis or often called variance decomposition is carried out to describe the relative importance of each variable in the VAR system due to shocks. Variance decomposition is useful for predicting the percentage contribution of variance for each variable due to changes in certain variables in the VAR system (Widarjono, 2009). Variance decomposition in the form of a graph or table can provide an overview of the variance of a variable due to surprises from other variables or itself.

Table 4.19: Forecast Error Decomposition Variance Test Results for Indonesian SBSN Variables

Priode	S.E	SBSN	GDP
1	12697.38	100.0000	0.000000
2	19725.57	99.97414	0.025859
3	24002.98	98.91165	1.088347
4	29426.70	99.27407	0.725930
5	35411.20	99.30224	0.697759
6	40130.36	99.45668	0.543317
7	44135.98	99.48013	0.519873
8	48120.54	99.53468	0.465315
9	52140.00	99.43959	0.560408
10	55721.15	99.47673	0.523274

From the table of FEDV Test results on the Indonesian Government Sukuk (SBSN) variable, we can see that the biggest contribution to the SBSN variable variance is the variant or shock of the variable itself.

The contribution of the SBSN variable at the beginning of the period was 100% influencing the variable itself. Meanwhile, during that period the GDP shock still had no effect. In the second period, the SBSN variable began to be influenced by the shock of the GDP variable, but not so much, only 0.025859%, and until the end of the observation period, the value of the SBSN variable was 99.47673%, only decreasing by 0.523274%, influenced by the shock of the GDP variable. Thus, this variable continues to dominate because the shock to the variable itself and the GDP variable only contributed 0.523274% at the end of the observation period.

Table 4.20: Forecast Error Decomposition Variance Test Results for Indonesian GDP Variables

Priode	S.E	SBSN	GDP
1	29209.34	19.92746	80.07254
2	35300.30	40.49372	59.50628
3	36892.99	42.64759	57.35241
4	37890.57	44.99533	55.00467
5	45920.18	49.70246	50.29754
6	52408.75	58.33644	41.66356
7	54992.14	60.90578	39.09422
8	56774.76	62.72567	37.27433
9	61760.37	65.29364	34.70636
10	67451.89	69.00294	30.99706

In the next analysis, movements in the GDP variable are dominantly influenced by the shock of the variable itself, namely 80.07254%. At the beginning of the shock observation period, the State Sukuk (SBSN) variable contributed 19.92746% to the GDP variable. However, the movement of the GDP variable decreased significantly in the second period to 59.50628% and the SBSN variable contributed 40.49372%. Until the end of the tenth period, the SBSN variable increased significantly, affecting the GDP variable, namely by 69.00294% and the GDP variable decreased to 30.99706%.

Table 4.21: Forecast Error Decomposition Variance Test Results on the SBSN Malaysia Variable

Priode	S.E	SBSN	GDP
1	2509.657	100.0000	0.000000
2	4111.030	99.65338	0.346618
3	5474.493	99.15367	0.846334
4	6347.586	98.86106	1.138941
5	6799.022	98.63306	1.366944
6	6957.713	98.43521	1.564790
7	6979.700	98.30368	1.696315
8	6988.003	98.25340	1.746597

9	7038.296	98.26568	1.734322
10	7123.648	98.30626	1.693738

In the first period, State Sukuk (SBSN) was strongly influenced by the variable shock itself by 100%, while in that period the GDP variable shock still had no effect. Next, starting from the second period the shock of the GDP variable affects SBSN only by 0.346618%, until the tenth period the proportion of the shock of the SBSN variable to the SBSN variable itself is still large with a contribution of 98.30626%, almost 100%, while the shock provided by the GDP variable is only 1.693738% only.

Table 4.22: Forecast Error Decomposition Variance Test Results on the Malaysian GDP Variable

Priode	S.E	SBSN	GDP RILL
1	13066.08	3.116642	96.88336
2	17407.45	6.334120	93.66588
3	19522.61	8.765584	91.23442
4	22108.36	12.06637	87.93363
5	24976.01	15.84143	84.15857
6	27651.73	19.44644	80.55356
7	30192.40	22.46811	77.53189
8	32621.50	24.77305	75.22695
9	34868.29	26.39287	73.60713
10	36910.58	27.42875	72.57125

In the table above we can observe that the GDP variable is influenced by the shock variable itself by 96.88336%, while the State Sukuk (SBSN) variable has contributed 3.116642%. It can be seen that in the following period the shock that occurred in the SBSN variable continued to increase but did not significantly affect the GDP variable and until the end of the period the shock that occurred in the GDP variable was still dominated by the variable itself at 72.57125%, while the SBSN variable only contributed 27.42875%.

Analysis of the Causality Relationship between Government Sukuk (SBSN) and Economic Growth in Indonesia and Malaysia.

State Sharia Securities or commonly called State Sukuk are expected to increase the rate of Economic Growth and high Economic Growth is expected to bring prosperity to society so that it can increase demand for State Sukuk themselves. The following is the causal relationship between State Sukuk and Economic Growth in Indonesia and Malaysia.

a. Indonesia

The results of the Granger causality test analysis show that the relationship between the development of State Sukuk (SBSN) and Economic Growth in Indonesia is a unidirectional relationship, where the development of State Sukuk (SBSN) significantly influences Economic Growth. This is shown by the results of the Granger causality test which shows that the development of SBSN affects GDP with a probability of 0.0140. Meanwhile, the influence of GDP on the development of Government Sharia Securities (SBSN) is not significant with a probability value of 0.0571. This result can also be seen from the results of the variance decomposition test. The results of the variance decomposition test show that the contribution of the SBSN variable to the GDP variable is greater than the contribution of the GDP variable to SBSN. The contribution of the SBSN variable to GDP is 69.00294%, while the contribution of the GDP variable to the SBSN variable is 0.523274%. We can conclude that in research on the causal relationship between Government Sukuk (SBSN) and Economic Growth in Indonesia there is only a unidirectional relationship, namely that the development of SBSN influences Economic Growth in Indonesia.

This research shows that Government Sukuk (SBSN) influences economic growth in Indonesia. This indicates that in Adam Smith's theory of economic development, capital plays an important role. According to this theory, capital accumulation will determine how fast or slow economic growth occurs in a country. This capital is obtained from savings made by the community. By accumulating capital generated from savings, economic actors can invest it in the real sector, in an effort to increase their income (Huda et al, 2017: 91). Investment has a dual role in that it can not only create income but investment can also increase production capacity in the economy (Boediono, 1999: 59). Investment is a commitment of a certain amount of funds or other resources made now, with the aim of obtaining profits in the future (Tandelilin, 2001: 21).

Sukuk, which in transactions require the existence of underlying assets that are required to have economic value, enable

sukuk to stimulate growth in the financial sector and the real sector which will increase Indonesia's Gross Domestic Product (GDP). Research conducted by Smaoui and Salem (2017) shows that the development of the sukuk market is conducive to economic growth. This research concludes that the development of the sukuk market has encouraged financial inclusion, which stimulates investment and economic growth. Widodo (2018) said that sukuk traded on the sharia capital market have a significant positive effect on Indonesia's GDP in the short term.

Furthermore, the relationship between economic growth and influence on Indonesian Government Sukuk (SBSN) is not proven. This is because when issuing sukuk, the government is not based on the level of economic growth, the issuance of sukuk is adjusted to the government's needs for economic development because there is still a lot of infrastructure that has not been built in Indonesia. If the government lacks funds or capital to build infrastructure and so on, the government will issue sukuk to help fund it. Investors are not based on the level of economic growth, when the government issues sukuk, investors will still buy it, because sukuk is a sharia-based investment instrument and the risk is very low (Datuk, 2014) because there is an underlying asset that can be said to be a guarantor of the investment. Sukuk are also intended to fund development, not to fund business ventures.

The findings of this research are relevant to the Islamic economic discourse that Islam not only regulates morals, creeds and worship, but also muamalah. The muamalah aspect is the rules of the game for humans in carrying out social life, as well as the basis for building an economic system that is in accordance with Islamic values. This research basically explains the existence of sharia investment instruments, namely Government Sukuk (SBSN), which have an influence on economic growth in Indonesia. As confirmed in this research, there is a lot of infrastructure development that is supported financially through State Sukuk (SBSN).

To guarantee that the State Sukuk is in accordance with sharia principles, the government guarantees the conformity of sharia in the fatwas of the National Sharia

Council (DSN) of the Indonesian Ulema Council (MUI) and the Malaysian Sharia Advisory Council (MPS) which serve as references in matters relating to sharia. Rules that are generally prohibited include investments that contain elements of usury, gharar (changing a condition of certainty into a condition of uncertainty in order to gain a profit), gambling, maysir (gambling), selling something that is not owned, and various other transactions that are detrimental to one party. Forbid all destructive and detrimental actions. Islam requires economic activities that are based on the principle of mutual benefit and prioritize the benefit of the people.

Since the approval of Law Number 19 of 2008 concerning SBSN, the issuance of the first series of SBSN, namely Islamic Fixed Rate (IFR), was worth IDR 15 trillion and the total issuance of SBSN reached IDR 764.51 billion around 2008. After this initiation, Sukuk variants were available on the market, such as Retail Sukuk (SR), Global Indonesian Sukuk (SNI), Ziarah Sukuk (SDHI), Treasury Sukuk (SPN-S), Project Based Sukuk (PBS) and the newest (issued in 2016) is Savings Sukuk (ST). Until the end of 2017, the total accumulated SBSN contributed IDR 192.5 trillion or 17% of total government bonds (IIFM Sukuk Report, 2018).

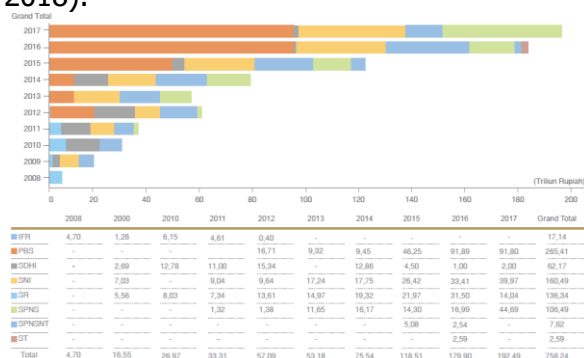


Figure 4.4: Trend of Indonesia Sovereign Sukuk Issuance

Compared to 2016 where the total SBSN was IDR 179.9 trillion, SBSN has increased 51.8% in 2017. These figures reflect that the Indonesian Government has a strong commitment to regularly issuing Sovereign Sukuk in the domestic and global markets to support development global Islamic financial market and attract investors to Islamic financial institutions to grow quickly in Indonesia. From year to year, the development of state sukuk shows positive

movements. With this increase in state sukuk issuance, Indonesia is among the top five sukuk issuing countries in the global market.

The development of sukuk in Indonesia cannot be separated from various aspects that support the development of sukuk, starting from regulations, fatwas that guarantee the sanctity of sharia principles in sukuk, variations in the contracts used and policies that have a positive impact on the development of sukuk. Public awareness continues to increase regarding the sharia economy which demands halal transactions in the future, making the prospects for future sukuk development even better. However, the government must develop sukuk with a wider variety of contracts than what is currently being done so that it can attract more investors.

b. Malaysia

The results of the Granger causality test analysis show that the relationship between Government Sukuk (SBSN) and Economic Growth in Malaysia is that there is no causality, either one way or two ways. Where the development of State Sukuk (SBSN) statistically does not significantly influence the GDP variable with a probability value of 0.9153 and the GDP variable also does not significantly influence the SBSN variable with a probability value of 0.7182. This result can also be seen from the results of the variance decomposition test. The results of the variance decomposition test show that the contribution of the SBSN variable to the GDP variable is 27.42875% and the contribution of the GDP variable to SBSN is 1.693738%. We can conclude that there is no causal relationship between Government Sukuk (SBSN) and Economic Growth in Malaysia.

Lucas (1988) argues that the financial sector and economic growth do not have a mutual influence relationship or The independent hypothesis. David Ricardo and Thomas Robert Malthus were of the opinion that in the long term the economy will reach a stationary state or a situation where economic development does not occur at all. Economic growth is determined by limited natural resources (in the sense of land), and a rapidly increasing population will reduce the level of development to a lower level (Huda, 2017: 92). Schumpeter stated that if

the level of progress of an economy is higher, the desire to innovate decreases, this is because society feels that its needs are met. In this way, economic growth will become slower and eventually a stationary state will be reached. However, the state of undevelopment referred to here is different from the classical view. In Schumpeter's view, a state of undevelopment is achieved at a high level of economic growth (Sukirno, 2006: 246).

In Malaysia, sukuk-financed projects have run out. Sukuk in Malaysia have been around since 1990 and are used continuously in infrastructure development. Such as Government Investment Issues (GII) and Islamic Treasury Bills Malaysia (MITB) which are state sharia securities issued based on Islamic principles by the Malaysian government to finance development expenditure and government working capital. Sukuk issuance in Malaysia is also not based on the level of economic growth. GII and MITB are issued to enable Islamic banks to hold securities that meet their mandatory liquidity requirements. Malaysian society, which is predominantly Muslim, buys sukuk not based on the level of economic growth. When the government issues sukuk, investors will still buy it, because sukuk is a sharia-based investment instrument and the risk is very low. Research conducted by Abdelghani (2016) proves that the issuance of Sukuk for Saudi Arabia and the GCC countries has an influence on economic growth only when all countries are combined, otherwise no influence can be identified.

Analysis of the Long-Term Relationship between Sovereign Sukuk and Economic Growth in Indonesia and Malaysia

In long-term analysis, we can find out whether or not there are similarities in the movement and stability of the relationship between the variables in this research between State Sukuk (SBSN) and Economic Growth in Indonesia and Malaysia. Based on cointegration tests in Indonesia and Malaysia using the Johansen test, the trace statistical value is greater than the critical value of 5%. The results of the cointegration test on Indonesian data show trace statistical values of 49.57678 (None*) and

7.567768 (At most 1*) while the critical values are 15.49471 (None*) and 3.841466 (At most 1*) . The results of the cointegration test on Malaysian data show trace statistical values of 18.50274 (None*) and 5.167714 (At most 1*) while the critical values are 15.49471 (None*) and 3.841466 (At most 1*). This shows that between the two variables there is a cointegration relationship, indicating that between the State Sukuk (SBSN) variable and Economic Growth in Indonesia and Malaysia there is a long-term relationship.

The results of this cointegration test mean that the State Sukuk (SBSN) variable and Economic Growth in Indonesia and Malaysia will influence each other in the future. This of course only applies assuming other variables do not exist (disturbance term). This is in line with investment theory which is an investment in one or more assets owned and usually for a long period of time with the hope of making a profit in the future (Sunariyah, 2000:4). Investment is a step to increase long-term economic growth and people's living standards (Mankiw, 2007: 62).

Sukuk, which are used as a source of the APBN and will later be used to finance infrastructure in general, cannot be enjoyed in a short period of time, in the sense that developments built using the new sukuk scheme can be enjoyed in the long term. Infrastructure built from sukuk can mobilize the economy so that it can increase economic growth and community welfare as well as increase consumption and investment. In line with Tya's (2013) research which states that state sukuk has a long-term relationship with economic growth in Indonesia. Smaoui and Nechi (2017) explain that the development of the sukuk market is conducive to economic growth. This research concludes that the development of the sukuk market has encouraged financial inclusion, which stimulates investment and economic growth.

Islam looks further into the future regarding investment and economic growth which is not only oriented to worldly problems but also to problems in the afterlife. Investments that violate sharia will receive appropriate retribution, as will investments that comply with sharia. Islamic investment is a sacrifice of resources in the

present with the hope of obtaining greater returns in the future, both directly and indirectly, in accordance with overall sharia principles (kaffah). Islam requires economic activities that are based on the principle of mutual benefit and prioritize the benefit of the people (Nafik, 2009: 68).

Conclusion

The conclusion and recommendation of the author are given in this section and are consistent in using the term "Conclusion".

The conclusion of the research should serve the urgent purposes of the study within this section. This can be followed by suggesting the relevant future studies.

Conclusions from the research results by conducting analysis using the Vector Autoregression (VAR) method, and the discussion carried out in chapter IV with the observed variables of State Sukuk (SBSN) and Economic Growth, several conclusions can be drawn:

The causal relationship between State Sukuk (SBSN) and Indonesia's Economic Growth is a one-way relationship (unidirectional causality) and there is no causal relationship between State Sukuk (SBSN) and Malaysia's Economic Growth, either one way (unidirectional causality) or two directions (bidirectional causality). This is because the benefits of sukuk for development can mobilize the economy directly, especially in Indonesia which requires a lot of development in infrastructure to facilitate economic activity. In Malaysia, sukuk-financed projects have run out. Sukuk in Malaysia have been around since 1990 and are used continuously in infrastructure development. In line with the opinion of economist Schumpeter, the higher the level of progress of an economy, the desire to innovate decreases. Thus, economic growth will reach a stationary state.

There is a long-term relationship between Government Sukuk (SBSN) and Economic Growth in Indonesia and Malaysia. This is caused by investment which is an investment in one or more assets owned and usually has a long term period with the hope of making a profit in the future. Investment is a step to increase long-term economic growth and in Islam is an activity that is useful for the benefit of the people.

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Conflict of Interest

The author raises this problem because the relationship between SBSN and Indonesia's GDP is a unidirectional relationship where State Sukuk affects Indonesia's GDP. There is no causal relationship, either unidirectional or bidirectional, between Government Sukuk and Malaysian GDP. There is a long-term relationship between Government Sukuk and GDP in Indonesia and Malaysia. The importance of developing sukuk encourages financial inclusion, stimulates investment and economic growth.

References

- A. McEachern, William. 2000. *Ekonomi Makro: Pendekatan Kontemporer*. Jakarta: Salemba Empat.
- Abdelghan, Hassanuddeen, dan Umar. 2016. Does Sukuk Financing Promote Economic Growth? An Emphasis On The Major Issuing Countries. *Turkish Journal of Islamic Economics*. Vol. 3. No. 2. 63-73.
- Achsien, Jggi, H. 2003. *Investasi Syariah di Pasar Modal: Menggagas Konsep dan Praktek Manajemen Portofolio Syariah*. Jakarta: Gramedia Pustaka Utama.
- Adisasmita, Rahardjo. 2013. *Teori-Teori Pembangunan Ekonomi, Pertumbuhan Ekonomi dan Pertumbuhan wilayah, cetakan pertama*. Yogyakarta: Graha Ilmu.

- Aedy, Hasan. 2011. *Teori dan Aplikasi Ekonomi Pembangunan Perspektif Islam*. Yogyakarta: Graha Ilmu.
- Aloui, Chaker, Shawkat Hammoudeh, dan Hela Ben Hamida. 2015. Comovement between sharia stocks and sukuk in the GCC markets: A time-frequency analysis. *Elsevier: Journal of International Financial Markets, Institutions & Money*. Vol. 34. No.-.69–79.
- Al-Zubi, K., dkk. 2006. Financial Development and Economic Growth: A New Empirical Evidence from the Mena Countries 1989-2001. *Journal of Applied Econometrics and International Development*. Vol. 6. No.1. 3-11.
- Amin, Rukhul. 2016. Surat Berharga Syariah Negara (SBSN) dan Pengaturannya di Indonesia. *Jurnal Perbankan Syariah*. Vol. 1 No. 2. 72-88.
- Ariefianto, M.D. 2012. *Ekonometrika Esensi dan Aplikasi dengan Menggunakan Eviews*. Yogyakarta: Erlangga.
- Arifin, Imamul dan Giana Hadi W. 2009. *Membuka Cakrawala Ekonomi*. Jakarta: PT. Setia Purna.
- Arifin, Zainal. 2003. *Dasar-Dasar Manajemen Bank Syariah*. Jakarta: Alfabet.
- Arikunto, Suharsimi. 2006. *Metode Penelitian: Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Arsyad, A. 2010. *Media Pembelajaran*. Jakarta: PT.Raja Grafindo Persada.
- Ascarya. Alur Transmisi dan Efektifitas Kebijakan Moneter Ganda di Indonesia. *Buletin Ekonomi Moneter dan Perbankan*. Vol. 14. No. 3. 302.
- Bank Indonesia. 2006. *Kamus Istilah Keuangan dan Perbankan Syariah*.
- Basuki, Agus Tri dan Nano Prawoto. 2016. *Analisis Regresi dalam penelitian ekonomi & bisnis*. Jakarta: PT Raja Grafindo Persada.
- Boediono. 1999. *Teori Pertumbuhan Ekonomi Seri Sinopsis Pengantar Ilmu Ekonomi No. 4*. Yogyakarta: BPFE.
- C. K. Choong, Z. Yusop, S. H. Law dan V. L. K. Sen. 2003. Financial Development and Economic Growth in Malaysia: The Stock Market Perspective. *Economic Working Paper Archive at WUSTL-Macroeconomics*.
- Damodar N. Gujarati. 2006. *Dasar-dasar Ekonometrika. Jilid 1*. Jakarta: Erlangga.
- Damodar N. Gujarati. 2013. *Dasar-dasar Ekonometrika 2, Edisi Ke-3*. Jakarta: Erlangga.
- Datuk, Bahril. 2014. Sukuk, Dimensi Baru Pembiayaan Pemerintah Untuk Pertumbuhan Ekonomi. *Jurnal Riset Akuntansi dan Bisnis*. Vol. 14. No.1. 111-124.
- Dornbusch, R., & Fischer, S. 1994. *Makro Ekonomi. Alih Bahasa Julius A. Mulyadi*. Jakarta: Erlangga.
- Fatwa DSN MUI NO: 69/DSN-MUI/VI/2008 Tentang Surat Berharga Syariah Negara.
- Ghozali, Imam. 2011. *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Universitas Diponegoro.
- Grassa, Rihab dan Kaouther Gazdar. 2014. Financial development and economic growth in GCC countries A comparative study between Islamic and conventional finance. *Emerald: International Journal of Social Economics*. Vol. 41 No. 6. 493-514.
- Gujarati, N. Damodar. 2003. *Ekonometri Dasar. Terjemahan: Sumarno Zain*. Jakarta: Erlangga.
- Guryay, E., Safkli, O.V., Tuzel, B. 2007. Financial Development and Economic Growth: Evidence from Northern Cyprus. *International Research Journal of Finance and Economics*. 8(27).

- Herlambang, T, dkk. 2001. *Ekonomi Makro: Teori, Analisa, dan Kebijakan*. Jakarta: Gramedia Pustaka Utama.
- Huda, nurul dkk. 2015. *Ekonomi Pembangunan Islam*. Jakarta: Kencana.
- Husain, A. Abdul. 2004. *Ekonomi Islam, Prinsip, Dasar, dan Tujuan*, diterjemahkan oleh M. Irfan Shofwani. Yogyakarta: Magistra Insania Press.
- IIFM Sukuk Report. 2018. *A Comprehensive Study Of The Global Sukuk Market, 7th Edition*.
- Jhingan, M.L. 2003. *Ekonomi Pembangunan dan Perekonomian*. Jakarta: PT. Raya Grafindo Persada.
- Jhingan, M.L. 2007. *Ekonomi Pembangunan dan Perekonomian*. Jakarta: PT. Raya Grafindo Persada.
- Jhingan, M.L. 2016. *Ekonomi Pembangunan dan Perekonomian*. Jakarta: PT. Raya Grafindo Persada.
- Juanda, Bambang dan Junaidi. 2012. *Ekonometrika Deret Waktu Teori dan Aplikasi*. Bogor: IPB Press.
- Kassim, Salina. 2016. Islamic finance and economic growth: The Malaysian experience. *Elsevier: Global Finance Journal*. Vol. 30. No.-.66–76.
- Kewal, Suramaya Suci. 2012. Pengaruh Inflasi, Sukuk Bunga, Kurs, dan Pertumbuhan PDB Terhadap Indeks Harga Saham Gabungan. *Jurnal Economia*. Vol. 8. No. 1. 53-64.
- Khiyar Abdalla Khiyar and Ahmad Al Galfy, The Role of Sukuk (Islamic Bonds) in Economic Development, *JFAMM-2-2014*. 31-35.
- Kuncoro, Mudrajad. 2003. *Metode Riset untuk Bisnis & Ekonomi*. Jakarta: Erlangga.
- Lidyawati, L., Rozi, R., Rohmadania, S., Kurnia, M., & Hayatullah, I. (2023). ZAKAT GOVERNANCE IN PANGKALPINANG CITY INSTITUTIONAL ECONOMIC PERSPECTIVE. *ASY SYARTIYAH: JURNAL ILMU SYARIAH DAN PERBANKAN ISLAM*, 8(1), 34-49. <https://doi.org/10.32923/asy.v8i1.3731>
- Listiyani, Indriana Mei. 2016. Analisis pengaruh perkembangan sektor keuangan terhadap pertumbuhan ekonomi Indonesia dan Malaysia: studi komparatif keuangan syariah dan konvensional. *Tesis*. UIN Sunan Kalijaga.
- Lucas, R. E. 1988. On The Mechanics of Economic Development. *Journal of Monetary Economic*. Vol. 22. No. 1. 3-42.
- Mankiw, G. 2007. *Teori Makroekonomi*. Jakarta: Erlangga.
- Maski G. 2010. Analisis Kausalitas antara Sektor Keuangan dan Pertumbuhan. *Jurnal Ekonomi dan Pembangunan Indonesia*. Vol. 10 No.2, pp 143-158.
- Muda, Ahmad Antoni K. 2003. *Kamus Lengkap Ekonomi*. Jakarta: Gitamedia Press.
- Mukhopadhyay, Bidisha Rudra P. Pradhan dan Mete Feridun. 2011. Finance growth nexus revisited for some Asian countries. *Applied Economics Letters*. Vol. 18. No. 16. 1527–1530.
- Mustika Rini dan Irfan Sauqi Beik, Dampak Sukuk terhadap Indikator Makroekonomi, *Jurnal Ekonomi Islam Republika IQTISHODIA*, Republika Kamis, 28 Juni 2012, hlm. 23.
- Nachrowi, Djalal dan Hardius Usman. 2006. *Pendekatan Populer dan Praktis Ekonometrika untuk Analisis Ekonomi dan Keuangan*. Jakarta: Universitas Indonesia.
- Nafik, HR. Muhamad. 2009. *Bursa Efek dan Investasi Syariah*. Jakarta: PT Ikrar Mandiriabadi.
- Naifar, Nader dan Shawkat Hammoudeh. 2016. Do global financial distress and uncertainties impact GCC and global

- sukuk return dynamics?. *Elsevier: Pacific-Basin Finance Journal*. Vol. 39. No.-. 57–69.
- Noor, Henry Faizal. 2005. *Ekonomi Public (ekonomi untuk kesejahteraan rakyat), cet. Pertama*. Jakarta: PT. Indeks.
- Noor, Henry Faizal. 2009. *Investasi, Pengelolaan Keuangan Bisnis dan Pengembangan Ekonomi Masyarakat*. Jakarta: PT Indeks.
- Otoritas Jasa Keuangan, *Roadmap Pengembangan Keuangan Syariah Indonesia 2017-2019*.
- Pasal 1 angka 1 UU No. 19 tahun 2008 *tentang SBSN*.
- Peraturan Bank Indonesia, No. 17/ 19 /PBI/2015. *Tentang Perubahan Kedua Atas Peraturan Bank Indonesia Nomor 10/13/PBI/2008 Tentang Lelang Dan Penatausahaan Surat Berharga Negara*.
- Prasetyo, Eko. 2009. *Fundamental Makro Ekonomi: Sebuah Pengetahuan Tingkat Dasar dan Menengah serta Advanced untuk Ilmu Ekonomi Makro, cet Kedua*. Yogyakarta: Beta Offset.
- Pujoalwanto, Basuki. 2014. *Perekonomian Indonesia, Tinjauan Historis, Teoritis, dan Empiris*, Yogyakarta: Graha Ilmu.
- Purbowisanti, Ratih. 2016. Hubungan kausalitas antara nilai tukar dengan indeks harga saham syariah: studi pada Indonesia dan Malaysia. *Tesis*. UIN Sunan Kalijaga.
- R. Levine. 1997. Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature*, Vol. 35. No. 2. 688-726.
- Rifa'i, M. Nasib. 2011. Kemudahan dari Allah: Ringkasan Tafsir Ibnu Katsir jilid 2. Jakarta: Gema Insani.
- Rihab Grassa dan Kaouthar Gazdar. 2014. Financial development and economic growth in GCC countries: A comparative study between Islamic and conventional finance. *Emerald: International Journal of Social Economics*. Vol. 41. No. 6. 493-514.
- Rohayana, Ade Dede. 2000. Ekonomi Islam Pendekatan al-Qur'an dan Hadith. *Religia*. Vol. 3. No. 1. 67-85.
- Rosilawati Amiruddin, Abu Hassan Shaari Mohd Nor dan Ismadi Ismail. 2007. Test For Dynamic Relationship Between Financial Development And Economic Growth In Malaysia. *Gadjah Mada International Journal of Business*. Vol. 9. No. 1. 61–79.
- Schumpeter J.A. 1934. "The Theory of Economic Development", Cambridge, MA, Harvard University Press.
- Sekaran, Uma dan Roger Bougie. 2017. *Metode Penelitian Untuk Bisnis, Edisi 6, Buku 2*. Jakarta: Salemba Empat.
- Shochrul R, Ajija, dkk. 2011. *Cara cerdas menguasai EVIEWS*. Jakarta: Salemba Empat.
- Smaoui, Houcem dan Salem Nechi. 2017. Does sukuk market development spur economic growth?. *Elsevier: Research in International Business and Finance*. Vol. 41 No.-. 136–147.
- Soemitra, Andri. 2009. *Bank dan Lembaga Keuangan Syariah, Edisi ke-1*. Jakarta: Kencana.
- Subagyo, Pangestu dan Djarwanto Ps. 2005. *Statistika Induktif*. Yogyakarta: BPFE Yogyakarta.
- Sugiyanto, Catur. 2007. *Ekonometrika*. Jakarta: Universitas Terbuka.
- Sukirno, Sadono. 2000. *Makroekonomi Modern: perkembangan pemikiran dari klasik hingga keynesian baru*. Jakarta: PT Raja Grafindo Persada.
- Sukirno, Sadono. 2006. *Makroekonomi: Teori Pengantar*. Jakarta: PT. Raja Grafindo Persada.
- Sukirno, Sadono. 2007. *Ekonomi Pembangunan: Proses, Masalah, dan*

- Dasar Kebijakan. Edisi kedua, Cetakan ke-2.* Jakarta: Kencana.
- Sukirno, Sadono. 2010. *Mikroekonomi Teori Pengantar, edisi ke 3.* Jakarta: Rajawali Pres.
- Sukirno, Sadono. 2012. *Makro Ekonomi Teori Pengantar Edisi Ketiga.* Jakarta: Penerbit PT Raja Grafindo Persada.
- Sunariyah. 2000. *Pengantar Pengetahuan Pasar Modal.* Yogyakarta: YKPN-Yogyakarta.
- Sunariyah. 2003. *Pengantar Pengetahuan Pasar Modal, edisi ke tiga.* Yogyakarta: UPP-AMP YKPN.
- Sunarsih. 2008. Manfaat dan Kelebihan Surat Utang Negara Syariah Atas Obligasi Konvensional Berbasis Bunga. *Jurnal EKBISI.* Vol. 2. No. 2. 43-59.
- Supartoyo, Yesi H. kk. 2018. Pengaruh Sektor Keuangan Bank Perkreditan Rakyat terhadap Perekonomian Regional Wilayah Sulawesi. *Kajian Ekonomi & Keuangan.* Vol. 2 No. 1. 15-38.
- Suud Sarim Karimullah, & Rozi. (2023). Rethinking Halal: Exploring the Complexity of Halal Certification and its Socio-Economic Implications. *AL-BAYAN: JURNAL HUKUM DAN EKONOMI ISLAM*, 3(2), 102-121. Retrieved from <https://stainwsamawa.ac.id/jurnal/index.php/al-bayan/article/view/170>
- Syafi'i , Asrof. 2005. *Metodologi Penelitian Pendidikan.* Surabaya: eLKAF.
- Syauqi Beik, Irfan, dkk. 2017. *Ekonomi Pembangunan Syariah, Edisi 1, Cetakan 2.* Jakarta: Rajawali Pers.
- Tandelilin, Eduardus. 2001. *Analisis Investasi dan Manajemen Portofolio, Edisi Pertama,* Yogyakarta: BPFE-Yogyakarta.
- Todaro, Michael P., dan Stephen C. Smith. 2011. *Pembangunan Ekonomi Edisi 11 Jilid 1.* Jakarta: Erlangga.
- Todaro, Michael. 2003. *Pembangunan Ekonomi Di Dunia Ketiga.* Jakarta: Erlangga.
- Wahyudi, Imam, dan Gandhi A. S. 2014. Interdependence between Islamic capital market and money market: Evidence from Indonesia. *Borsa Istanbul Review* Vol. 14. No. 1. 32-47.
- Widarjono, Agus. 2013. *Ekonometrika: Pengantar Dan Aplikasinya Disertai Panduan Eviews.* Yogyakarta: UPP STIM YKPN.
- Widodo. 2018. Pengaruh Pasar Modal Syariah Terhadap Pertumbuhan Ekonomi Indonesia. *Tesis.* UIN Sunan Kalijaga.
- Yahya, M. Mohd Hussin dan Fidlizan Muhammad, dan Salwa Amirah Awang. 2012. Development of Sukuk Ijarah in Malaysia. *Journal of Islamic Economics, Banking and Finance.* Vol. 8. No. 2. 92-102.
- Yuliana, Indah. 2010. *Investasi Produk Keuangan Syariah.* Malang: UIN-Maliki Press.
- Yunus, Muhammad. 1989. *Kamus Arab-Indonesia.* Jakarta: PT Hidakarya Agung.
- Zirek, Duygu, Fusun Celebi dan M. Kabir Hassan. 2016. The Islamic Banking and Economic Growth Nexus: A Panel VAR Analysis for Organization of Islamic Cooperation (OIC) Countries. *Journal of Economic Cooperation and Development.* Vol. 37. No. 1. 69-100.
- Zuhri, A. 2018. Analisis Kausalitas Antara Pertumbuhan Ekonomi, Inflasi, Jumlah Uang Beredar, dan Sukuk di Indonesia: Menggunakan Pendekatan Kointegrasi & Kausalitas Granger. *Tesis.* Universitas Islam Negeri Maulana Malik Ibrahim Malang.