The Sustainability of Fiscal Deficits, Sharia Obligations and Government Debt, in the Indonesian Economy

¹Yusri Hazmi, ²Said Herry Syafrizal*, ³Ali Imran, ⁴Lukman, ⁵Aryati Aryati, ⁶Teuku Mustaqim

1.2.3.4.5.6 Lhokseumawe State Polytechnic, Lhokseumawe, Indonesia

Abstract: The fiscal deficit is the result of the government's decision to use spending, and as a consequence of receiving less than spending. In the last few years, the problem of deficit is still a challenge and the right formula has not been found to solve it. Government spending growth that exceeds state revenue growth is a strong reason to revive current fiscal policy. This paper aims to hide the relationship between the growth of debt and Sharia obligations within the framework of the Islamic fiscal deficit. State Revenue is unable to fulfill the obligation to make debt repayments. This study uses the ARDL cointegration approach to provide empirical evidence of long-term and short-term dynamics between research variables. The results of the study found that there are long-term dynamics between the research variables. Sharia obligations do not significantly affect the reduction of the fiscal deficit. However, it has a role in reducing the growth of government debt. Especially debt originating from abroad, which was caused by the depreciation of the rupiah.

Keywords: Economy, Fiscal deficit, Government Debt, and Sharia Obligations

JEL Clasifikasi: E6, E61, E62, G28, G38, H6, H68

I. INTRODUCTION

The theory of fiscal deficit looks at the effect of a deficit on economic variables, and on the other hand, the effect of macroeconomic variables on fiscal deficits. This paper provides a brief review of the effect of economic deficit variables on fiscal deficits. Fiscal policy is intended to encourage economic growth in a better direction. Failure to achieve economic growth or growth lower than expected is closely related to tax revenues below the target. So that it has an impact on increasing the fiscal deficit. Fiscal as an instrument of government in encouraging economic growth. Healthy fiscal financing comes from the ability to finance all government expenditures originating from state revenues, and is a measure of sustainability of financing. The main problem of current fiscal sustainability is the still high fiscal deficit and excessive spending on government debt. Maintaining fiscal capacity amidst a deficit, as an effort to anticipate fiscal risks. Fiscal risk tends to burden the State's fiscal, inhibiting economic growth and capital outflow. Therefore, instruments are needed to increase fiscal capacity and reduce levels that cause excessive debt, especially foreign debt.

Managing debt without care will actually increase the fiscal burden in the future. Without managing debt and doing refinancing will have an impact on debt accumulation, (Ansah,. At all., 2013): This is also due to debt repayments that are due, made through issuance of new debt. This practice is carried out continuously in the midst of an increasing deficit. Thus increasing the fiscal risk. The same policy was also applied to foreign debt, which had exceeded fiscal capacity. This condition is a form of exploitation of the balance of payments: current account, national savings, domestic investment. Foreign debt has influenced saving and investment

behavior. Reducing foreign debt aimed at reducing investment is an option compared to reducing savings. The increase in investment tends to be smaller than the increase in savings. The government's buildup of foreign debt has resulted in deteriorating economic conditions, which have fueled the drain on government savings and investment. This condition had an impact on the current account deficit which worsened from time to time due to the accumulation of foreign debt. This condition is closely related to fiscal policy. The intended fiscal policy is a cyclical deficit policy as an instrument for slowing economic conditions or structural deficits. This policy is intended to encourage economic growth amidst sluggish economic conditions. Fiscal experienced strong pressure which was marked by an increase in deficit that exceeded the fiscal deficit limit of 3 percent of GDP. The increase in the deficit was not only caused by an increase in government spending, but also due to the failure to achieve the target of state revenue. The abatement policy is related to the economic development strategy, whose policy is aimed at encouraging actual economic growth, when actual economic growth is below potential economic growth. In the context of expansionary policies, the government tends to increase the money supply, so that the liquidity of the financial community increases, followed by an increase in the demand for and supply of goods and services. In conditions of fiscal deficit, the government relies on financing sourced from foreign debt. Foreign debt has a high risk, which is caused by the volatility of the exchange rate. Depreciation caused the purchasing power of the rupiah to decrease and the amount of foreign debt to increase significantly. The economic crisis hit Indonesia in 1997-1998, and this became a valuable lesson in managing foreign government debt.

In addition to financing the fiscal deficit through foreign debt financing, the government sharia obligations(ORI) instrument is also used. shariaobligations as a tool that has relatively less financial resilience compared to debt. Development of this financing instrument is also intended to increase the contribution of domestic investors in the financing deficit. Studies related to the Fiscal Burden of Debt Maturities (debt feelings of maturity), the issuance of sharia obligations has a negative impact on fiscal financing.Sharia obligations can minimize the risk of default (debt trap), which is due to each issuance of Sharia Obligations requiring an underlying asset. The fiscal burden caused by the payment of debt interest can be seen from the increased interest rate risk. An increase in interest debt caused by fluctuating exchange rates will not occur in sharia obligations. On the other hand, Sharia obligations instruments can reduce market risk when the money market experiences shocks. Investors can have different tenor preferences and become a buffer when the securities issued based on sharia principles, which serve as evidence of the share of assets. Issuance of sharia obligations is intended to finance the fiscal deficit. The government began to use sharia obligations as a financing instrument.

1.1 Sharia Obligations and Fiscal Deficit

In general, the fiscal deficit policy is correlated with the economic development strategy, especially with the state's current financial condition. The fiscal expansion policy that has been carried out in the last few decades is aimed at accelerating national economic growth. However, in practice, this policy is not as expected. Actual economic growth is lower than potential growth. This policy is of course based on the principle of a countercyclical fiscal policy. When actual economic growth is below potential economic growth, expansionary policies are more appropriate to implement. However, when actual economic growth is higher than potential, the use of contractionary policies is certainly the right choice. Expansionary policies that place state expenditures greater than state revenues have created a fiscal deficit. The consequence of this policy is an increase in the money supply in society. Economic liquidity drives increased demand and supply of goods and services, thereby creating jobs. As a result of the increase in the fiscal deficit that continues to be faced by the government as a result of a decrease in tax revenues, it is certainly a consideration and perhaps a necessity for the government to access alternative sources of financing in order to maintain national development. The state budget as a fiscal instrument continues to experience an increasing deficit, in line with increasing government spending. Government spending is not affected by sufficient state revenue. In dealing with this condition, the government uses foreign debt to meet financing needs. This long-term policy results in excessive accumulation of debt.

Foreign debt hides by using foreign exchange which is very prone to depreciation. Ironically, debt repayments are made through withdrawing new debt. Reducing dependence on foreign debt and maintaining sustainable growth, alternative sources of financing are needed.

Studies related to financial potential use Islam, especially sharia obligations as an instrument in financing development. The potential for the utilization of Islamic finance at the international level is experiencing rapid development. This industry is experiencing exponential growth with assets expected to experience a significant increase every year. Feature-wise, sharia obligations provide access to a broad range of Islamic liquidity. Sharia obligations which are realized in the form of certificates with the same value, represent shares and are not divided into ownership of tangible assets, results and services or ownership of certain assets, projects or special investments. TheSharia obligations refer to certificates or investment values as proof of ownership of indivisible tangible assets, results and services or investments in certain project assets or specific investment activities using sharia principles. In the Islamic bond structure, Islamic bondholders have the right to receive payments from trading transactions or ownership of certain assets or business ventures, (Yunita, 2015).

Overall studies state that sharia obligations have the potential as an alternative instrument of state financing, as well as being the preferred investment for Muslim and non-Muslim communities (Elkarim, Ghemari. 2012). The development of the sharia bond market has economic potential in the long term as the presence of eight non-member countries of the Islamic Cooperation Organization that are interested in issuing sharia obligations on the global market, namely: France, Germany, Luxembourg, United Kingdom, Singapore, Hong Kong and the United States. shariaobligations can develop optimally in the global market and contribute to the economy (Abdul Manab (2016). The results of the study found that the GDP variable has a positive effect on the development of sharia obligations from the aspect of institutional quality, the rule of law has a significant positive effect on the development of warnings Sharia.Other studies state that large economies of scale, Muslim population, investment profile, and corruption control will strengthen the development of sharia obligations.Macroeconomic variables such as economic growth, inflation and exchange rates are used to assess economic performance and play an important role in providing a measure of economic conditions. (Tarequl, M, at al. 2016).The economy has a positive impact on the country's economic and financial development. On the other hand, unstable macroeconomic conditions tend to have a negative impact on the country's economic and financial development (Maftuh, M., 2014).

1.2Government Debt

This study examines the effect of government debt on the fiscal deficit. Long-term debt strain has created excessive additional costs. Debt problems within the framework of becoming a crucial fiscal amidst deteriorating state revenue conditions. The target of tax revenues has not been met and non-tax state revenues have so far not yielded significant results to finance the state budget (Syahrini at all, 2021). In the perspective of economic development, debt accumulation is still a crucial issue in a number of studies. The difficulty level of government debt becomes the debt-to-GDP ratio. Raising the ratio has implications for buying new debt, debt accumulation and inflation (Hazmi, at all.2019). The effect of the debt-to-GDP ratio threshold as a measure of assessing fiscal sustainability. The Study by Ali and Ahmed's study(2017) assessed debt accumulation in 17 MENA countries in the 1996 and 2015 periods, with institutional indicators. Research findings, poor management causes the ratio of debt to GDP to increase. Studi by Hazmi., et al. (2019) found that there was a 5.30 percent threshold effect of the ratio of fiscal deficit to GDP on the nonlinearity of fiscal policy. Poor debt governance results in an increased debt-to-GDP ratio. This study measures fiscal sustainability by including the shadow economy with component analysis. The shadow economy can affect government revenues and spending through fiscal policy (Arrazola, et al., 2011). Study by Yereli et al. (2007) shadow economy leads to lower tax revenues and greater public spending. As a result, when the shadow economy is high, state revenues are insufficient to pay public debts. The study measured the economic shadow of 158 countries in 2015(Medina and Schneider's, 2018). The current study measures the economic shadow assessed for constructing indicators of fiscal sustainability, which seeks to unearth a mystery in the literature by estimating thresholds of debt-to-GDP

and fiscal ratios. From empirical evidence, economic growth is still lower than the target and debt growth. The policy of maintaining foreign debt as the main instrument for defist financing needs to be evaluated.

1.3 Macroeconomic Variables

Has the fiscal deficit problem amid excessive debt accumulation affected the Indonesian economy? Macroeconomic theory has different hypotheses regarding the intent of government deficits and debt to the economy. One literature argues that government debt reduces national saving which, on a warning, stimulates capital accumulation. Therefore, government debt hinders economic growth. In other literature it is stated that government debt does not reduce national saving or capital accumulation. This view is based on the Ricardian which states, only the quantity of government spending that affects the economy, whether the spending is financed through taxes or loans. The Covid 19 pandemic has caused the debt-to-GDP ratio to increase sharply, along with an increase in government spending. In the midst of recovering economic conditions, there is an urgent need to improve fiscal performance. Under such conditions, credible fiscal management is needed, which is focused on economic recovery and sustainable development, as well as debt management. Fiscal policy related to debt in the midst of a deficit is only emphasized on the assumption that economic growth is optimal, which is offset by growth in state revenues (Hazmi, at all. 2019). In addition to the problem of excessive debt accumulation, macroeconomic performance has also not been encouraging. Macroeconomic performance is still vulnerable to external factors, especially international economic performance.

Macroeconomic indicators vary widely and have different sizes and functions. Inflation is one of the important instruments in macroeconomic variables and is used to measure the level of economic stability. At a certain level it is useful in driving the economy. However, at a higher level, inflation actually disrupts the economy. In several empirical studies, inflation has a different effect on the economy. By using theoretical and practical approaches, inflation tends to have an important role in macroeconomics, especially in maintaining fund stability and driving the economy. The macroeconomic variables have a positive relationship with economic growth. An empirical study related to Islamic Sharia Obligations and macroeconomic variables on economic growth was conducted by Rinaldhy et al (2015) found that Islamic Sharia Obligations have an important role in driving economic growth. Sharia obligations as debt-based Islamic financial instruments whose performance is affected by the underlying contraction. Study of Harya and Raditiyo. (2016) stated that macroeconomic variables have a positive effect on state financial performance. Another study states that GDP growth has a positive effect on Sharia warnings (Purnomo et al., 2013).

II. RESEARCH METHODS

2.1 Stationarity Concept

The process is stochastic stationary if the mean and variance are constant with respect to time and the covariance value between two time periods depends only on the distance between the two time periods and not on the actual time in which the covariance is calculated (Kamaruddin, at all. 2021). When time series data are not stationary and are used in econometric payments, there is a problem of spurious regression, leading to unreliable results. To avoid this problem, it is necessary to investigate the time series data for their stationary properties. The ADF test statistic has been developed by Dickey and Fuller, in which serial correlation exists and is carried out by adding the lagging values of the dependent variable. The ADF test follows the same asymptotic distribution as the DF statistic, so the same critical values can be used. The test's power to reject the hypothesis does not decrease as the number of lags increases. Rejection of the null hypothesis requires that the variables studied are stationary (Gujarati, 2003). The test procedure requires estimating the test model and calculating the t value for the estimated β coefficient. Then compare the calculated t ratio with the critical value τ from the Dickey - Fuller table. If t > τ , then the null hypothesis is rejected. If t value is found not stationary (Gujarati, 2003).

2.2 Cointegration Concept

Time series data tends to change over time. But these changes can occur under stable or predictable conditions, where the mean and variance will be well defined. Or the internal conditions are unstable, where the mean and variance will change over time. Series that are not stationary can often be stationary. Cointegration is the expansion of the concept of univariate integration into two or more series. Even in the case of two nonstationary variables, if the linear transformation of the variables is stationary, they are said to be cointegrated (more than two variables can produce more than one cointegration vector). If cointegration is detected, the seller of the cointegration determines the long-run relationship of the variables, but also, error correction models will exist to determine the behavior of the short-run and long-run variables. The cointegration test according to Engle and Granger (1987), each series of variables is tested for stationary if the variable is not found to be stationary in the same order of integration, then proceed to the second stage. The Engle-Granger procedure has the advantage of applying least squares to the identification and application of cointegration vectors. An alternative procedure for cointegration testing is that found by Johansen and Juselius (1990) to be more reliable for multivariate analysis. Nonetheless, a large sample is required for this test. The data is divided into a differentiated section and a level section. Under the process I(1) assumption, the different data is stationary. The canonical correlation technique is used to find linear combinations of data in levels. It is concluded that this linear combination must be stationary. This procedure has the advantage of being able to identify more than one cointegration vector.

2.3 Data Analysis Models

This research uses time series data. with the period from 1990 to 2020. The initial testing stage carried out was the unit root test. Test root testing was carried out with the ADF-Test for each research variable. The ADF-Test formulation in general is:

$$\begin{array}{ll} Y_t &= \beta_0 + \beta_1 \ X_{1t} + \beta_2 \ X_{2t} + \ldots + \beta_P X_{Pt} \\ \Delta Y_t &= \beta_0 + \beta_1 \ X_{1t} - X_{1t^{-1}} + \beta_2 \ X_{2t} - X_{2t-2} + \ldots + \beta_P X_{Pt} - X_{Pt-1} \end{array}$$

After testing the unit root, the next step is to determine the optimum lag value. Optimal lag maintenance is carried out through the smallest basic Akaike Information Criterion (AIC) value. The next stage is to test cointegration. The cointegration test is intended to ensure that there is no relationship in the long-term balance between the independent variables and the dependent variable. The formulations in this test are:

$$y_t = \beta_0 + \beta_1 X_1 + \epsilon_t$$

then, the variant of the equation becomes:

$$\epsilon_t = y_t - \beta_0 - \beta_1 X_1$$

With notes:

The value of εt is a linear combination of X_1 and X_2 . The cointegration concept requires that εt must be stationary at I(0), so that it can produce a long-term equilibrium.

2.4 Distributed Lag Autoregressive Estimation Model

ARDL is a combination of the Autoregressive model with Distributed Lag. Autoregressive (AR) models use one or more past data from the variable Y. Meanwhile, Distributed Lag (DL) is a regression model involving current and past data from the variable X. For ARDL model formulations in general are:

 $y_t = \alpha_0 + \alpha_1 t + \sum_{i=1}^{p} \phi_i y_{t-1} + \beta' x_t + \sum_{i=0}^{q-1} \beta_i \Delta x_{t-j+u_t}$

$$\Delta x_t = P_1 \Delta x_{t-1} + P_2 \Delta x_{t-2} + \dots + P_s \Delta x_{t-S} + \mathcal{E}_t$$

Where:

 x_t : k dimension variable in I(1) integration, not cointegrated between them. ε_t : error with zero mean, constant variance and covariance and no serial correlation.

 P_t : coefficient matrix k x k vector autoregressive process at stable x_t.

The ARDL model is able to explain whether or not there is an equilibrium relationship in the short term. This model approach requires a lag, which indicates the time required to respond (Y), as a result of an influence. Selection of lag is done by Akaike Information Criteria. The ARDL model requires negative and significant ECT values, and long-term stability parameters. Meanwhile, to determine the long-term effect, the Long Run Bounds test was carried out. The ARDL model formulation is:

$$\begin{split} FD_t &= \alpha_{0+}\alpha_1FD_{t-1} + \ldots + \alpha_pFD_{t-p} + \beta_1LogSO_t + \beta_2LogSO_{t-1} + \ldots + \beta_qLogSO_{t-q} + \kappa_1LogGD_t + \kappa_2LogGD_{t-1} + \ldots + \kappa_qLogGD_{t-q} + \gamma_1GDP_t + \gamma_2GDP_{t-1} + \ldots + \gamma_rGDP_{t-r} + \rho_1Inf_t + \rho_2Inf_{t-1} + \ldots + \rho_sInf_{t-s} + \mu_1LogER_t + \mu_2LogER_{t-1} + \ldots + \mu_tLogER_{t-t} + \epsilon_t \end{split}$$

Where:

 $\begin{array}{ll} FD_t & : \mbox{Fiscal Deficit at time t} \\ FD_{t-1} & : \mbox{Fiscal Deficit at time t-1} \\ LogSO_{t-1} & : \mbox{Log Sharia Obligations at time t-1} \\ LogGD_{t-1} & : \mbox{Log Government Debt at time t-1} \\ GDP_{t-1} & : \mbox{GDPat time t-1} \\ Inf_{t-1} & : \mbox{Inflationat time t-1} \\ LogER_{t-1} & : \mbox{Log Exchange Rateat time t-1} \\ \epsilon_t & : \mbox{Error Term} \end{array}$

III. RESULTS AND DISCUSSION

3.1 Unit root test

Under stationary conditions, time series data tends towards an average value (mean) which fluctuates around this average value with constant variation. If it does not meet one of these three things, it is called non-stationary data. Processing of non-stationary data is feared to produce spurious regression. False regression is regression that does not reveal the truth. This is because time series data has its own behavior, which is often influenced by trends. If only one variable is not stationary, then it is regressed, so it could be as if the independent variables affect the dependent variables significantly and have a high R-square. In fact, the relationship is only two variables that have the same trend, so the resulting regression is meaningless. To find out stationary data can be done by comparing the probability value (Prob.*) which is smaller than the FDvariable which is already stationary at a level difference of 1 because the probability value is smaller than the α level of 0.05. The following are the test results, as shown in table 1.

Variable	Prob.	Order of	Information
	*	Integration	
FD	0.0000	I (1)	Stasioner
SO	0.0234	I (0)	Stasioner
Inflation	0.0000	I (0)	Stasioner
Exchange Rate	0.0001	I (0)	Stasioner
GDP	0.0000	I (1)	Stasioner
Debt	0.0034	I (0)	Stasioner

Table 1 Unit Root Results

Source: Data processed in 2023.

3.2 Cointegration Test

To perform cointegration testing which is a continuation of the unit root test. The cointegration test is intended to determine whether the cointegrated remains are stationary or not. If the variables are cointegrated then there is a stable relationship in the long run. Conversely, if there is no cointegration between variables, then there is no disclosure of a long-term relationship. Cointegration testing can be done with the Eigen Cointegration Test. Table 2 is the result of cointegration testing.

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.803711	134.5231	95.75366	0.0000
At most 1	0.442664	61.25548	69.81889	0.1988
At most 2	0.269480	34.94907	47.85613	0.4507
At most 3	0.217048	20.81910	29.79707	0.3690
At most 4	0.170300	9.808321	15.49471	0.2958
At most 5	0.030788	1.407234	3.841466	0.2355

Table 2 Eigen Cointegration Test Results

Source: Data processed in 2023.

Table 2 shows the probability values for all research variables are greater than alpha 5 percent ($\alpha = 0.05$), which for each variable are: Sharia obligations with a value of 0.1988, Inflation with a value of 0.4507, Exchange rate with a value 0.3690, GDP with a value of 0.2958, debt governmentwith a value of 0.2355. Thus it can mean that cointegration does not occur in the long run, so that if the data is correct, use the ARDL model.

3.3 Optimal Lag Test

Optimal lag treatment is a long lag that gives a significant effect or response. Determining the optimal lag is a very important step for time series data. The ARDL model captures the effect of each variable on other variables. Handling this lag is very important considering the purpose of developing this model is to see the behavior and relationship of variables in the short term. With a lag that is too small, the residual from the regression will not display a white noise process so that the model cannot estimate the true error precisely. However, if you include too much lag, it can reduce the rejectability of H, because too many extra parameters reduce the degrees of freedom (Gujarati, 2003). For this purpose, several criteria can be used to determine whether or not lag is used optimally. Table 3 is the result of the optimal lag test for each ARDL model variable.

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
D (FD (-1))	-0.255015	0.155632	-1.638.580	0.0143
D (SO)	-0.205911	0.259953	-0.792109	0.0361
D (Inflation (-3))	0.051512	0.018507	2.783.439	0.0103
D (ER (-4))	0.001436	0.000798	1.798.393	0.0447
D (GDB (-4))	0.064797	0.033470	1.935.951	0.0347
D (Debt)	0.000254	0.010664	0.023779	0.0412
С	0.165052	0.113889	1.449.237	0.1602

Table 3 Optimal Lag Test Results

Source: Data processed in 2023

These results can be interpreted: the DF variable is lag 1, the Islamic Sharia Obligations variable is lag 0, the inflation variable is lag 3, the exchange rate variable is lag 4, the GDP variable is lag 4 and the government debt variable is lag 0.

3.4 Cointegration Test

The cointegration test aims to determine whether the non-stationary variables are cointegrated or not. The concept of cointegration as a linear combination of two or more non-stationary variables will produce a stationary variable. This linear combination is known as the cointegration equation and can be interpreted as a long-term equilibrium relationship between variables. If the values on the F-statistic are greater than I1 Bound with an alpha of 5 percent, it means that the data is cointegrated and there is a long-term relationship and can then be used to predict.

Test Statistic	Value	K	
F-statistic	13.29254	5	
Critical Value Bounds			
Significance	I0 Bound	I1 Bound	
10%	2.26	3.35	
5%	2.62	3.79	
2.5%	2.96	4.18	
1%	3.41	4.68	

Table 4 Co	ointegration	Test	Results
------------	--------------	------	---------

Source: Data processed in 2023

If the value on the F-statistic with a value of 13.29254 is greater than I1 Bound with an alpha of 5 percent or 3.79. Thus the data is cointegrated or there is a long-term relationship between the variables in this study.

3.5 ARDL Model Test

The following are the results of testing the ARDL model for each research variable as shown in table 5 below.

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
D (FD (-1))	-0.255015	0.155632	-1.638.580	0.1143
D(OS)	-0.205911	0.259953	-0.792109	0.0361
D (Inflation (-3))	0.051512	0.018507	2.783.439	0.0103
D (ER (-4))	0.001436	0.000798	1.798.393	0.0847
D (<i>GDB</i> (- 4))	0.064797	0.033470	1.935.951	0.0447
D (Debt)	0.000254	0.010664	0.023779	0.0412
С	0.165052	0.113889	1.449.237	0.1602
R-squared	0.690102	Mean dependent var		0.077381
Adjusted R-squared	0.470590	S.D. dependent var		0.967872
F-statistic	3.143.808	Durbin-Watson stat		1.900.676
Prob(F- statistic)	0.005170			

Table 5 ARDL Model Test Results

Source: Data processed in 2023

From the test results, the value for the F-Statistics test is 0.005170, with a value less than 0.05. From these results it is explained that all independent research variables jointly affect the dependent variable (FD) of the current year. The R-Square value is 0.690102 or 69.01 percent, which means that this value is quite good, that is, it has exceeded 50 percent and can be trusted because all models are stationary. The R-Square value of 0.690102 proves that this study has used good enough variables, so that it is able to provide results related to the problems of the panelists as previously mentioned.

IV. DISCUSSION

Increasing government spending as an effort to recover the economy and create sustainable development. Debt policy, especially foreign debt that is used for financing the fiscal deficit, it turns out to result in significant debt growth. An increase in long-term debt results in a deteriorating fiscal performance and a higher tax burden. Foreign debt that has high vulnerability, as a result of the depreciation of the rupiah against foreign currencies. Sharia bonds as one of the fiscal instruments so far are believed to be able to reduce the rate of debt growth. In the long term Islamic bonds will experience an increase, due to their better performance. For this reason, efforts are needed to increase the existence of guarantees in the community. From the research results, in the short term, the growth of Islamic bonds does not have a significant effect on reducing the fiscal deficit and reducing the growth of government debt. This is because the value of Islamic bonds is relatively small and the contribution to fiscal financing is still very low. However, in the long term efforts are needed to increase the utilization of Islamic bonds is of course very reasonable, namely Islamic bonds are not susceptible to changes in value caused by changes in exchange rates. This study also concludes that inflation, exchange rate and GDP have a significant impact on deficit financing in the short term. Thus efforts are needed to maintain the stability of the value of this variable. Islamic bonds The results of testing the ARDL model also conclude that there is no long-term equilibrium relationship between the research variables.

REFERENCE

- [1.] Abdul Manab (2016). The Effect of Macroeconomic Stability on Tribal Issuance in Indonesia, Malaysia and Brunei Darussalam.Institutional Repository of IAIN TulungAgung. http://repo.iaintulungagung.ac.id/4781.
- [2.] Ali, T.B., and Ahmed, Z. (2017). Governance and public debt accumulation: Quantitative analysis in MEN countries. Economic Analysis and Policy, 56, 1 <u>https://www.nber.org/system/files/</u>working_papers/w1232/w1232.pdf–13. https://doi.org/10.1016/j.eap.2017.06.004
- [3.] Arrazola, M., de Hevia, J., Mauleón, I.,and Sánchez, R. (2011) Estimación del volumen de economíasumergida en España. Cuadernos de InformaciónEconómica, 220: 81-88.
- [4.] Burcin, Y.A., Secilmis, E.ibrahim, and Basaran, A. (2007) Shadow economy and public debt sustainability in Turkey. Ekonomskianali, vol. 52, br. 173, str. 85-104.
- [5.] Chowdhury, Mohammad TarequlHasan, et al. "Exchange rate regimes and fiscal discipline: The role of trade openness." International Review of Economics & Finance 45 (2016): 106-128.
- [6.] Elkarim, Ghemari. (2012). Factors Influence Sharia Obligations and Conventional Sharia Obligations in Malaysia, A project paper submitted to OthmanYeop Abdullah Graduate School of Business Universiti Utara Malaysia.
- [7.] Engle, R. and Granger, C. (1987) Cointegration and Error Correction: Representation, Estimation and Testing. Econometrica, 55, 251-276.http://dx.doi.org/10.2307/1913236
- [8.] Gujarati, D. (2003). Basic Econometrics. 4th ed. New York: McGraw Hill, pp. 638-640.
- [9.] Harya P., Raditiyo. (2016). Estimation of Indonesia's Fiscal Reaction function. Fiscal Policy Agency of the Ministry of Finance of the Republic of Indonesia. Journal of Economic and Financial Studies. Vol. 20. No. 1. <u>http://fiskal.kemenkeu.go.id/ejournal/index.php/kek/article/view/178</u>.
- [10.] Isnowati, M., D. (2014).Study of Investment, Government Expenditures, Labor and Economic Openness on Economic Growth in Central Java Province.Journal of Business and Economics.Matter. 62 – 72. Vols. 21, Number 1 ISSN: 1412-3126.
- [11.] I Syahrini, R Masbar, AAliasuddin, S Munzir, and Y Hazmi. (2021). The Application of Optimal Control Through Fiscal Policy on Indonesian Economy. The Journal of Asian Finance, Economics and Business 8 (3), 2021, p 741-750
- [12.] Johansen, S. and Juselius, K. (1990) Maximum Likelihood Estimation and Inference on Cointegration with Applications to the Demand for Money. Oxford Bulletin of Economics and Statistics, 52, 169-210. <u>https://doi.org/10.1111/j.1468-0084.1990.mp52002003.x</u>
- [13.] KamaruddinKamaruddin, Hazmi,Yusri,Masbar,Raja, Syahnur,Sofyan, and M. ShabriAbd.Majid (2021).Asymmetric impact of world oil prices on marketing margins: application of NARDL model for the Indonesian coffee. International Journal of Energy Economics and Policy.11(6). ISSN: 2146-4553.212-220.

- [14.] Khiyar, A., and Al Galfy.(2014). The Role of Sharia Obligations (Islamic Sharia Obligations) in Economic Development, JFAMM2-2014, <u>www.psp-ltd.com/JFAMM 10 2 2014</u>.
- [15.] Maftuh, M., (2014). Effect of State Retail Sharia Liability Prices, Inflation Rate, BI Rate and Profit Sharing Rate of Mudharabah Deposits on the Commemoration Rate of Retail Sharia Obligations SR 003.
- [16.] Medina, L., and F. Schneider. (2018). Shadow Economies around the World: What Did We Learn over the Last 20 Years? IMF Working Paper 18/17, International Monetary Fund, Washington, DC.
- [17.] Pastor Ansah, John, and Muhammad AzeemQureshi.System dynamics model of debt accumulation in developing countries: The case of Ghana and Pakistan. African Journal of Economic and Management Studies 4.3 (2013): 317-337.
- [18.] Purnomo, Hendra and Widyawati. (2013). Effect of Exchange Rates, Interest Rates, and Inflation on Stock Returns in Property Companies, Journal of Management Science & Research, Vol. 2 No.10, 2013.
- [19.] Rinaldhy, and Azkha. (2015). Study of the Implementation of Sharia Obligations as an Alternative Source of State Finance, Scientific Journal of the Department of Economics. Faculty of Economics and Business, University of Brawijaya.
- [20.] Taylor, L., at al. (2012). Fiskal deficits, economic growth and government debt in the USA. Cambridge Journal of Economics, Volume 36, Issue 1, Pages 189–204. <u>https://doi.org/10.1093/</u>cje/ber041
- [21.] Yereli, A. Yereli, I., Basaran, A. (2007), Shadow economy and public debt sustainability in Turkey. ,EconomicAnnals,Vol.52,No.173,pp.85-104.doi:10.2298/EKA0773085B
- [22.] Yunita, Irni. (2015). The Development, Scheme, Risk and Fair Market Value Model of Sharia Obligations Ijarah and Mudharabah in Indonesia, American Journal of Economics, 5(2).
- [23.] Hazmi, Yusri, Nazamuddin, Masbar, Raja, and Abdullah, Syukriy. (2019). Analysis of Subsidies, Inflation, Exchange Rates, BI Rates on Fiscal Sustainabality in Indonesia. International Journal of Social Science and Economic Research. Vol: 04, Issue:03 ISSN: 2455-8834.