

THE EFFECT OF MACROECONOMICS AND THE STATE BUDGET ON STATE SHARIA SECURITIES IN INDONESIA

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ABSTRACT – This study aims to investigate the impact of various macroeconomic indicators and the State Budget on State Sharia Securities (SSS) in Indonesia. It employed secondary data from the first to the fourth quarter of 2022 and analyzed using the PLS-SEM (Partial Least Squares - Structural Equation Modeling) method, which allowed for estimating the multiple relationships between dependent and independent constructs. The findings reveal significant direct or indirect effects of macroeconomic indicators, represented by inflation rates, real GDP, benchmark interest rates, and oil commodity prices, had a significant direct or indirect effect on SSS. Furthermore, the State Budget, as reflected by tax revenue and government foreign debt with a remaining time of ≤ 1 year, exhibited a significant positive impact on the volume of SSS issuance and outstanding. It is important to note that macroeconomic indicators were found to have a significant negative effect on the State Budget, highlighting the interplay between these variables. The predictive value of the model employed in this study demonstrates its relevance in elucidating the underlying patterns in the data. These findings have valuable implications for policymakers, providing them with essential insights for the effective management of SSS as a prominent Islamic public financing instrument in Indonesia. They are advised to maintain continuous monitoring of both macroeconomic indicators and the State Budget to identify necessary changes related to the volume of SSS issuance.

Keywords: Islamic Public Finance; Macroeconomic; State Budget; State Sharia Securities

ABSTRAK – Pengaruh Indikator Makroekonomi Dan APBN Terhadap SBSN. Penelitian ini bertujuan untuk menganalisis pengaruh indikator makroekonomi dan Anggaran Pendapatan dan Belanja Negara (APBN) terhadap Surat Berharga Syariah Negara (SBSN) di Indonesia. Penelitian menggunakan data sekunder periode triwulan I/2012 sampai dengan triwulan IV/2022. Analisis data dilakukan dengan menggunakan metode PLS-SEM (Partial Least Square - Structural Equation Modeling) untuk mengestimasi hubungan antar variabel yang bersifat *multiple relationship* antara konstruk dependen dengan independen. Hasil kajian menunjukkan bahwa indikator makroekonomi yang diwakili oleh tingkat inflasi, PDB riil, suku bunga acuan dan harga komoditas minyak memiliki pengaruh signifikan baik langsung maupun tidak langsung terhadap SBSN. Kemudian APBN yang diwakili dengan penerimaan pajak dan utang luar negeri pemerintah yang memiliki jangka waktu sisa ≤ 1 tahun memiliki pengaruh positif yang signifikan terhadap volume penerbitan/outstanding SBSN. Selanjutnya, indikator makroekonomi diketahui memiliki pengaruh signifikan negatif terhadap APBN. Model yang digunakan dalam penelitian ini memiliki nilai prediktif yang relevan untuk menjelaskan informasi yang ada dalam data penelitian. Implikasi hasil penelitian memberikan masukan bagi pembuat kebijakan dalam mengelola SBSN sebagai salah satu instrumen pembiayaan keuangan publik Islami di Indonesia untuk melakukan pemantauan berkelanjutan atas indikator makroekonomi dan APBN sehingga dapat mengidentifikasi perubahan yang perlu dilakukan terkait dengan volume penerbitan SBSN.

Kata Kunci: Keuangan Publik Islam; Makroekonomi; APBN; Surat Berharga Syariah Negara

INTRODUCTION

Indonesia, as a country, requires high, inclusive, and sustainable economic growth to address various challenges and achieve its vision of prosperity (Bank Indonesia, 2020). In line with the Islamic concept, the government bears the responsibility of meeting social needs (Huda et al., 2019). Consequently, effective public financial management by the government, encompassing economic and religious dimensions, is crucial to enhance community welfare (Jaelani, 2015). Since the Fiscal Year (FY) 2000, the Indonesian State Budget has adopted a deficit budget system that relies on financing (Huda & Muti, 2011). Deficit financing is employed to accelerate domestic economic growth, counter low purchasing power, mitigate weakening exchange rates, address global economic weaknesses, and combat inflation. One alternative for deficit financing is the issuance of government bonds in the capital market (Huda et al., 2015).

The Sharia financial market in Indonesia, particularly the capital market, has witnessed significant growth. As of June 2022, the Indonesia Sharia Stock Index (ISSI) had risen by 6.02%. Additionally, there are 30 corporate Sharia securities (sukuk) valued at IDR 6.64 trillion, while the outstanding value of State Sharia Securities (SSS) has increased by 6.12% compared to the end of 2021 (OJK, 2022). The development of Sharia securities is attributed to their underlying long-term assets (Suwanan et al., 2022). SSS, as a financing alternative for the State Budget, plays a crucial role (Aini & Luthfi, 2019). From 2017 to June 2022, the Ministry of Finance has issued 71 SSS series with a total outstanding value of IDR 1,227.89 trillion. However, the market share of SSS outstanding remains relatively limited, accounting for 19.48% of the total outstanding state Sharia securities and bonds (OJK, 2022).

Despite offering lower yields, the issuance of SSS has received positive responses from investors, as evidenced by increasing auction offers (Qolbi, 2022). This can be attributed to global uncertainties, which have prompted investors and portfolio managers to seek safe investment alternatives for hedging purposes (Usman et al., 2019). Furthermore, investors have recognized the strength of SSS, particularly retail Sharia securities that are easily accessible through online platforms, offering attractive and competitive coupon rates. Retail Sharia securities provide a safe, liquid, and affordable investment option (Mughtar, 2021).



Investors' decision-making process is influenced by several factors, including macroeconomic indicators such as GDP, interest rates, inflation, exchange rates, private investment, budget deficits, trade balances, and payment balances (Artaya et al., 2014). Prior studies have highlighted the impact of interest rates, inflation, and exchange rates on investment decisions regarding green Sharia securities (Setiadi, 2018). While short-term effects on retail Sharia security trading volume are minimal, inflation, exchange rates, circulating money, Shariah Bank Indonesia Certificates, and GDP exhibit long-term effects, both positive and negative (Hanifah & Pantas, 2022). Inflation and price variables have been found to significantly influence the volume of retail Sharia security issuances, whereas exchange rate variables have a significant impact in both the short and long term. Yield variables, however, do not affect either period (Shintyawati et al., 2020). Exchange rate stability, foreign debt stability, and debt service stability have been identified as significant factors impacting outstanding Sharia securities (Boukhatem, 2022).

In terms of public finance, financing and debt arise from a deficit-oriented State Budget where state expenditure surpasses state revenue. The government resorts to borrowing to cover budget deficits, address short-term cash shortages, finance public sector investments, manage debt portfolios, and meet expenditure requirements (Satya, 2015). Macroeconomic indicators, such as GDP and oil prices, have also been found to impact the budget deficit (Ebi & Aladejare, 2022; Obeidat et al., 2022).

Although Islamic economics and finance studies have predominantly focused on areas such as Islamic banks, capital markets, accounting, business and marketing, and monetary policy, research on the SSS remains limited (Laila et al., 2020). Thus, this study aims to bridge this gap in the literature by examining the effect of macroeconomic indicators and the State Budget on SSS issuance volume. The findings will contribute to the development of SSS as an Islamic public financial instrument in Indonesia and provide valuable insights for regulators and future research endeavors.

This paper is organized into multiple sections. The introduction offers a comprehensive overview of the research topic, followed by a literature review section. The methodology section provides a detailed description of the adopted research approach. Subsequently, the findings derived from the analysis are thoroughly examined and discussed. Finally, the paper concludes by presenting the key insights and conclusions drawn from the study.



LITERATURE REVIEW

Islamic Public Finance

Realizing public interests is a fundamental responsibility of the government and society, with some needs requiring government intervention. In the field of economics, this government intervention is known as the public sector economy, which is closely tied to the state's role. From the perspective of Islamic economics, the state's role encompasses various economic activities such as domestic development, poverty eradication, price regulation, monetary policies, and economic planning. Islamic economics utilizes instruments like zakat, land, natural resources, and other revenues to finance the public sector (Huda et al., 2019).

Deficit budget systems are commonly utilized in national finances, and government deficits serve as indicators of an economy's strength or weakness relative to its Gross Domestic Product (GDP). The deficit tends to decrease as GDP increases, and vice versa. Managing low-interest rates plays a crucial role in achieving economic stability and well-being. Government bonds are issued to influence and regulate interest rates throughout the economy (Pettifor, 2019; Ibrahim, 2018).

To address budget deficit challenges, governments can opt for either foreign or domestic financing instruments, considering their costs and risks (Huda et al., 2019; Ibrahim, 2011). Since 2008, Indonesia has issued state securities based on Sharia principles known as state sharia securities (SSS). SSS offers a viable alternative instrument for reducing budget deficits with relatively low risks (Amaliah & Aspiranti, 2017). Additionally, budget deficits and infrastructure financing have been observed to positively impact SSS issuance in the short term. Therefore, it is desirable for the government to support SSS as a reliable investment instrument (Amaliah & Aspiranti, 2022).

Indonesian Public Finance: State Budget

The Indonesian State Budget encompasses a fiscal year from January 1st to December 31st, providing a comprehensive overview of the state's revenue and expenditure for that period. In Indonesia, the President, as the Head of Government, holds the authority to manage the country's finances, while the Minister of Finance assumes the role of fiscal manager and government representative in terms of state ownership. Additionally, the Minister/Head of



Institution serves as the budget user, responsible for managing institutional resources. The structure of the state budget includes components such as state revenues, grants, state expenditures, primary balance, surplus/deficit, and financing. State revenues primarily consist of tax collections, while state expenditures encompass the central government's spending. Since 2000, Indonesia has operated with a deficit budget, necessitating financing measures to address the budget shortfall (Huda & Muti, 2011).

Sukuk/State Sharia Securities (SSS)

The term "*Sukuk*" is derived from the word "*sakk*," which originated from the Latin word "cheque." While commonly referred to as Shariah bonds, this terminology is inaccurate as Sukuk represents ownership of an asset rather than debt (Sulaiman, 2012 in Rohmah et al., 2020). The Financial Services Authority defines Sukuk as Shariah-based securities in the form of certificates or proofs of ownership, representing an inseparable or indivisible part of the underlying asset (Financial Services Authority, date). Using the term "Shariah bonds" is inappropriate as Sukuk utilizes a financing contract, whereas bonds employ a loan contract (Abdalloh, 2020). Key differences include the use of profit sharing instead of interest, the presence of an underlying transaction as the basis for issuance, and the existence of a contract based on Shariah principles (Witro & Setiawan, 2021; Ibrahim et al., 2021).

State Sukuk or State Sharia Securities (SSS) are issued by the government in compliance with Shariah principles, serving as evidence of participation in SSS assets denominated in both domestic and foreign currencies. The primary market involves the issuance of SSS for financing the State Revenue and Expenditure Budget and project funding, with trading occurring in the secondary market (Undang-Undang Republik Indonesia Nomor 19 Tahun 2008 Tentang Surat Berharga Syariah Negara, 2008). The government issues two types of sukuk: retail sukuk, which are tradable in the secondary market, and savings sukuk, which are not (Riana et al., 2020).

Sukuk issuance is particularly attractive to fixed-income investors seeking Shariah-compliant investment instruments (Almaskati, 2022). Investors benefit from the coupon value received during the ownership period and the overall investment yield. Holding Sukuk until maturity ensures that the yield equals the coupon value, while selling it before maturity in the secondary market carries the potential for capital gain or loss (Abdalloh, 2020).



METHODOLOGY

This study aims to investigate the relationship between economic indicators, the State Budget, and the SSS in Indonesia. The analysis utilizes quarterly time-series secondary data from Q1/2012 to Q4/2022, comprising a sample of 44 data points. The secondary data were obtained from the Bank of Indonesia and the Ministry of Finance.

The data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with the SmartPLS 3 software. PLS-SEM was chosen due to its ability to estimate relationships between dependent and independent constructs, irrespective of the data source (primary or secondary) and without assuming a specific measurement scale. Additionally, PLS-SEM is suitable for small sample sizes (Ghozali, 2014).

Table 1. Operational Variables

Variable	Indicator	Concept	Explanation	Scale
Dependent: SSS	Outstanding State Sukuk/SSS Volume (Y) (Amaliah & Aspiranti, 2022)	Shows the value of SSS issued in a certain position.	The outstanding value of SSS consists of Fixed Rate, Retail SSS, Sharia State Treasury Bills, and Savings Sukuk, in billions of Rupiah	Ratio
<i>Exogenous</i> (Independent): Macroeconomic Indicators	Inflation rate (X_1) (Al-Raeai et al., 2018; Hanifah & Pantas, 2022; Setiadi, 2018; Shintyawati et al., 2020)	Shows the monthly national inflation rate	(Consumer Price Index/CPI of this month-CPI of the previous month)/ (CPI of previous month) x 100 percent	Ratio
	Real GDP (X_2) (Ebi & Aladejare, 2022; Hanifah & Pantas, 2022; Obeidat et al., 2022)	Shows the economic growth of a country that has been adjusted for inflation.	(Nominal GDP x 100)/GDP deflator	Ratio
	Policy rate (X_3) (Setiadi, 2018)	Shows the attitude toward the monetary policy set by the Central Bank	The policy rate announced every month, in percent	Ratio
	World oil commodity prices of West Texas Intermediate/WTI (X_4)	Shows one of the benchmarks for world oil commodity prices	The value of world oil prices in units of USD/barrel that underlies the New York Mercantile	Ratio



Variable	Indicator	Concept	Explanation	Scale
	(Al-Raeai et al., 2018; Ebi & Aladejare, 2022; Obeidat et al., 2022)		Exchange oil futures contract	
<i>Endogenous</i> (Independent and Dependent): State Budget	Tax Revenue (X_5) (Satya, 2015)	Shows total government tax revenue	Tax and customs and excise revenues, in billions of rupiah	Ratio
	Government Foreign Debt Remaining Period ≤ 1 year (X_6) (Satya, 2015)	Shows the Government's Foreign Debt with a remaining maturity of ≤ 1 year	Position of Foreign Debt by remaining period ≤ 1 year with the Government's borrowing group, in Millions of USD	Ratio

(Source: Processed data from various sources)

The minimum required sample size was determined using the 10 times rule, which states that the sample size should be at least 10 times the maximum number of arrows pointing to any latent variable in the PLS path model (Hair et al., 2017). In this study, the maximum number of arrows pointing to a latent variable was 4 (for the "Macroeconomic" latent variable), hence a minimum sample size of 40 was necessary (refer to Figure 1).

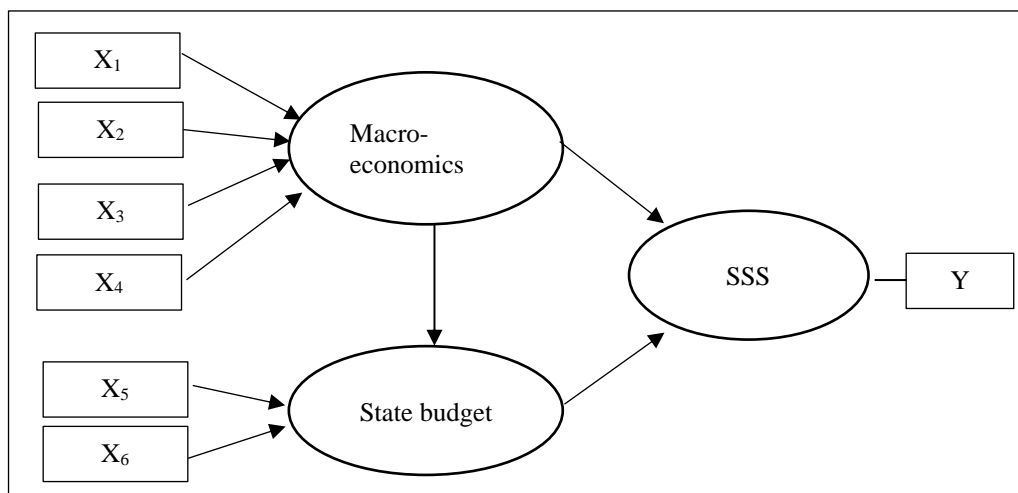


Figure 1. Study Model
(Source: Construction by the author)

Based on the findings from the literature review, the dependent variable used in this study was the volume of outstanding SSS issuance. The independent variables included inflation data, BI7DRR or BI rate (before June 2016), world oil commodity prices, tax revenues, and government foreign debt with a



remaining maturity of ≤ 1 year. These independent variables also referred to as measurement variables, were categorized into two groups of latent variables based on the activities they represented. The exogenous variables reflecting economic activities were combined into a latent variable named "Macroeconomic," while the endogenous variables reflecting government financial activities were grouped into "State Budget." Other latent variables containing the dependent variables were denoted as "SSS." Table 1 explains the definitions of each variable. All of the variables above are translated in a flowchart as shown in Figure 1.

RESULT AND DISCUSSION

Measurement Model Test Results

This study employed a formative indicator model, where changes in the indicators result in changes in the latent variable since the indicators collectively determine the empirical meaning of the latent construct (Ghozali, 2014). In a formative construct, reliability testing is not necessary as it is assumed that each indicator does not correlate with the others. Instead, the focus should be on criterion-related validity to assess the validity of the latent variable (Ghozali, 2014). The testing procedure for a formative measurement model includes evaluating the following: (1) convergent validity of the formative measurement model; (2) collinearity issues in the formative measurement model; (3) significance and relevance of the formative indicators.

Convergent Validity Test Results

Convergent validity, also known as redundancy analysis, examines the extent to which a measure correlates with another measure (such as reflective) of the same construct using different indicators. Therefore, when assessing a formative measurement model, it is important to test whether the formatively measured construct exhibits a high correlation with the reflective measures of the same construct (Hair et al., 2017).

For the formative construct "Macroeconomic," convergent validity was assessed using the reflective construct "Macroeconomic_R," which includes other national and international macroeconomic indicators such as economic growth (X7), the exchange rate (X8), CPO commodity prices (X9), and coal commodity prices (X10) (refer to Figure 2). As for the formative construct "State Budget," its convergent validity was examined using the reflective



construct "State Budget_R," which incorporates other State Budget posture indicators, such as foreign debt (X11) and the budget deficit (X12) (refer to Figure 2).

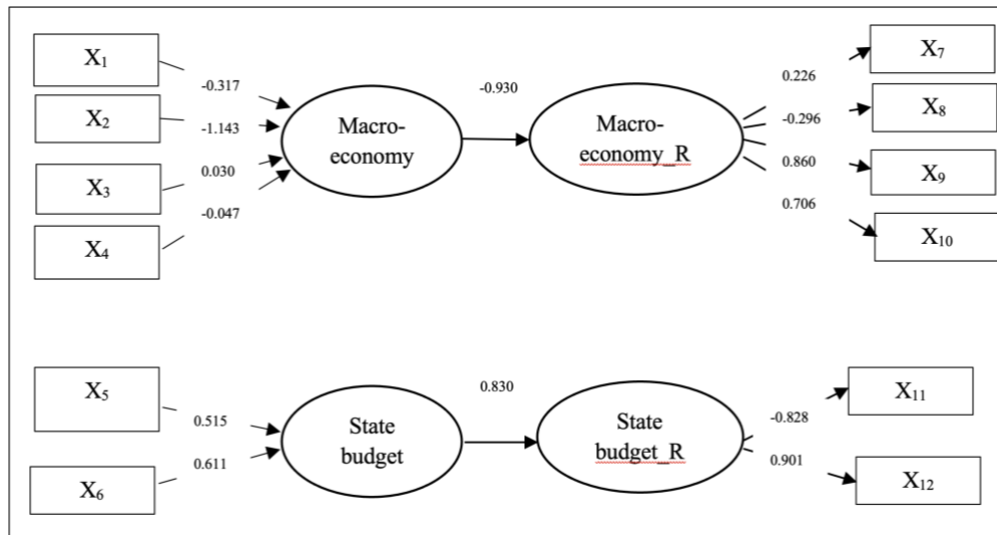


Figure 2. Convergent Validity Test

(Source: Construction by the author, results processed with SmartPLS 3)

In this convergent validity test, a path coefficient value greater than 0.7 is recommended to support the convergent validity of formative constructs (Hair et al., 2017). The redundancy analysis for the macroeconomic and State Budget constructs yielded estimates of -0.930 and 0.830, respectively. A path coefficient approaching +1 indicates a strong positive relationship, while a path coefficient approaching -1 indicates a strong negative relationship (Hair et al., 2017). Therefore, all the formatively measured constructs demonstrated convergent validity.

Collinearity Test Results

Multicollinearity, which refers to high correlation between two or more formative indicators, is a problem that needs to be addressed when testing formative constructs as it reflects a methodological or interpretational issue. In PLS-SEM, collinearity issues are assessed using the variance inflation factor (VIF), with a VIF value greater than 5 indicating potential collinearity problems (Hair et al., 2017). The VIF results in this study showed values below 5, indicating the absence of collinearity issues (see Table 2).



Test Results of Significance and Relevance of Formative Indicators

A crucial criterion for evaluating the contribution of formative indicators is the measurement of outer weights. The outer weights value is derived from multiple regression, where the latent variable is the dependent variable and the indicators are the independent variables. This value represents the contribution of each formative indicator to the construct. Additionally, the significance of the formative indicators should be assessed to determine if they indeed contribute to construct formation (Hair et al., 2017).

Since PLS-SEM is a distribution-free multivariate data analysis technique that does not rely on distribution assumptions or provide t or p values for initial estimation significance, a bootstrap procedure is employed to estimate these values. Bootstrap involves resampling the data multiple times to estimate the path model under slightly altered data constellations. In this study, a total of 5,000 bootstrap samples, each with the same number of cases as the raw data set, were drawn (Hair et al., 2017).

The outer weights value for the macroeconomic formative indicator was found to be significant ($p\text{-value} \leq 5\%$, $t\text{-value} \geq 1.65$) after conducting the bootstrap procedure with 5,000 samples at a 5% significance level and a one-tailed test type, except for X1 and X3. However, the loadings of X1 and X3 were relatively higher than 0.5, suggesting that both indicators could still be retained (Hair et al., 2017). The formative indicators for the State Budget were also found to be significant (see Table 2).

Table 2. Assessment of the Measurement Model

Construct/Indicator	VIF	Outer Weight	Outer Loadings	t value	P value	Sig
Macroeconomic	3.749					
X ₁	3.138	0.023	0.584	0.240	0.405	No
X ₂	1.987	-0.901	-0.963	2.065	0.019	Yes
X ₃	3.441	0.182	0.768	1.454	0.073	No
X ₄	1.437	-0.232	0.092	1.726	0.042	Yes
State Budget	3.749					
X ₅	1.488	0.375	0.797	3.620	0.000	Yes
X ₆	1.488	0.736	0.951	7.503	0.000	Yes

(Source: Processed results of SmartPLS 3)



Structural Model Test Results

Once the measurement model for the study construct has been established as reliable and valid, the next step is to conduct a structural model test, which involves several steps: testing for collinearity issues, testing for the significance of path coefficients, calculating R² values, calculating effect size f² values, calculating predictive power through Q² values, and calculating effect size q² values.

In the structural model shown in Figure 1, the test for collinearity is performed by examining the VIF value between the Macroeconomic and State Budget constructs. Collinearity issues are indicated when the VIF value exceeds 5, which corresponds to a tolerance value of 0.20 (Hair et al., 2017). In this study, the VIF value between the Macroeconomic and State Budget was 3.749, indicating the absence of collinearity issues in the inner model (see Table 2).

To test the relevance of significant relationships in the study model, a bootstrap procedure with 5,000 samples at a 5% significance level and a one-tailed test type is conducted, similar to the previous step. The results of the significance of the Direct, Indirect, and Total Effects path coefficients are presented in Table 3.

Table 3. Significance of Structural Model Path Coefficients

Relationship	β	Mean	SD	P value	Sig
<i>Direct Effect</i>					
Macroeconomic → State Budget	-0.856	-0.767	0.407	0.018	Yes
Macroeconomic → SSS	-0.744	-0.670	0.358	0.019	Yes
State Budget → SSS	0.240	0.224	0.090	0.004	Yes
<i>Indirect Effect</i>					
Macroeconomic → SSS	-0.205	-0.171	0.123	0.047	Yes
<i>Total Effect</i>					
Macroeconomic → State Budget	-0.856	-0.776	0.407	0.018	Yes
Macroeconomic → SSS	-0.949	-0.841	0.443	0.016	Yes
State Budget → SSS	0.240	0.224	0.090	0.004	Yes

(Source: Processed results of SmartPLS 3)

The table above illustrates that the latent variable "Macroeconomic" has a significant negative effect of -0.856 on the latent variable "State Budget" and a



significant negative effect of -0.744 on "SSS." Additionally, the "State Budget" has a significant positive effect of 0.240 on "SSS."

Furthermore, the indirect effect of "Macroeconomic" on "SSS" is significant and negative, with a magnitude of -0.205. Taking into account the direct and indirect effects, the total impact of the "Macroeconomic" variable on "SSS" is 0.949 or (-0.744) + (-0.205) (see Figure 3).

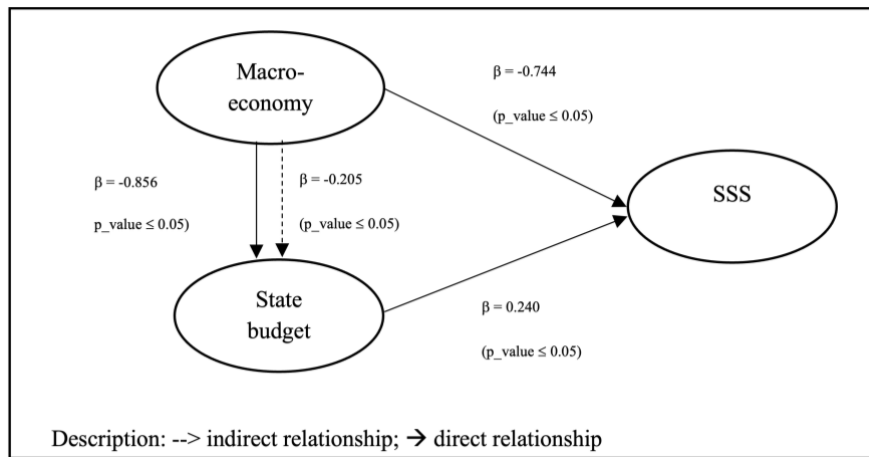


Figure 3. Relationship among Variables

(Source: Construction by the author, results processed with SmartPLS 3)

The subsequent step involves calculating the coefficient of determination (R2) to evaluate the predictive strength of the constructed model. Adjusted R2 is also calculated to account for potential bias in complex models. In this study, SmartPLS 3 calculated the R2 values for "State Budget" and "SSS" as 0.733 and 0.916, respectively. The corresponding adjusted R2 values were 0.727 and 0.912 (see Table 4). Based on the results, the model's predictive ability for "State Budget" is considered moderate since the R2 value falls between 0.50 and 0.75. On the other hand, the model's predictive ability for "SSS" is substantial as the R2 value exceeds 0.75 (Hair et al., 2017).

Table 4. Value of R Square and R Squared Adjusted

Latent Variable	R square	R square adj
State Budget	0.733	0.727
SSS	0.916	0.912

(Source: Processed results of SmartPLS 3)



The magnitude of effects in the model was assessed using the F^2 value. Generally, a value between 0.02 and 0.15 indicates a small effect, 0.15 to 0.35 indicates a moderate effect, and above 0.35 indicates a large effect (Ghozali, 2014). After processing the results using SmartPLS, it was determined that the macroeconomic indicator had a large impact on both the State Budget and SSS. On the other hand, the State Budget had a moderate impact on SSS, as indicated in Table 5.

Table 5. f Square Value

Latent Variable	f Square	
	State Budget	SSS
Macroeconomic	2.749	1.758
State Budget		0.183

(Source: Processed results of SmartPLS 3)

The calculation of Q^2 is indeed important to evaluate the predictive power of the structural model. A Q^2 value greater than zero for an endogenous latent variable indicates the predictive relevance of the path model for that specific dependent construct. According to the SmartPLS analysis, the study model exhibits a predictive ability of 89.2% for SSS and 55.6% for the State Budget, as indicated in Table 6.

Table 6. Q Square Value

Latent Variable	SSS
State Budget	0.556
SSS	0.892

(Source: Processed results of SmartPLS 3)

This study addressed the following hypotheses: (1) Macroeconomic indicators have both direct and indirect significant effects, on the volume of SSS issuance/outstanding; (2) State Budget has a significant effect on the volume of SSS issuance/outstanding; (3) Macroeconomic indicators have a significant effect on the State Budget.



The Effect of Macroeconomic Indicators on the Volume of SSS Issuance/Outstanding

Based on the results, the first hypothesis was accepted because macroeconomic indicators, represented by the inflation rate, real GDP, benchmark interest rate, and oil commodity prices had a significant direct and indirect impact on SSS. The macroeconomic indicator had a direct impact on SSS by -0.744, meaning that every 1-unit change in the macroeconomic indicator variable leads to a decrease in the SSS outstanding value by 74.4%. Moreover, it had an indirect impact on SSS by -0.205 through the State Budget variable, and a total impact of -0.949. This indicates that a 1-unit change in the macroeconomic indicator variable, directly and indirectly results in a decrease in the SSS outstanding value by 94.9%. It is worth noting that the model constructed in this study not only has a significant impact but can also substantially predict the volume of SSS issuance /outstanding.

It is evident that of the four macroeconomic indicators examined, the largest contribution came from the benchmark interest rate, which had a negative contribution of 0.901 to the macroeconomic indicator. Therefore, it can be concluded that the benchmark interest rate contributes to the volume of SSS issuance /outstanding. This is because the secondary sharia security market, sukuk, is traded at a discount. Meanwhile, investors in the secondary market are usually speculators and do not intend to hold sharia security as a long-term investment. Their goal is to generate quick profits from market liquidity and interest rate movements (Razak et al., 2019).

The second-largest contributor to the macroeconomic indicator is the world oil commodity price, indicating that the world oil price affects the volume of SSS issuance /outstanding. This is in line with previous findings that Islamic stocks' value is sensitive to changes in oil prices, and such changes can provide benefits, specifically for oil-producing countries, rather than consumer countries (Narayan et al., 2019).

The effect of the State Budget on the volume of issuance/outstanding SSS

The second hypothesis was accepted based on the results that the State Budget represented by tax revenue and the government's foreign debt with a remaining time of ≤ 1 year had a significant positive effect on the volume of



issuance/outstanding of SSS by 0.240. This means that a change of 1 unit in the State Budget variable directly increases the value of outstanding SSS by 24%.

Out of the two indicators examined as components of the State Budget variable, the government's foreign debt with a remaining time of ≤ 1 year had the greatest contribution of 0.736. This is in line with previous studies that one of the government's objectives is to manage debt portfolio (Satya, 2015).

The Effect of Macroeconomic Indicators on the State Budget

The third hypothesis was accepted based on the results that macroeconomic indicator represented by the inflation rate, real GDP, benchmark interest rate, and oil commodity prices had a significant negative effect on State Budget by 0.856. This means that every 1-unit change in the macroeconomic indicator variable can decrease State Budget by 85.6%.

This is in line with the previous studies, where one of the indicators in the macroeconomic variables is the world oil commodity prices, indicating that changes in world oil prices contribute to the State Budget. This is supported by Azerbaijan which found that fluctuations in world oil prices had an impact on the national budget (Humbatova, 2023).

Measures of Impact and Predictive Power of Macroeconomic Indicators and State Budget on SSS

Based on the results above, the impact and predictive strength of the model can be summarized as follows: (1) macroeconomic indicators had a significant impact on both State Budget and SSS; (2) State Budget had a moderate impact on SSS; (3) The combined effect of macroeconomic indicators and State Budget on SSS was 91.2%; (4) The model in this study had a relevant predictive value of 55.6% for State Budget and 89.2% for SSS, hence it can be used to explain the information within the study data.

Implications of the Study

Based on the findings presented above, several implications arise regarding the management of SSS as a prominent Islamic public financing instrument in Indonesia. These implications can guide policymakers and stakeholders in making informed decisions and implementing effective strategies. The following recommendations should be considered:



Firstly, it is crucial to conduct a comprehensive analysis of macroeconomic indicators prior to the issuance of SSS. These indicators demonstrate a significant impact on the demand for SSS. Policymakers should carefully examine these indicators to gain valuable insights into the prevailing economic conditions. This analysis will aid in making informed decisions regarding the appropriate volume of SSS issuance necessary to fulfill the financing requirements of the State Budget.

Secondly, policymakers are expected to meticulously review the State Budget, particularly in terms of its financing needs, to determine the optimal volume of the SSS issuance. A thorough assessment of these needs will ensure the alignment between the State Budget and the required SSS issuance. By carefully evaluating the financing requirements, policymakers can effectively manage the issuance process and maintain financial stability.

Thirdly, it is imperative to adjust the SSS issuance plan in response to changes in economic conditions indicated by macroeconomic indicators, such as a decline in economic growth or an increase in inflation. Adapting the SSS issuance plan in accordance with these indicators allows for a proactive response to prevailing economic challenges. Such adjustments may encompass strategies such as reducing the volume of SSS issued, modifying the tenor or price of SSS, and potentially deferring the issuance until more favorable economic conditions prevail.

Lastly, during periods of economic downturn, it becomes essential to enhance the attractiveness of the SSS to potential investors. This can be achieved by introducing innovative SSS structures that cater to the specific needs of investors, increasing transparency in the SSS market, and promoting the SSS as a secure and profitable investment instrument. These efforts will enhance investor confidence, stimulate market activity, and ensure continued interest in SSS even amidst challenging economic circumstances.

By implementing these recommendations, policymakers can effectively manage SSS as an Islamic public financing instrument. The analysis of macroeconomic indicators, adjustment of the State Budget, adaptation of the SSS issuance plan, and enhancement of SSS attractiveness will contribute to the sustainable and efficient utilization of SSS in meeting financing needs and supporting economic growth in Indonesia.



CONCLUSION

Achieving high, inclusive, and sustainable economic growth is essential for realizing the vision of an Advanced Indonesia. In line with the Islamic concept, the state bears the responsibility of meeting these needs, including effective management of public finances. Indonesia, like many other nations, utilizes a budget deficit system as an economic indicator relative to its Gross Domestic Product. To address this deficit, the government issues State Sharia Securities (SSS) for project financing.

This study aims to investigate the impact of macroeconomic indicators and the State Budget posture on SSS. The macroeconomic variables examined include inflation rate, real GDP, policy interest rates, and world oil commodity prices. The State Budget posture is represented by government tax revenues and foreign debt with a remaining maturity of one year. The volume of SSS issuance/outstanding serves as an indicator for the SSS variable. The study's predictive model demonstrates significant explanatory power, with 55.6% predictability for the State Budget and 89.2% for SSS. Through the utilization of PLS-SEM (Partial Least Squares - Structural Equation Modeling), the following conclusions are drawn:

1. Macroeconomic indicators, including inflation rate, real GDP, reference interest rate, and oil commodity prices, exert a significant direct and indirect influence on SSS. The reference interest rate holds the greatest impact, followed by world oil commodity prices.
2. The State Budget, represented by tax revenue and government foreign debt with a remaining maturity of one year, significantly contributes to the volume of SSS issuance/outstanding. Among the State Budget indicators, government foreign debt with a remaining maturity of one year has the most substantial effect.
3. Macroeconomic indicators, such as inflation rate, real GDP, reference interest rate, and oil commodity prices, negatively affect the State Budget.
4. Macroeconomic indicators exert a significant influence on both the State Budget and the volume of SSS issuance/outstanding.
5. The State Budget has a moderate impact on SSS.
6. The combined impact of macroeconomic indicators and the State Budget on SSS amounts to 91.2%.



Based on these findings, policymakers responsible for managing SSS as an Islamic public financial instrument in Indonesia should consistently monitor macroeconomic indicators and the State Budget. This proactive approach will facilitate adjustments to the volume of SSS issuance to align with prevailing economic conditions and support high, inclusive, and sustainable economic growth. It is important to acknowledge that this study's focus is limited to Indonesia and its unique context. Results may vary in other countries due to the significance of inflation as a macroeconomic indicator, which can have diverse effects depending on the country's circumstances. Future studies can expand beyond Indonesia, exploring additional indicators or latent variables not previously analyzed.

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