

# THE EFFECT OF SBI AND SBIS AS MONETARY INSTRUMENTS ON THE INDONESIA ECONOMY

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**ABSTRACT** - As a developing nation, Indonesia uses Gross Domestic Product (GDP) as a measure of economic expansion. To maintain a high GDP, however, it is necessary to address a number of issues, including inflation, interest rates, and exchange rates. In an effort to resolve the issues, monetary operations, including the use of the Bank Indonesia Certificate (*Sertifikat Bank Indonesia - SBI*) and the Bank Indonesia Sharia Certificate (*Sertifikat Bank Indonesia Syariah - SBIS*) instruments, were carried out. These instruments should theoretically provide a positive effect on the economy. This study aims to determine the impact of the SBI and SBIS instruments on the economy of Indonesia. Data were obtained in a time series format from the Statistics Indonesia (*Badan Pusat Statistik - BPS*) and Bank Indonesia websites. It was interpolated on a monthly basis and analyzed using the VAR VECM method to determine short-term and long-term effects. The findings show that the SBIS variable has a significant impact on economic growth, whereas the SBI has no effect on the Indonesian economy. This result suggests that the Indonesian monetary authorities should consider using SBIS as a tool to support economic growth rather than SBI.

**Keywords:** GDP, Indonesia, monetary policy, SBI, SBIS

**ABSTRAK – Pengaruh SBI dan SBIS Sebagai Instrumen Moneter terhadap Ekonomi Indonesia.** Indonesia sebagai negara berkembang menjadikan Produk Domestik Bruto (PDB) sebagai indikator pertumbuhan ekonomi. Namun untuk mempertahankan PDB yang tinggi, terdapat beberapa masalah diantaranya inflasi, suku bunga maupun nilai tukar. Untuk mengatasi persoalan tersebut secara moneter, dilakukan operasi moneter diantaranya dengan menggunakan instrument SBI dan SBI. Secara teoritis, kedua instrument harus memberikan dampak positif terhadap pertumbuhan ekonomi. Karenanya penelitian ini bertujuan untuk mengetahui dampak instrument SBI dan SBIS terhadap perekonomian Indonesia. Data penelitian dikumpulkan dalam bentuk time series dari situs BPS dan BI. Data tersebut diinterpolasi secara bulanan dan dianalisis dengan metode VAR VECM untuk menemukan dampak SBI dan SBIS pada periode jangka pendek dan jangka panjang. Hasil penelitian menunjukkan adanya dampak yang signifikan variabel SBIS terhadap pertumbuhan ekonomi, sementara SBI tidak berdampak signifikan terhadap perekonomian Indonesia. Implikasi temuan ini adalah otoritas moneter harus lebih mempertimbangkan SBIS dibandingkan SBI sebagai instrumen operasi moneter guna mendukung pertumbuhan ekonomi.

**Kata kunci:** PDB, Indonesia, kebijakan moneter, SBI, SBIS

## INTRODUCTION

A country's economic development is typically characterized by economic growth, with GDP (Gross Domestic Product) serving as the indicator. The goal of development is to achieve economic prosperity through full employment and an optimal growth rate (Chapra, 2000) so that it may achieve prosperity (*falah*) in this world and the hereafter.

GDP measures the quantity of goods and services consumed or produced as an indicator of economic growth. However, in order to achieve a high GDP, several macroeconomic issues must be addressed, including high interest rates, high inflation, rupiah (exchange rate) depreciation, and low economic growth (Boediono, 2014). These various macroeconomic issues require a variety of policies, both fiscal and monetary, aimed at achieving economic stability.

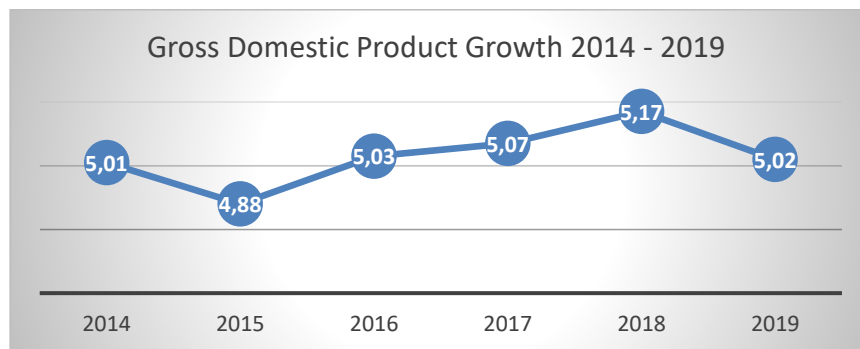


Figure 1 GDP Growth in 2014-2019  
(Source: Official Statistics News BPS)

According to the BPS's Official Gazette of Statistics, Indonesia's economy grew 5.02 percent in 2019, which is clearly lower than the 5.17 percent growth achieved in 2018 (Badan Pusat Statistik, 2020).

According to the World Bank's Indonesian economic report, the slowdown in Indonesian economic growth was caused by, among other things, a significant decline in commodity prices, political uncertainty prior to the announcement of the new cabinet, and total consumption also slowed, including a significant slowdown in government consumption and also weak domestic demand due to large import volume contraction. The weakening of the Indonesia economy is also caused by the deterioration of the global trade exchange rate, with many challenges confronting the global economy (Bank Dunia, 2019). However, as



shown in the graph above, the Indonesian economy remains stable despite GDP growth rates in the 5% range. This demonstrates that the government has implemented various policies aimed at achieving economic stability in Indonesia.

The Indonesian government employs economic policies to maintain economic stability. The government's intervention in terms of affecting economic growth, in which Indonesia adheres to monetary policy with the Dual Banking System, namely conventional and sharia monetary policy. Monetary operations with instruments such as the BI rate as the interest rate issued by BI, Open Market Operations (OPT) as the buying and selling market for government securities, and Bank Indonesia Certificates (SBI) as debt recognition securities are used for implementation. Meanwhile, sharia monetary policy exists in the form of Sharia Monetary Operations (CSOs), which include instruments such as sharia open market operations (OPTS), a market for government securities with sharia principles, sharia term deposits, and Bank Indonesia Certificates with Sharia Principles (SBIS), which are also securities with sharia principles as a benefit.

SBI and SBIS are monetary instruments that are frequently used to assess the impact of Indonesian monetary policy on economic growth. Ayuniyyah and Ascarya (2010) proved the negative influence exerted by SBI and SBIS on the pace of the Indonesia economy. It's just that SBIS has a significant effect, but not with SBI. Ascarya (2012) revealed that for the national economic growth, the negative influence was owned by SBI while the positive influence was owned by SBIS. Likewise, Asnuri (2015) revealed that SBIS had a significant negative impact on short and long-term economic growth.

Syapriatama (2017) stated that Islamic monetary policy and Islamic banks have a significant impact on economic growth. He used SBIS to represent Sharia monetary policy, and he believed that the bonus level of this SBIS indicated a shift toward Bank Indonesia policy, either loose or tight. Tambunan and Nawawi (2018) revealed that through the granger causality test, GDP and SBIS have a two-way causality relationship that influences each other, and SBIS as a monetary policy instrument significantly influences the economy. Whereas Wibowo and Mubarok (2018) stated that SBI and SBIS had a negative effect on economic growth. According to this, the monetary and banking authorities must pay close attention to enhancing national economic growth through monetary instrument policies (Ibrahim, 2011).



This research is necessary because there are some differences in the results of research between SBI and SBIS on the rate of economic growth and little empirical research on the effect of SBI and SBIS on economic growth. The VAR VECM method was used in this scientific study. This method is appropriate for testing monthly time series data and can see the long-run stability of the SBI and SBIS variables on economic growth.

## LITERATURE REVIEW

### Economic Growth

A country that increases its output can be defined as economic growth, which is characterized by an increase in the number of goods and services as measured by the value of its Gross Domestic Product. Based on current and constant prices, this output value is a percentage measure of economic growth. A change in GDP value reveals a particular period of output quantity with the concept of economic growth in one period, as follows:

$$Gt = \frac{(GRDP_t - GRDP_{t-1})}{GRDP_{t-1}} \times 100\% \quad (1)$$

### Classical and Neoclassical Economic Growth Theories

Classical economic growth theory regarding the optimal population has explained the link that exists between the number of employees and the level of output, or GDP, where the best circumstances of growth will occur when total production grows as the number of workers increases. As a refinement of these classical theories, Solow's neoclassical growth theory assumes that the level of technology and the rate of depreciation are constant, as well as a constant rate of population growth, and that there is no export-import, no government sector, and that the entire society in the region has jobs. According to Romer, the technology factor is also an endogenous component of economic growth since individuals may possess and use technology without paying expenditures. Schumpeter also argued that entrepreneurship truly defines a region's economic progress. He went on to say that among business individuals who have the capability and creative stability to execute innovations and fresh and new ideas in terms of production, varied procedures, and management. According to Harrod-Domar, increasing capital investment is crucial since it increases production (Jhingan, 1996).



## **Monetary Policy**

The government adopts monetary policies in the monetary sector in terms of monetary stability as well as economic growth through measures that impact interest rates and money supply in order to manage the money supply in society. There are three sorts of money circulation principles in the offer: M1, M2, and M3. M1 is a small range of money supply that comprises banknotes and coins, demand deposits or savings in commercial banks, and checks. M2 is considered a wide money supply, which includes M1 and quasi money, which include commercial bank deposits and time deposits. For M3 this is a term for money that has a wider circulation with M2 coverage and term deposits contained in other financial institutions outside of commercial banks (Melitz & Martin, 1971).

## **Classical Thoughts about Monetary Policy**

The classical figures say that real interest rates cannot be influenced by monetary policy, but are influenced by real investment and real savings (Melitz & Martin, 1971). According to the classics, the central bank regulates the circulation of money through monetary policy by printing new money or boosting the most significant financial institutions in trade banks, lowering credit interest rates so that loans grow huge. Price hikes, nominal wage rates, nominal interest rates, and nominal national income will all be affected. Nonetheless, as a price impact defined by inflation, this money printing program has no effect on the value of real wage rates, real interest rates, and real income in society. This strategy can raise the money supply in the economy, which boosts aggregate demand and prices. While interest rate policy will have an impact on savings and nominal investment, the real value still has no effect.

## **Keynes's Thoughts about Monetary Policy**

According to Keynes, the basis of economic issues is quite complicated, with money playing a significant part in driving economic activity, but also other elements. According to him, active monetary policy easing or tightening will have an impact on short-term real economic growth, while price developments would be impacted in the medium to long term (Twinoburyo & Odhiambo, 2018; Ibrahim, et. al, 2021).



The existence of a policy of decreasing interest rates to zero percent will result in an endless condition on the elasticity of money demand. In this instance, the public has no motivation to retain securities as a result of future profit speculation. They will believe that as a result of this approach, interest rates would surely rise and will never go below zero percent. As a result, no one will buy since they want to keep their cash. This results in perfect elasticity in the demand for money, resulting in the Liquidity Trap.

This event gave rise to monetary policy as a means of stabilizing the economy which was considered better than fiscal policy for the following reasons (Melitz & Martin, 1971):

- a. The monetary policy does not cause crowding out problems
- b. The decision making the time needed to implement the policy is not too long and adjusted to the economic problems at hand
- c. The policy imposes a burden on the community in terms of interest and debt payments made by the government.

The variables that have changed in the implementation of monetary policy are interest rates and money supply. The central bank carries out open market operations and makes revisions to the minimum reserve ratio in terms of having an effect on the money supply or called money supply. For interest rates, the central bank uses the Bank Rate as its instrument. The determination of these two policies both interest rates and the money supply cannot be carried out at once because each of these policy variables will have an impact on other policy variables. It is the central bank's responsibility to choose between interest rates and money supply under its control and supervision. In reality, sustaining interest rates through the money supply would result in huge changes in national revenue as well as swings in economic activity (Twinoburyo & Odhiambo, 2018). However, if the money supply is controlled through monetary policy, it will have a large impact on economic stability.

The main instruments used by central banks in monetary policy, namely:

- a. Open market operations, where this policy comprises easy and tight money policies;
- b. Discount rate;
- c. Reserve requirement;
- d. Moral suasion.



**Iqtishoduna's Thought: Islamic Monetary Policy**

This flow views that there is a perfect elasticity in the money circulating among the people. The government in this case who holds the monetary authority cannot give effect so monetary policy is not needed. This viewpoint is based on the early history of Islam, when the financial system was essentially non-existent and money was used infrequently. Only the government and traders employ credit as promissory notes, which are also used as an instrument of agreement, rendering the system incapable of realizing the function and formation of money. These newly issued securities will be utilized in product transactions and to raise additional cash, making loans impossible. Even though the creditor sells these securities, the debtor who purchased them is not permitted to sell them. This is when money does not generate speculation or financial markets. In Islam, the balance between money flows and genuine flows (goods and services) can be maintained by outlawing gambling, usury, and superficial promissory note trade operations. The existence of this regulation has an impact on the balance of the goods and money markets, resulting in the automatic creation of monetary policy instruments as a result of the government's application of the system to the activities of consumption, savings, and investment, as well as trade transactions and, ultimately, social welfare. According to this flow, the community conducts economic activity due to the reward of Allah SWT so that many people invest and distribute wealth through Islamic philanthropies (Karim, 2010).

**Mainstream Islamic Economic Thought: Islamic Monetary Policy**

Metwally, a prominent person in this school of thought, stated that money in circulation was completely controlled by the state as a monopoly power in creating official money, in this case, the central bank. The Baitul Mal was the precursor of a modern central bank during the Prophet's time. The central bank is in charge of creating currencies and keeping exchange rates constant under stable price levels. And this monetary control is carried out in order to increase the leverage of current resources on economic production. They suggest that the idle fund's dues may be utilized as an instrument to affect aggregate demand, which attempts to promote the pace of growth of national income.

Monetary instruments in organizing monetary regulations, namely (Chapra, 2000):



- a. Growth Target of Money Supply and Primary Money. This target must be re-analyzed at a predetermined time based on the performance of the economic performance and also the trend of other important variables that are trending. The growth of money circulation is closely related to the growth of base money (high-powered money) as a currency in circulation as well as central bank deposits, so that the availability of base money is also the growth must be regulated by banks. The base money is used productively;
- b. *Giral* Money, where the use of demand deposits by the government in terms of financing projects for social;
- c. Reserve requirements, where these reserves will assist the banking system in ensuring the security of deposits in the form of deposits and liquidity security;
- d. Credit Restrictions, where credit limits are required by commercial banks to ensure the consistency of total credit creation in accordance with the monetary target so that prudential principles need to be carried out for the realization of a healthy bank;
- e. Credit Allocation has an orientation to the value of the social benefit;
- f. Moral Suasion, which is very important to work together between commercial banks so that power can be maintained and banking problems can be resolved.

### **Alternative-Critical Thinking of Islamic Economy: Islamic Monetary Policy**

According to these figures, the monetary policy system is executed through a *syuratiq* process, in which the monetary authority and real authority deliberate on a decision or policy in order to develop a monetary instrument as a kind of harmonization between the two authorities. Given that monetary policy is a recurring game in game theory in the shape of a supply and demand curve for money, which has a positive slope as a result of knowledge created by the process and the exchange of information extremely effectively. The existence of harmonization between policies in the monetary sector and the real sector, according to Choudhury, will show an interaction of the demand curve and supply of money and then it harmonizes with the growth of national income (Karim, 2010).





## METHODOLOGY

The method used in this study is a quantitative research method with a Vector Autoregressive (VAR) VECM model. This VAR method was first proposed by Sims in around 1980 (Gujarati, 2003). This model was chosen because it is thought to be capable of capturing economic events in this study. The extent of the influence of the short-term and long-term relationship between SBI, SBIS, and GDP as indicators of Indonesian economic development from 2014 to 2019 may be examined using the VAR VECM approach. The data utilized are time-series data taken from BPS and BI statistics reports, with data interpolated into monthly intervals. This approach is appropriate for assessing monthly time series data and determining variable stability over time. EViews 10 was utilized to do the cointegration test with the VAR VECM technique.

The testing stages of the VAR VECM method for this analysis test are:

1. Stationary test as a proof of the stability of each variable used with the value of Augmented Dickey-Fuller as the value of the test criteria;
2. Test to determine the optimal lag length to determine the length of the period duration of a variable that is influenced by the previous period variable and other variables;
3. The cointegration test is used to get the possibility of a long-term equilibrium relationship between variables. This test is carried out as a further test from the stationary test. This test is using Johansen's cointegration test;
4. Granger causality test to check whether there is a causal relationship between two variables (Tanjung & A. Devi, 2013). In this study, namely between SBI, SBIS, and GDP.

The flowchart of this analysis using the VAR VECM method can be seen in the figure as follows:



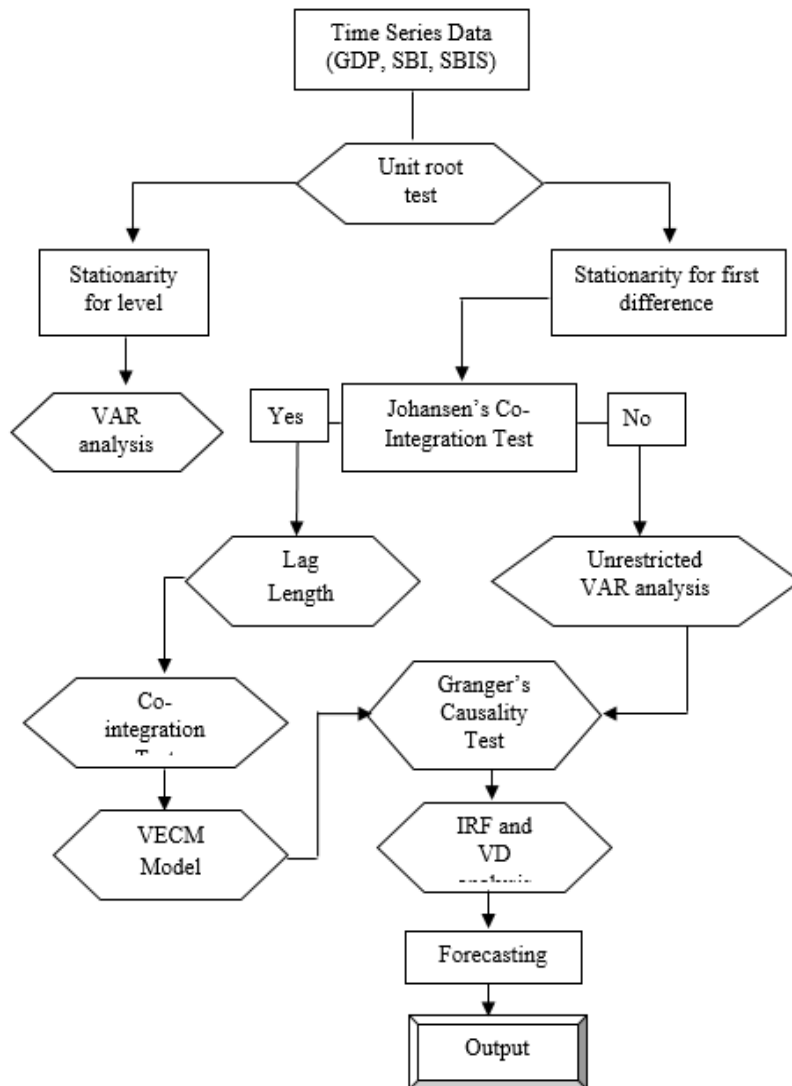


Figure 2. Flowchart of the VAR VECM method

Equation models that can be built to see the effect of SBI and SBIS on Indonesia's economic growth in this study can be seen as follows:

$$GDP = \alpha + \beta_j \sum_{j=1}^{60} GDP_{t-j} + \gamma_j \sum_{j=1}^{60} SBI_{t-j} + \delta_j \sum_{j=1}^{60} SBIS_{t-j} + \mu_{1t} \quad (2)$$

Where:

GDP = Indonesia's Gross Domestic Product as an indicator of economic growth in percent

SBI = the growth value of Bank Indonesia Certificates in percent units



SBIS = the value of the growth of Bank Indonesia Certificate in Sharia principles in percent

## RESULTS AND DISCUSSION

### Progression of Indonesia's Economy

Indonesia, being one of the most populous countries in Southeast Asia, has a relatively consistent economic development. This is demonstrated by the growth rate, which is in the 5% range. The graph below shows the country's rate of growth:

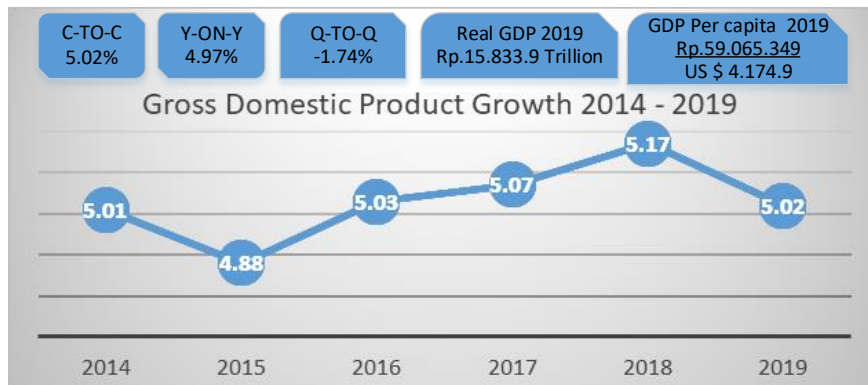


Figure 2. Indonesia's GDP growth in the 2014-2019 period  
(Source: Badan Pusat Statistik)

The graph above shows that the Indonesian economy's growth rate has increased from 2014 to 2019. This indicates that the Indonesian economy has been steadily growing. From 2016 to 2018, Indonesia's economic growth rate was in the 5% area, indicating economic stability. The Indonesian economy is expected to contract in 2019. This is due to both internal and external forces. Global geopolitical conditions, international commodity prices, national agendas such as General Elections, and changes in the harvest season, as well as the presence of macroeconomic variables such as the rupiah exchange rate, which experiences shocks or depreciates, all have a significant impact on the Indonesian economy. The global economy also affects the condition of the Indonesia economy, such as the uncertainty surrounding US-China trade tensions, as stated by the World Bank.



### Progression of SBI and SBIS in Indonesia

The SBI and SBIS, as monetary policy instruments, play a key role in the country's economic development. Indonesia, in particular, features a dual banking system, namely the conventional system and the sharia system. SBI is a monetary tool for traditional policies that serves as a model for banks using traditional methods. SBIS, on the other hand, is a monetary instrument for sharia monetary policy that serves as a reference for banks that employ the sharia system. According to Widodo (2017), Islamic monetary policy in the context of a dual monetary policy can help to reduce price level volatility in Indonesia.

The SBI and SBIS exist to control the quantity of money in circulation in the society. If the quantity of money circulating in the community is substantial and would have an influence on growing inflation, the BI, as the monetary policy authority, will intervene through banks using the SBI and SBIS instruments. It is one way to raise the role of Islamic banking in the economy if this policy becomes an economic policy that may positively improve the assets of Islamic banks (Mifrahi & Theory, 2020; Nadia, Ibrahim, & Jalilah, 2019). The following is the development of the SBIs and SBIS in Indonesia.

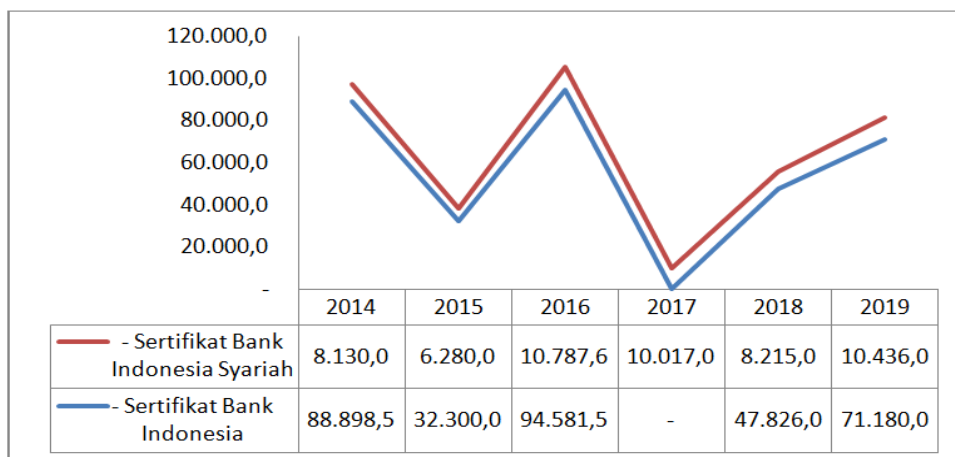


Figure 3. The Progress of SBI and SBIS in the 2014 - 2019 period  
(Source: SEKI Bank Indonesia data processed)

We can notice a growth in the value of SBI and SBIS in the graph above. This shows that people are beginning to trust SBI and SBIS as monetary measures to help the economy recover. For the movement of SBI itself in 2017, it is equivalent to zero due to the BI policy to deactivate SBI at that time due to a



significant number of foreign investors in SBI, which is feared to have an influence on market instability, both monetary and real. As a result, the Bank of Indonesia (BI) released a Certificate of Bank Indonesia Deposit (SDBI) for domestic investors. However, around mid-2018, BI revived SBIs in order to preserve market liquidity (Nisak & Ibrahim, 2014).

## Research Results

Time series data is declared to be stationary if it does not contain unit-roots. According to Gujarati, the time series data is said to be stationary with the condition that it has a constant average and variance throughout the period and will move stably without seeing the movement of positive or negative trends (Tanjung & A. Devi, 2013). This stationary test was performed using the Augmented Dickey-Fuller method, which compared the calculated ADF value with the Mackinnon critical value. The data to be tested is at the first level of differentiation. The following are the ADF test output results in a broad outline:

Table 1. Stationary Test Results

Variable	Unit Root	Augmented Dickey-Fuller test statistic	MacKinnon 5% Critical Value	Probability	Concl.
PDB	Level	-0,611877	-2,910019	0,8598	No stationary
	First Difference	-10,966540	-2,910019	0,0000	stationary
SBI	Level	-3,644236	-2,903566	0,0072	stationary
	First Difference	-9,699431	-2,904198	0,0000	stationary
SBIS	Level	-5,491900	-2,904848	0,0000	stationary
	First Difference	-13,976530	-2,904198	0,0001	stationary

(Source: Data processed by EViews 10)

The components of GDP, SBI and SBIS, and zakat are stationary at the 1st difference level with alpha 5% seen as stationary. The interpretation of stationary results is as follows:

- a. In the GDP variable, it can be seen that the probability value at the 1st level difference value is 0.0000 smaller than alpha 5% so it is concluded that the GDP is stationary.
- b. The SBI variable can be seen as the probability value at the level of 1st difference, which is 0.0072 smaller than alpha 05% so it can be concluded that the SBI is stationary.



- c. In the SBIS variable, it can be seen that the probability value at the level of 1st difference, which is 0.0000 smaller than the alpha value of 5%, so it is concluded that the SBIS is stationary.

The next stage is determining the optimal lag with the following results:

Table 2. Optimum Lag Length Test Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	0	243,9674	NA	1,21E-07	-7,414381	-7,314025
1	1	286,6597	80,1302	4,29E-08	-8,451068	-8,049642*
2	2	294,404	13,82066	4,47E-08	-8,412432	-7,709938
3	3	310,7035	27,5837	3,59E-08	-8,630731	-7,633467
4	4	319,0095	13,28965	3,70E-08	-8,615678	-7,311045
5	5	336,2382	25,97549	2,91E-08	-8,868867	-7,263165
6	6	359,2227	32,53194*	1,94e-08*	-9,299160*	-7,392389

(Source: Data processed by EViews 10, 2020)

In this method, the optimum lag length test is determined by suggesting the smallest values in FPE, AIC, SC, and HQ in the presence of asterisks. The optimum lag test acquisition shows the optimal lag length is 6. The asterisks are seen in almost all criteria in lag 6. This means that the influence of SBI and SBIS variables on economic growth will experience the optimum point at lag 6.

The next stage is the cointegration test to find out the existence of long-term relationships in non-stationary components. This shows that, although each component is not stationary, a linear combination of all variable components will produce a stationary residual. Johansen's cointegration method was used in this test with the following results:

Table 3. Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0,05 Critical Value	Prob.**
None*	0,435742	48,76662	29,79707	0,0001
At most 1	0,124932	12,14304	15,49472	0,1502

Trace test indicates 1 cointegrating eqn(s) at the 0,05 level

\*denotes rejection of the hypothesis at the 0,05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

(Source: Data processed by Eviews 10, 2020)



This can be seen from the test results that the probability trace statistic is 0.0001 which is smaller than the alpha level of 5%. So, it can be concluded that there is cointegration among SBI, SBIS, and GDP.

Table 4. Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0,05 Critical Value	Prob.**
None*	0,435742	36,62358	21,13162	0,0001
At most 1	0,124932	8,541039	14,2646	0,3263

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0,05 level  
 \*denotes rejection of the hypothesis at the 0,05 level  
 \*\*MacKinnon-Haug-Michelis (1999) p-values

(Source: Data processed by EViews 10, 2020)

It can be seen that the maximum probability Eigenvalue is 0.0002 which is smaller than the confidence level  $\alpha = 5\%$ . So, it can be concluded that there is cointegration among SBI, SBIS, and GDP.

Johansen's cointegration test shows that there is a long-term relationship between variables (cointegrated) that form a linear relationship. The results show that the SBI, SBIS, and GDP used in this study have a cointegration relationship. It can be said from the results of the cointegration test that SBI, SBIS, and GDP have a stable or balanced relationship even the similarity of movement in the long run. Every short-term period, SBI, SBIS, and GDP tends to adjust to each other in achieving their long-term equilibrium. Because it was cointegrated, the test was continued with the VECM method.

Based on stationary and cointegration tests, the relationship between SBI, SBIS, and GDP is stationery and equilibrium in the long term so that causality analysis can be carried out and will show valid and reliable results. This causality analysis uses the Granger method. The results of the causality test in this study are as follows:

Table 5 Granger's Causality Test

Null Hypothesis	F-Statistic	Prob.	Remarks
SBI does not Granger Cause GDP	3,04703	0,0239	It has a one-way causality from SBI to GDP
GDP does not Granger Cause SBI	2,2517	0,0745	
SBIS does not Granger Cause GDP	2,56625	0,0475	It has a one-way causality from SBIS to GDP
GDP does not Granger Cause SBIS	1,93508	0,1167	



SBIS does not Granger Cause SBI	1,6238	0,1805	It has no causality
SBI does not Granger Cause SBIS	1,49086	0,2168	

(Source: Data processed by EViews 10, 2020)

The results of the above can be known:

1. SBI probability value on GDP is 0.0239, and the value is smaller than  $\alpha = 5\%$ . While the probability value of GDP on SBI is 0.0745 and the value is greater than the level of confidence  $\alpha = 5\%$ . Then it can be concluded that SBI and GDP have unidirectional causality, i.e. there is causality from SBI to GDP. It can be seen from the results that the SBI variable is statistically significant in influencing GDP. On the other hand, GDP is not significant in influencing SBI. Therefore, it is concluded that there is a one-way causality from SBI to GDP;
2. SBIS probability value on GDP is 0.0475 and the value is smaller than the level of confidence  $\alpha = 5\%$ . While the probability value of GDP in SBIS is 0.1167 and the value is greater than the level of confidence  $\alpha = 5\%$ . Then it can be concluded that SBIS and GDP have directional causality in which the direction of causality from SBIS to GDP. Also, the results above show that the SBI variable statistically significantly influences GDP. However, on the contrary, GDP did not significantly affect SBI. Thus, it is concluded that there is one-way causality from SBIS to GDP;
3. The probability value of SBIS on SBI is 0.1805, and the value is greater than the level of confidence  $\alpha = 5\%$ . And the SBI probability value on SBIS is 0.2168 and the value is higher than the confidence level  $\alpha = 5\%$ . Then it can be concluded that there is no causality between SBIS and SBI.

## VECM Estimation Result

Table 6 VECM Estimation Result

Variable	Coefficient	Standard Error	T Statistics
SBI	-0.044892	0.02609	-1.72054
SBIS	-0.791886	0.12052	-6.57084
C	0.002707		

(Source: Data processed by EViews 10, 2020)

Based on the estimation results for the long term, SBI has a negative but not significant relationship to GDP. Whereas SBIS has a significant influence with a negative relationship to GDP. In times of rising SBIs and SBIS, this will reduce Indonesia's GDP. This result is certainly in accordance with research by





Wibowo and Mubarak research that SBI and SBIS have a negative influence on economic growth, therefore, the need for the seriousness of attention by monetary and banking authorities needs to be given to monetary instrument policies to support increasing national economic growth (Wibowo & Mubarak, 2018).

## **Discussion**

The findings indicate that SBIS has a considerable impact on Indonesia's GDP. It shows the impact of the SBI and SBIS on the economy across short and long time periods. As a result, the importance of SBI and SBIS as monetary policy instruments can have an impact on GDP, which is an indication of economic growth. The government's monetary policy should be on target in order for the economy to stabilize and society to thrive. With the negative association between SBI and SBIS factors on the Indonesian economy, public money are shifting from the monetary to the real sectors. It may be concluded that individuals prefer to invest in the actual sector rather than the monetary sector. It is necessary for government policy to provide fresh air to the public to invest funds in the monetary sector and to move the Indonesia economy in the hope of economic stabilization.

The conformity of these results with research by Asnuri, Tambunan, and Nawawi shows SBIS has a significant effect (Asnuri, 2015; Tambunan & Nawawi, 2018). Meanwhile, 'Ayuniyyah shows that SBI and SBIS have a negative influence on Indonesia's economic, where SBIS has a significant influence but differs from SBI (Ayuniyyah, Q. & Ascarya, 2010). Although, the results are also in accordance with Ascarya showing that SBI has a negative influence on economic growth, the discrepancy of this study with the results for the variable SBIS in which the results of this study SBIS has a negative influence on economic growth even though the Ascarya shows SBIS has a positive influence on economic growth (Ascarya, 2012). Even Asnuri from his research found that SBIS has a negative effect on economic growth in the short and long term (Asnuri, 2015). This result was also shown by Syapriatama's research in which SBIS responded negatively to the economy (Syapriatama, 2017).



## CONCLUSION

This research was conducted by showing that the most influential factor between the Bank Indonesia Certificate and Bank Indonesia Sharia Certificate on Indonesia's economic growth in the period from 2014 to 2019. From the tests conducted, there was a negative influence of SBI but not significant to the Indonesia economy and there was a negative influence of SBIS which is significant to Indonesia's GDP. This proves that sharia monetary instruments are more influential than conventional monetary instruments. As a result, there is a need for government monetary policy that may pique the public's interest in investing in the monetary sector, so accelerating economic growth.

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