The Influence of Islamic Banks and Sovereign Retail Sukuk on Economic Growth in Indonesia

Firsty Izzata Bella
Universitas Airlangga, Surabaya, Indonesia
Firsty.izzata.bella19@feb.unair.ac.id

Inas
Universitas Islam Internasional Malaysia, Kuala Lumpur, Malaysia
Inesagestaa08@gmail.com

Abstract

This study aims to examine the short-term and long-term effects of Islamic banking financing and the development of sovereign Retail Sukuk (SR) on Indonesia's economic growth during the period 2009: Q1 to 2019: Q3. Outstanding SR is used as an indicator of SR's development in seeing its impact on Indonesia's economic growth. Through Dickey Fuller-Generalized Least Square (DF-GLS) analysis, Lag-Length Test, Auto-Regressive Distributed Lag (ARDL), Cointegration Bound Testing. Total Sharia Bank financing and outstanding SR do not have long-term cointegration with Indonesia's economic growth. Meanwhile, in the short term, Indonesia's GDP is influenced positively by total Islamic Bank financing (TFIN) at lag 3 and negatively by the outstanding SR at lag 3 and 4. Researchers only examined the Islamic banking sector, specifically highlighting financing in Islamic banking and SR's development through nominal outstanding on a quarterly scale. The limitations of the variables studied are becoming the limitations of this study. The government as a policymaker have to provide a support through cooperation between institutions and Medium and Small Enterprises (MSMEs) with Islamic banks in collecting and channeling financing, education, and outreach to the public. Consequently, the deepest layers need to be improved to make SR an individual investment instrument that can support Indonesia's economic growth. The implications of this study to offer valuable insights for policymakers, urging them to foster the growth of Islamic banks and promote retail Sukuk as an investment option and enhancing investors awareness of retail Sukuk.

Keywords: Indonesia, Retail Sukuk, Sharia Banking

INTRODUCTION

In the 2019-2024 Indonesian Sharia Economics Masterplan carried out by the National Committee for Sharia Economics and Finance (KNEKS), it is mentioned that the Islamic financial sector has received considerable attention with the huge developments. Although it is still dominated by Islamic banking, maximizing the potential of zakat and waqf, crowdfunding, Islamic stocks indices, and Sukuk have also begun to be developed in Indonesia (KNEKS, 2018). There is

support from the government to bring Islamic financial instruments into momentum for Indonesia to maximize its users, especially with a Muslim percentage of 87,2% of the total population and and stated to account for 12.7% of the Muslim population in the world (Adamsah & Subakti, 2022).

The report on the Global Islamic Economy Indicator 2019/2020 shows Indonesia's ranking in the halal finance category is in 5th position, experiencing a significant increase from ranking 10th in the previous year (DinarStandard, 2020). Meanwhile, Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria and Turkey well-known D-8 countries became part of memberships The Developing Eight Organizations for Economic Cooperation in the short and long run on the research conducted by Hamadou (2022) found that Islamic banking and economic growth has a positive connection. Therefore, to realize Indonesia as the center of the world's sharia economy, the Islamic financial sector needs to be strengthened.

Banking is the leading and most important sector in growing the economy in a country. The intermediary function in the banking sector to channel funds from surplus units to deficit units through the financing mechanism at Islamic banks is proven to be able to improve the economy in Indonesia. This fact is in line with the research result conducted by Saeed et al. (2020) state that Islamic banking financing in Indonesia affects in the short and long term on economic growth. Other research shows that the relationship between Islamic banking financing and economic development in Indonesia is bi-directional, or a relationship that affects each other (Anwar et al., 2020; Setiawan, 2021). The merger phenomenon of three Islamic banks in Indonesia provides new hope for Islamic banking to have domestic competitiveness in the global market and make the best contribution to economic development (Putri, 2020). Therefore, it is crucial to continue to conduct studies on the effect of Islamic banking financing on economic growth to be used as a reference, especially for policymakers in determining policies.

The banking sector made a significant contribution to Indonesia's economic growth. It was recorded that this figure reached more than half of Indonesia's GDP, namely 55.01% by the end of 2019. With the dual banking system adopted by Indonesia, banking applies both conventional and sharia systems. Law No. 21 of 2008 concerning Islamic banking and various other government regulations plays an essential role in grounding the Rabbani economy in Indonesia. But unfortunately, as of July 2020, it was noted that the total assets of Islamic banking only reached 9.68% of the banking industry assets, conventional banks owned the rest.

The presence of efforts from state-owned banks which are members of the Association of State-Owned Banks (Himbara) consisting of BRI Syariah, BNI Syariah, and Bank Syariah Mandiri to carry out a merger agreement which is targeted to be completed in February 2021, provides new hope for Islamic banking to have power. Domestic competitiveness in the global market and make the best contribution to economic development. According to Hery Gunardi, as head of the office project management team and deputy managing director of PT Bank Syariah Mandiri, the three Islamic banks' combined results will have the potential to become the top 10 Islamic banks globally based on market capitalization. He added that by combining Islamic banking's total assets, the target of financing and funding will increase, even reaching IDR 335 trillion (Putri, 2020).

On the other hand, one of the investment instruments issued by the state in the form of state debt securities (SUN) and Islamic government securities (SBSN / Sukuk) also assists the government in terms of financing, which is ultimately aimed at growing the country's economy. Indonesia has a uniqueness that other countries do not have in issuing bonds, namely retail category state securities called Indonesian Retail Bonds (ORI) and Retail Sukuk (SR) as options with sharia

principles. This type can be purchased by individual domestic investors, with a relatively low minimum purchase of IDR 1,000,000 to IDR 3 billion. For retail investors, ORI and SR can be options in investing because they are declared zero risk, and the government bears all risks. Besides, the objective of this investment is clear, namely financing the state budget deficit and funding government projects in various fields, such as infrastructure, education, health, and so on.

Several previous studies discussing state bonds and Sukuk (SBSN) have become the study object of previous studies (Pradhan et al., 2020; Yıldırım et al., 2020). However, the discussion of Sukuk in quantitative studies is still limited, the majority of research studies from theoretical and conceptual aspects (Hafsa & Oumaima, 2021; Sukmana, 2020). Furthermore, Sukmana (2020) also states that Sovereign Retail Sukuk's study is important to examine with at least three underlying motivations, namely 1) SR purchases are only intended for Indonesian citizens, 2) SR uses projects as underlying assets, different from other types of Sukuk which uses leasing, 3) The discussion of Sukuk is empirically limited.

This study aimed to see the effect of exogenous variables on endogenous variables in the short and long term. In analyzing the impact of bank financing on economic growth, several previous studies used the VAR / VECM method (Anwar et al., 2020; Muharam et al., 2019). However, the Auto Regressive Distributed Lag method has advantages over other methods, namely 1) Used in research with small samples, such as studies related to new phenomena. Retail Sukuk is a new study in Indonesia because it was only published in 2009. 2) Simultaneously estimate the long and short-term components of the model, and eliminate autocorrelation problems. 3) This method can distinguish between exogenous and endogenous variables (Narayan, 2004). On the other hand, the impact of financing instruments on Islamic banking and Retail Sukuk on economic growth requires time (lag) to respond. It is because the funding provided is identical to business capital, which takes time, as well as financing through Sukuk, which will be distributed as funding for government spending and government projects and takes time to see the resulting impact.

Therefore, to fill the gap in previous research, studies on the role of Islamic banking and Retail Sukuk on economic growth are essential to do. To figure out the effect on the short and long-term using time series data during the 2009-2019 period, with the same method as in the research of Tabash et al. (2022), Kamarudin & Kassim (2022), Anwar et al (2020) namely the Auto Regressive Distributed Lag (ARDL) method. This study will explore in more detail how does Islamic bank and development of sovereign Retail Sukuk (SR) are capital market products that are traded have a real impact on Indonesia's economic growth.

LITERATURE REVIEW
Economic Growth

Economic growth is the main goal of every country. Economists and statisticians use several methods to measure the country's economic performance, and one of the most widely used methods is Gross Domestic Product (GDP) measured according to the prices valid producing of goods and services in a country in a certain period (in quarters and years) (Kurniawan et al., 2019). GDP as the total output of goods and services in the economy meanwhile the total value of all goods and services produced in the area within a certain period, usually per year (Santoso & Artha, 2021). According to Wesiah & Onyekwere (2021), a study that examines the relationship between

financial development-economic growth always uses GDP as the primary variable that reflects economic growth.

In calculating the GDP figure, three approaches can be implemented, namely 1) According to the production approach grouped into nine (9) business fields (sectors), 2) According to the income approach, and 3) According to the expenditure approach which consists of household consumption expenditure and non-profit private institutions, government consumption, gross domestic fixed capital formation, changes in inventories, and net exports. Although there is an approach to calculating the GDP figure, the resulting statistics are the same.

Furthermore, it is stated on the BPS (2020) page that GDP can be based on current and constant prices, the first type is used to see economic shifts and structure, while continuous (real) prices are used to determine the overall rate of economic growth or each sector from year to year. Supplementary to this, all previous studies conducted by Ledhem & Mekidiche (2020), Rizvi et al (2020), Alafif & Shaheen (2021) and Anwar et al (2020) used as a reference for this study use GDP in measuring economic growth. Hence, in line with the description above, this study uses GDP with a production approach (business field) at constant 2000 Series prices for the 2009 period. And the rest of the period refers to the 2010 series because it describes real GDP under the purpose of this study, namely to see economic growth in the period 2009 to 2019.

Through data published by BPS, it is known that Indonesia's GDP based on constant prices in 2019 reached IDR 19.95 trillion, an increase of 5.02% from the previous year. However, it is lower than the economic growth in 2018 which was 5.17%. The financial services and insurance industry category are known to have grown by 6.60%, up from 4.17% in the previous year, but on the contrary, in terms of consumption, when viewed from the gross fixed capital formation (GFCF), which illustrates the level of investment and government consumption has weakened. Based on World bank data, in 2019 Indonesia will rank 16th globally with a total of US $ 1,119.19 billion. The World Economic Forum predicts that in 2024 Indonesia will be ranked as the fifth-highest GDP worldwide, with a total of US $ 5,329.2 billion (Buchholz, 2020).

Islamic Commercial Banks

The Islamic finance sector has been confirmed by Elmawazini et al. (2020) to contribute to foster economic growth in Gulf Cooperation Council (GCC) countries. Thus, this influence is reflected in a significant impact on the level of investment and access to capital in the real sector (Ledhem & Mekidiche, 2020). Through Act No.21 of 2008 Sharia Bank is defined as a bank that carries out its business activities based on sharia principles. By type consists of Sharia Commercial Banks (BUS) and Sharia Rural Banks. As of July 2020, recorded in the Sharia Banking Statistics issued by the OJK, BUS (Commercial Islamic Banks) has reached 14 banks with total assets reaching IDR 352 billion. The banking industry, as one of the main industries in the financial sector, acts as an intermediary between the surplus units that deposit funds through a deposit mechanism which the bank then channels to the deficit unit in the form of business capital credit. Total financing is defined as a bank's behavior in pursuing profit and taking risks (Mohamad & Saeed, 2019). According to the official website of Bank Indonesia, financing is defined as the provision of funds or equivalent claims based on an agreement or agreement between the bank and another party financed and/or given a fund facility to return the funds after a certain time with loan interest, compensation, without compensation. In the end, the bank's intermediary function will strengthen the country's economy by moving the real sector.

Furthermore, Ledhem & Mekidiche's research (2020) concluded that the financial performance of Islamic banking through the level of profitability as measured by Return on Equity (ROE) has a significant positive impact on economic growth, especially in Malaysia, Indonesia, Brunei, Turkey, and Saudi Arabia. According to Trung (2021), one measure to evaluate banking performance is total assets because it covers all aspects of bank growth.

Through Law No.21 of 2008, Indonesia has declared a country that implements a dual banking system, namely one that carries out conventional and sharia banking activities. Therefore, in examining the banking sector, the two need to be juxtaposed to see the influence and contribution of each to the country's economic growth, one of which is through the total assets owned. Because the size of the assets will determine the amount of business credit disbursement for the deficit unit then have an impact on strengthening the wheels of the economy in the real sector. Furthermore, Hamadi & Awdeh (2020) concluded through their research that development of the national financial system can to boosts economic welfare. Therefore, it is vital to conduct a study on the financial sector to improve its economy.

Sovereign Sharia Securities / Sukuk

Other financial instruments that support economic growth are bonds and Sukuk issued by the government intending to finance the state budget deficit and as a source of funding for government projects. In terms of language, Sukuk comes from Arabic, namely *sakk* (singular) and Sukuk (plural), which have similar meanings to certificates or notes. Others also mentioned that *sakk* is a word from the Latin sound "check" or "check" which is usually described in contemporary banking (Jalil, 2019). Referring to the Financial Services Authority Regulation (POJK) No.18 of 2015, Sukuk is defined as sharia securities in the form of certificates or proof of ownership of the same value. It represents an integral or undivided part of the underlying assets. If categorized in terms of issuers, both Sukuk and bonds can be divided into two: corporate bonds/Sukuk and state bonds/Sukuk.

There is a clear difference between bonds and Sukuk, the first type is debt securities and uses a loan agreement. In contrast, Sukuk is an asset securitization-based sharia effect using a financing contract. Asset securitization is defined as an investment product due to the conversion of real assets into financial products (securities) for a certain period. Therefore, in issuance, Sukuk must have clear assets as the basis for assignment (underlying assets). Conversely, bonds do not require real assets in their issuance, because they are based on loans or debt securities.

Starting in 2006, Indonesia issued an innovation in state debt securities called Sovereign Retail Bonds (ORI), through the Ministry of Finance's website, it is stated that ORI is one of the Government Securities (SBN) instruments offered to individuals or Indonesian citizens (WNI) through distribution partners in the Primary Market. After three years, precisely in February 2009, the government first issued Retail Sukuk (SR) Series 001 as a sharia investment product intended for Indonesian citizens and has been declared sharia-compliant by the National Sharia Council-Indonesian Ulema Council (DSN-MUI). Through this research, the yield rate and nominal value of the Sukuk issuance will be examined as a representation of the Sukuk performance.

Figure 1.
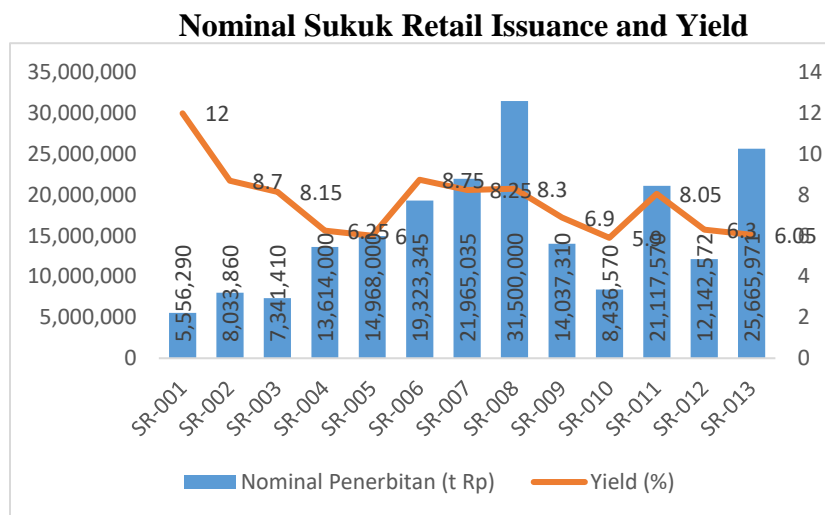
Nominal Sukuk Retail Issuance and Yield

The return rate is defined as the income generated and realized on an investment over a certain period, expressed as a percentage based on the amount of money invested, the current market value, or the nominal value of the security. Based on the Regulation of the Minister of Finance (PMK) No.187 of 2011, rewards are defined as payments that can be in the form of rent, profit sharing or margin, or other forms of payment with the bond/Sukuk issuance contract given to Sukuk/bondholders until the end of the period.

Ganti (2020) defines face value as the redemption price in bonds and stocks it is usually stated at the beginning of issuance, not their market value. He continued that in economics, nominal value refers to an unadjusted level or current price, without considering inflation or other factors as opposed to real value, while adjustments are made for changes in the general price level over time. Therefore, in this case, it can be concluded that the issuance nominal is the amount or nominal amount of debt securities (bonds) or state sharia securities (SBSN) in Rupiah / foreign currency that the government and corporations can offer as a result of investor requests for certain series. The significant increase in the issuance nominal and the number of ORI and SR investors is one of the considerations that the researcher takes as the research object. Also, the fact that Indonesia is the first and only retail SUN and SBSN issuer in the world should be an analysis in seeing the impact of the resulting economic growth.

Sukuk are capital market products that are traded in the long and medium-term. There have been many studies examining the relationship between bonds / Sukuk on economic growth in a country. The results of research by Yıldırım et al (2020) on the effect of Sukuk on economic growth in 9 countries (Brunei, Indonesia, Jordan, Kuwait, Malaysia, Nigeria, Saudi Arabia, Pakistan, and Turkey) show that there is a long-term cointegration relationship and positive influence of Sukuk on economic growth, on the other hand, in the short term, the Sukuk variable has no effect. Furthermore, the results of research by Andiansyah et al. (2022) concluded through research in the short run sukuk show a negative impact with Indonesia's economic growth and meanwhile in the long run, government sukuk show a positive relationship with Indonesia's economic growth. Other

results conducted by Normasyhuri et al. (2022) show the issuance of SUN has a negative influence on economic growth when the economy is not doing well such as in the pandemic era because the government needs to increase foreign debt and interest which then burdens the state budget while SBSN shows a positive influence because of its strategic function by expanding the base in the Islamic financial market with investor diversification. Andriza et al. (2021) research explains that the findings that show the positive effect of sukuk on economic growth are in line with Keynes' theory which states that investment plays a role in the process of economic growth because it generates income and enlarges the production capacity of the economy through increased capital.

On the other hand Alimuddin et al. (2020) found that although SBSN is growing rapidly and supporting the financial inclusion program, the contribution of SBSN to development financing is still low as seen from the data on the portion of SBSN issuance in Indonesia which is relatively very small when compared to SUN.

Hence, through the analysis in this study, Indonesia or other countries that implement a dual financial system can develop the Islamic financial sector, one of which includes the Islamic banking sector and Sukuk in the short and long term. The purpose of this study is to explain the significant relationship between the banking sector and sovereign retail bonds on economic growth in Indonesia through conventional and sharia instruments. This research is expected to provide useful information and empirical evidence on developing the banking and obliges / Sukuk markets in Indonesia.

Relationship among Variables
Financing of Islamic Commercial Banks on Economic Growth
The banking sector has an intermediary role that facilitates the storage and collection of funds from surplus units to be channeled through the deficit unit's financing mechanism as business capital. The more funds are collected and distributed, the assumption is that the economy will grow and strengthen. In other words, the banking sector has played its role effectively as an intermediary financial institution. The relationship between the two is also explained by Anggraini (2019) state that total Islamic banking financing is connected to the real sector in the economy as measured by GDP and capital formation (GFCF). This is inconsistent with the results of research by Gani & Bahari (2021), which concluded that in the short-term Islamic bank financing in the Malaysia it covers 20 years is not significantly correlated with economic growth and capital accumulation is positively and significantly correlated with economic growth. Meanwhile in the long-term Islamic bank financing is positively and significantly correlated with economic growth and efficient productivity of capital accumulation influences the economic growth.
H1. Total BUS Financing affect GDP positively in the short and long term

Growth of Sukuk on Economic Growth
Sukuk issued by the government is intended to finance the state budget deficit. Sukuk plays a role in infrastructure development and the provision of goods and services for public needs such as education, health and state security, most of which are government projects that can be a driver of economic growth (Ilmia, 2020). Therefore, the greater the issuance of sovereign Sukuk, the financing of the government spending deficit and government projects will increase, and in the end, it will have an impact on economic growth. (Yıldırım et al., 2020) through his research entitled "Does Sukuk market development promote economic growth?" using the Sukuk market

development can be measured through the issuance of annual Sukuk (annual Sukuk export) in each country. The results of these studies indicate that Sukuk only affects economic growth in the long run, on the contrary, it does not affect it in the short term. Another case with Aristawidya & Fitria (2022) concluded that the collection of investment funds (nominal issued) on SBSN has a not effect on Indonesia's economic growth in the short and long-term. The nominal outstanding Sukuk has been used by (Abrorov, 2020) In his research as a proxy for Sukuk growth.

H2. Outstanding SR affects the GDP positively in the short and long term

RESEARCH METHOD

This study a quantitative research using of the Auto Regressive Distributed Lag (ARDL) approach to figure out the effect on the short and long-term of Islamic banks and sukuk on economy growth in Indonesia, where all the data is analyzed using through Dickey Fuller-Generalized Least Square (DF-GLS) analysis, Lag-Length Test, Auto-Regressive Distributed Lag (ARDL). For this research uses secondary data, time-series data, a quarterly nominal scale in the period Q1 2009 to Q3 2019 which is taken through a report on the official website of the Central Statistics Agency (www.bps.go.id), Directorate General of Financing and Risk Management (DJPPR), Ministry of Finance (djppr.kemenkeu.go.id), and the Financial Services Authority (ojk.go.id). This study's sampling technique is total sampling method.

There are two types of variables used in this study, namely the independent variable (exogenous) and the dependent variable (endogenous). The exogenous variables in this study consisted of total financing (TFIN) (X1) and Outstanding Retail Sukuk (SR) (X2). While the endogenous variables in this study use economic growth (GDP) (Y). All variables have been converted into natural logarithms.
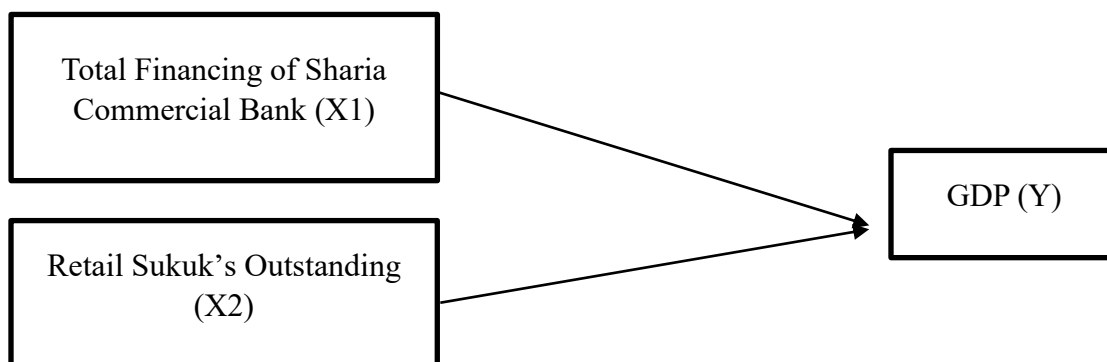
Figure 2.
Research Conceptual Framework

Table 1.
Data's explanation

Variable	Description	Notation	Source
Economic Growth (Y)	GDP per capita by field of business at constant prices of 2000 and 2010 series in IDR	GDP	Cenral Bureau of Statistics (BPS)
Total Financing of Sharia Commercial Banks (X1)	The annual amount of financing disbursed by Sharia banking	TFIN	Sharia Banking Statistics (SPS) of Financial Services Authority (OJK)
Retail Sukuk's Outstanding (SR) (X2)	Number of retails Sukuk that are due	SR	DJPPR, the Ministry of Finance

The factors that influence economic growth described by the following functions:

$$GDP = f(TFIN, SR)$$

$$GDP_t = f(\beta_0 + \beta_1 TFIN_t + \beta_2 SR_t + \mu_t)$$

Where:

GDP : Gross Domestic Product

TFIN : Total Financing of Sharia Commercial Banks

SR : Outstanding Sukuk Ritel

T : Time series

β_0 : Intercept

$\beta_1, \beta_2, \beta_3$: Regression coefficient

μ : Error term

RESULT AND DISCUSSION

Based on the research objective to see the short and long-term effects of TFIN and SR on GDP, the Auto Regressive Distributed Lag (ARDL) method was chosen to be used in this study. In the first stage, the stationarity test or unit root test will be carried out with the Dickey-Fuller-Generalized Least Square (DF-GLS) test because it has more strength than the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests.

Table 2 shows the results of the unit root test using the DF-GLS test. The critical value for rejecting the hypothesis of a unit root is presented in Table 3. The test results show that the GDP variable is stationary at the level or I (0) level, while the TFIN and SR variables are stationary at the 1st difference or I (1). After passing the stationarity test stage, it can be concluded that all of

the research variables do not contain unit roots. Due to the difference in order between the two variables, the Auto Regressive Distributed Lag (ARDL) technique is appropriate to do

Table 2.
DF-GLS test

Variable	Level/I(0)	1st Difference/I(1)
GDP	2.509184	
TFIN	-0.069476	-3.424994
SR	0.169952	-2.589523

Source: processed data

Table 3.
Critical Value for Unit Root Test

Significance Level	Level	1st Difference
10%	-1.611469	-1.611824
5%	-1.949856	-1.949097
1%	-2.627238	-2.622585

Source: processed data

After ensuring that all variables are stationary, the next step is to perform the Lag Length test. The test results as listed in Table 4 using the LR, FPE, AIC, and HQ criteria indicate that the optimal lag chosen is lag 4.

Table 4.
Lag Length Test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	115.0731	NA	5.51E-07	-5.898586	-5.769303	-5.852588
1	182.6739	120.9699	2.53E-08	-8.982839	-8.465707*	-8.798847
2	195.9288	21.62629	2.04E-08	-9.206777	-8.301795	-8.884792
3	209.5797	20.11719	1.64E-08	-9.451564	-8.158733	-8.991585
4	223.2981	18.05053*	1.34e-08*	-9.699901*	-8.019221	-9.101928*

Source: processed data

Table 5.
ARDL / Bound Cointegration Test

Test Statistic	Value	Sig.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	0.298837	10%	3.17	4.14
k	2	5%	3.79	4.85
		2.5%	4.41	5.52
		1%	5.15	6.36

Source: processed data

If the F statistic is greater than the critical value I (1) then reject H0, meaning that there is cointegration or a long-term relationship between variables. Table 5. Shows the results of the cointegration test with the Bound test, where the F-statistic value is smaller than the critical value I (1) (0.298837 <4.85), meaning that in the long run there is no cointegration relationship. Therefore, the analysis will be continued by testing long-term relationships using the Ordinary Least Square (OLS) method.

Table 6.
Short Term Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.011577	0.006355	1.821743	0.0805
D(GDP(-1))	-0.011369	0.032167	-0.353445	0.7267
D(GDP(-2))	-0.006519	0.034622	-0.188284	0.8522
D(GDP(-3))	0.044577	0.035670	1.249729	0.2230
D(GDP(-4))	0.015779	0.034635	0.455592	0.6526
D(TFIN(-1))	0.030089	0.148643	0.202426	0.8412
D(TFIN(-2))	-0.140997	0.148974	-0.946457	0.3530
D(TFIN(-3))	0.333214	0.140741	2.367561	0.0260
D(TFIN(-4))	-0.021268	0.117041	-0.181717	0.8573
D(SR(-1))	0.023936	0.033416	0.716283	0.4805
D(SR(-2))	0.013793	0.032429	0.425321	0.6742
D(SR(-3))	-0.090400	0.034402	-2.627780	0.0145
D(SR(-4))	-0.095560	0.033894	-2.819402	0.0093
R-squared	0.545128	Mean dependent var		0.014211
Adjusted R-squared	0.326790	S.D. dependent var		0.028057
S.E. of regression	0.023021	Akaike info criterion		-4.439351
Sum squared resid	0.013249	Schwarz criterion		-3.879125
Log likelihood	97.34768	Hannan-Quinn criter.		-4.240027
F-statistic	2.496712	Durbin-Watson stat		1.777121
Prob(F-statistic)	0.025906			

Source: processed data

Table 6 provides an overview of the effect between variables in the short term simultaneously and partially. It can be seen that GDP is only positively and significantly affected by TFIN in the 3rd lag positively, on the contrary, it is negatively affected by SR in the 3rd and 4th lags, meaning that an increase in TFIN in a quarter will increase GDP in the following three quarters by 0.33%, and an increase in the SR will decrease GDP in the three quarters and the following four quarters by 0.090% and 0095%, respectively.

The Influence of Islamic Bank Financing on Economic Growth

Based on the results of the cointegration test between TFIN and GDP in Table 5, it can be seen that there is no long-term co-integration relationship between Islamic Bank Financing on Economic Growth. The research conducted by Gani & Bahari (2021) also concludes that Islamic bank inidices in the short-run show a non-significant but in the long term Islamic bank financing has effect significantly and contribute on economic growth in Malaysia. Other results conducted by Andiansyah, Hanaf, et al. (2022) and Afandi & Amin (2019) show that Islamic banking financing does not affect Indonesia's economic growth. In other words, the existence of Islamic banking in Indonesia has not a significant impact on the welfare of the Indonesian civilization. Some of this research contradicts Setiawan (2021), Anggraini (2019), and Supriani et al. (2021) which state that there is a significant long-term relationship between Islamic banking and GDP. However, in the short term, based on this analysis and the studies mentioned above, there is a similarity in terms of the degree of effect between the total sharia funding on Indonesia's GDP.

There is a difference in results in the long term because in this study the indicators of Islamic banking include total assets, total financing, total deposits, FDR, NPF, number of employees, etc. On the other hand, this study only focuses on the total financing of Islamic banking. Furthermore, this study shows that there is an effect in the short term in Table 6, namely TFIN at lag 3 has a significant positive effect on GDP with a probability of 0.0260 <0.05, an increase of one TFIN unit in a quarter will increase GDP in the following three quarters by 0.33%. There is a possibility that this small influence is due to the market share of Islamic banks (6.18%) as of June 2020, which is still far behind compared to conventional banks (93.82). Specifically, the financing channeled by Islamic banks has not made a big positive contribution to Indonesia's economic growth. Therefore, in order to increase the distribution of financing, Islamic banks must increase their sources of funding or third-party funds. However, it is proven that an increase in the distribution of financing to Islamic banks will increase the real sector and impact the increase in Indonesia's GDP (Supriani et al., 2021).

Furthermore, the Financing to Deposit Ratio (FDR), or the ratio of financing to third party funds, in Islamic Banking as of 2019 has only reached 77.91%. Conversely, the Loan to Deposit Ratio (LDR) in conventional banking has reached 94.43%. The difference of around 17% has an impact on the small contribution of Islamic banking to economic growth. Therefore, policymakers should support Islamic banking in channeling financing to the public, one of which is by collaborating between agencies or ministries in encouraging economic activity, especially in the MSME sector in procuring funds. The existence of a three-bank sharia bank merger policy which is rumored to be completed in 2021 is expected to increase the market share of sharia repair in Indonesia. The existence of the merger phenomenon of three Islamic banks in Indonesia provides new hope for Islamic banking to have domestic competitiveness in the global market and make the best contribution to economic development (Putri, 2020). However, education and outreach must be improved and disseminated to all levels of society to support the growth of Islamic banks in the archipelago.

The Effect of Retail Sukuk Outstanding on Economic Growth

In the short term as presented in Table 6, SR at lag 3 and 4 has a significant negative effect on GDP with probability values of 0.0145 and 0.0093, respectively, where the two p-values are smaller than the critical value of 0.05 which can reject H0. A significant negative effect was seen

on SR at lag three and four with coefficients of 0.090400 and 0.095560, respectively. This means that an increase in retail Sukuk outstanding in a quarter will reduce GDP by 0.09% in the following three quarters, and as much as 0.066% of GDP in the following four quarters. The GDP decline response to the SR movement does not occur immediately but requires a time lag of at least three quarters, this is because retail Sukuk is an investment in projects carried out in the medium-term which takes about three years.

This study supports the previous study conducted by Al Fathan & Arundina (2019) namely that Indonesia's GDP responds negatively to shocks to Sukuk, because Sukuk in Indonesia is dominated by sovereign Sukuk as a source of long-term financing and aims to cover the budget deficit. In addition, the findings in this study are also in accordance with Andiansyah, Hanaf, et al. (2022) who examined the effect of Sukuk and GDP with the conclusion that Sukuk has a significant negative effect on GDP in the short term, on the contrary, in the long term Sukuk shows a significant positive effect on GDP. The investor's decision to invest in Sukuk, especially project-based Sukuk, which takes a long time to become productive, can reduce Indonesia's GDP.

On the contrary, the results of this study contradict Andiansyah, Hanaf, et al. (2022) who state that Sukuk not only affects GDP in the short term but also in the long term. The findings in this study also contradict Kartini & Milawati (2020) and Yıldırım et al (2020) who concluded that Sukuk only affects in the long term and has no effect in the short term on economic growth. Cupian, Arie, & Hasanah (2020) asserted that the optimization of Sukuk funds should be increased for economic growth both from government and corporate Sukuk funds such as by channeling through infrastructure projects. Throughout in 2018, the total issuance of SBSN reached Rp. 213.89 trillion, there was an increase in 2019 of 17.20% with a total issuance of Rp. 258.31 trillion (Ilmia, 2020). Through the results of the bound cointegration test in Table 5, it is concluded that outstanding Retail Sukuk does not have a long-term effect on GDP. The significant negative influence of SR on GDP is also motivated by the issuance of SR which is still relatively new because it was only issued in 2009, especially since the nominal amount of issuance in Retail Sukuk is low when compared to Sukuk in other categories and Government Bonds.

Therefore, the government and the private sector need to increase the issuance of Retail Sukuk to make the investment volume can increase, and consequently the hope is that increasing the issuance and purchase of Retail Sukuk it will encourage economic growth in Indonesia. For retail investors, ORI and SR can be options in investing because they are declared zero risk. After all, all risks are borne by the government. In addition, the objective of this investment is clear, namely financing the state budget deficit and funding government projects in various fields, such as infrastructure, education, health, and so on. Especially in a country with the largest Muslim population in Indonesia, retail Sukuk as a state financing instrument should be encouraged aimed to maximize domestic funding and investment. Researchers argue that education and socialization regarding Retail Sukuk are still not comprehensive and have reached the older generation, it appears that millennials still dominate the majority of investors.

Overall, this research requires further development, especially in the addition of the variables under study, such as by including the growth of the Islamic capital market and other macroeconomic variables. Besides that, other analytical methods can be used to study the same object such as VAR, VECM, GMM, and so on.

CONCLUSION

Islamic financial instruments have an important role in the Indonesian economy, the banking sector with its contribution to GDP reaching more than half of Indonesia's GDP, namely 55.01%, by the end of 2019, deserves special attention from the government as a regulator and policymaker, the private sector, and society at large. In addition, one of the state's investment instruments in the form of sharia government securities (SBSN/Sukuk) also assists the government in terms of financing which is ultimately aimed at growing the country's economy. Retail Sukuk as a type of SBSN is a unique instrument issued by Indonesia that is traded specifically for individual Indonesian citizens. Research on retail Sukuk quantitatively is still relatively small, because most of the research only examines the qualitative aspects, on the other hand, empirical studies are important to do. The results of this study indicate that total Sharia Bank financing (TFIN) and outstanding Retail Sukuk (SR) do not have a long-term cointegration relationship, and only have an effect in the short term. The short-term test results using the OLS method show that TFIN at the third lag has a significant positive effect on GDP. Meanwhile, the SR at the 3rd and 4th lags has a significant negative effect on GDP. This means that an increase in a TFIN quarter will increase GDP in the next three quarters by 0.33%, and an increase in one SR quarter will reduce GDP in the next three quarters by 0.09% and in the next four quarters by 0.095%. With this, the authors provide input to policymakers, in this case, the government, to encourage the growth of Islamic banks by collaborating or encouraging people to save their funds in Islamic banks. As for retail Sukuk, the public can be given socialization which will lead to this instrument's presence as an investment by helping the country work hand in hand.

Moreover, the study's implications are expected to be useful for various parties. First, the government as a policymaker can use this research as consideration for determining deposit rates or yields on Islamic deposits, to state bond coupons to attract investment among the public. Second, it can also be used as a reference for further research on the banking sector, government bonds, and economic growth. Finally, for investors as a surplus unit, it can be considered. However, it is essential to acknowledge certain limitations in the research, Researchers only examined the Islamic banking sector, specifically highlighting financing in Islamic banking and SR's development on GDP. Dynamics broader economic impacts of Islamic financial instruments are not thoroughly explored. Future research could delve into the long-term relationships and effects on economic indicators beyond GDP.

REFERENCES

Abrorov, S. (2020). The Importance of Sukuk in The Development Of Economy: As an Example Of Its Impact on The Income of The Malaysian Population. *Journal of Critical Reviews*, *7*(2), 776–780. https://doi.org/10.31838/jcr.07.02.142

Adamsah, B., & Subakti, G. E. (2022). Perkembangan Industri Halal Terhadap Pertumbuhan Ekonomi Manusia. *Indonesian Journal of Halal*, *5*(1), 71–75. https://doi.org/10.14710/halal.v5i1.14416

Afandi, M. A., & Amin, M. (2019). Islamic Bank Financing and Its Effects on Economic Growth: A Cross Province Analysis. *Signifikan: Jurnal Ilmu Ekonomi*, *8*(2), 243–250. https://doi.org/10.15408/sjie.v8i2.10977

Al Fathan, R., & Arundina, T. (2019). Finance-Growth Nexus: Islamic Finance Development in

Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, *12*(5), 698–711. https://doi.org/10.1108/IMEFM-09-2018-0285

Alafif, W. M. S., & Shaheen, R. (2021). An Empirical Evaluation of The Impact of Islamic Financing on Economic Growth in Saudi Arabia. *Palarch's Journal of Archaeology of Egypt/Egyptology*, *18*(13), 499–509.

Alimuddin, Putri, N. A., & Nurleni. (2020). Analysis of Government Development Financing between Sukuk and Bonds. *IOP Conference Series. Earth and Environmental Science*, 1–18. https://doi.org/10.1088/1755-1315/473/1/012073

Andiansyah, F., Hanaf, S. M., Haryono, S., & Wau, T. (2022). The Influence of Islamic Financial Instruments On Indonesia's Economic Growth: An Autoregressive Distributed Lag Approach. *Al-Amwal : Jurnal Ekonomi Dan Perbankan Syari'ah*, *14*, 246–262. https://doi.org/10.24235/amwal.v%vi%i.11826

Andiansyah, F., Hanafi, S. M., Haryono, S., & Wau, T. (2022). Pengaruh Instrumen Keuangan Syariah Terhadap Pertumbuhan Ekonomi Indonesia. *Al-Masraf (Jurnal Lembaga Keuangan Dan Perbankan)*, *7*(1), 69–86.

Andriza, D. R., Kaban, R. F., & Widjaja, H. S. (2021). The Effect of Corporate Sukuk and Sharia Mutual Funds on Economic Growth In Indonesia. *Gorontalo Development Review*, *4*(2), 111–123. https://doi.org/10.32662/golder.v0i0.1740

Anggraini, M. (2019). Islamic Banking Development and Economic Growth: a Case of Indonesia. *Asian Journal of Islamic Management (AJIM)*, *01*(01), 51–65.

Anwar, M. S., Junaidi, Salju, Wicaksono, R., & Mispiyanti. (2020). Islamic Bank Contribution to Indonesian Economic Growth. *International Journal of Islamic and Middle Eastern Finance and Management*, *13*(3), 519–532. https://doi.org/10.1108/IMEFM-02-2018-0071

Aristawidya, N., & Fitria, A. (2022). Pengaruh Dana Investasi Melalui Instrumen SUN dan SBSN Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Ilmu Dan RIset Akuntansi*, *11*(8), 1–15.

Badan Pusat Statistik. (2020). *Produk Domestik Bruto (Lapangan Usaha)*. Bps.Go.Id.

Buchholz, K. (2020). *China Could Overtake The US as The World's Largest Economy by 2024*. World Economic Forum. https://www.weforum.org/agenda/2020/07/largest-global-economies-1992-2008-2024/

Cupian, Arie, F., & Hasanah, A. (2020). Perkembangan Sektor Keuangan Islam dan Pertumbuhan Ekonomi: Studi Empiris Negara OKI. *Al-Tijary:Jurnal Ekonomi Dan Bisnis Islam*, *6*(1), 1–15. https://doi.org/10.21093/at.v6i1.2371

DinarStandard. (2020). *State of the Global Islamic Economy Report: Thriving in Uncertainty*. DinarStandard.

Elmawazini, K., Khiyar, K. A., & Aydilek, A. (2020). Types of Banking Institutions and Economic Growth. *International Journal of Islamic and Middle Eastern Finance and Management*, *13*(4), 553–578. https://doi.org/10.1108/IMEFM-09-2018-0304

Gani, I. M., & Bahari, Z. (2021). Islamic Banking's Contribution to The Malaysian Real Economy. *ISRA: International Journal of Islamic Finance*, *13*(1), 6–25. https://doi.org/10.1108/IJIF-01-2019-0004

Ganti, A. (2020). *Nominal Value: What It Means, Formulas for Calculating It*. Investopedia. https://www.investopedia.com/terms/n/nominalvalue.asp

Hafsa, Y., & Oumaima, B. (2021). An Overview Of Sukuk Issuance and Their Contribution in Economic Empowerment. *AZKA International Journal of Zakat & Social Finance (AZJAF)*,

2(1), 33–48. https://doi.org/10.51377/azjaf.vol2no1.42

Hamadi, H., & Awdeh, A. (2020). Banking Concentration and Financial Development in The MENA Region. *International Journal of Islamic and Middle Eastern Finance and Management*, *13*(4), 675–689. https://doi.org/10.1108/IMEFM-03-2019-0097

Hamadou, I. (2022). Islamic Banking System and Economic Growth: Exploration of D-8 Countries. *Muslim Business and Economic Review*, *1*(1), 131–151. https://doi.org/10.56529/mber.v1i1.32

Ilmia, A. (2020). Sukuk Negara dan Pembangunan Infrastruktur di Indonesia. *Finansha: Journal of Sharia Financial Management*, *1*(2), 22–34. https://doi.org/10.15575/fsfm.v1i2.10761

Jalil, A. (2019). Obligasi Dan Sukuk dalam Perspektif Keuangan Islam. *At-Tawazun*, *7*(2), 130–149.

Kamarudin, A. A., & Kassim, S. (2022). Islamic Banking Sector Development and Economic Growth: Empirical Evidence from Malaysia. *International Journal of Economics, Management and Accounting*, *30*(2), 451–480. https://doi.org/10.31436/ijema.v30i2.974

Kartini, E., & Milawati. (2020). How Sukuk and Conventional Bond Affect Economic Growth? Evidence from Indonesia. *International Journal of Economics and Financial Issue*, *10*(5), 77–83.

KNEKS. (2018). *Masterplan Ekonomi Syariah Indonesia 2019-2024*. Komite Nasional Ekonomi dan Keuangan Syariah (KNEKS).

Kurniawan, P. H., Dompak, T., & Tampubolon, R. P. (2019). Kedigdayaan Produk Domestik Bruto: Aspek Sejarah dan Popularitas di Masa Depan. *Dialektika Publik*, *3*(2), 38–45.

Ledhem, Mohammed Ayoub Mekidiche, M. (2020). Economic Growth and Financial Performance of Islamic Banks: A CAMELS Approach. *Islamic Economic Studies*, *28*(1), 47–62. https://doi.org/10.1108/IES-05-2020-0016

Mohamad, M. T., & Saeed, M. (2019). Does Inter-Bank Investments Restraints Financing Performance of Islamic Banks? In *Advanced Methodologies and Technologies in Business Operations and Management* (pp. 46–60). IGI Global. https://doi.org/10.4018/978-1-5225-7362-3.ch003

Muharam, H., Anwar, R. J., & Robiyanto. (2019). Islamic Stock Market and Sukuk Market Development, Economic Growth, and Trade Openess (The Case Of Indonesia dan Malaysia). *Verslas: Teorija Ir Praktika / Business: Theory and Practice*, *20*, 196–207. https://doi.org/10.3846/btp.2019.19

Narayan, P. K. (2004). Reformulating Critical Values For The Bounds F-Statistics Approach to Cointegration: An Application to The Tourism Demand Model For Fiji. *Journal Contribution*. https://doi.org/10.4225/03/5938abda7b4ab

Normasyhuri, K., Budimansyah, & Triyadi, E. (2022). No Dampak Penerbitan Surat Utang Negara (SUN) dan Surat Berharga Syariah Negara (SBSN) Pada Pertumbuhan Ekonomi Indonesia Era Pandemi Covid-19: Tinjauan Ekonomi Islam. *JIEI: Jurnal Ilmiah Ekonomi Islam*, *8*(1), 688–698.

Pradhan, R. P., Arvin, M. B., Norman, N. R., & Bahmani, S. (2020). The Dynamics of Bond Market Development, Stock Market Development and Economic Growth. Evidence From The G-20 Countries. *Journal of Economics, Finance and Administrative Science*, *25*(49), 119–147. https://doi.org/10.1108/jefas-09-2018-0087

Putri, R. D. (2020). *Merger Tiga Bank BUMN Syariah Ditargetkan Rampung Februari 2021*.

Tirto.Id. https://tirto.id/merger-tiga-bank-bumn-syariah-ditargetkan-rampung-februari-2021-f5Ud

Rizvib, S. A. R., Narayan, P. K., Sakti, A., & Syarifuddin, F. (2020). Role of Islamic Banks in Indonesian Banking Industry: an Empirical Exploration. *Pacific-Basin Finance Journal*, *62*, 1–10.

Saeed, M. Y., Hamid, K., Rehman, M. A. U., & Nazam, M. (2020). Islamic Financial Development and Economic Growth of Emerging Economy of Pakistan; a Panel Data Approach. *Journal of Business and Social Review in Emerging Economies*, *6*(1), 197–208. https://doi.org/10.26710/jbsee.v6i1.1039

Santoso, F., & Artha, B. (2021). Pengaruh Ekspor Terhadap Gross Domestic Product (Studi Kasus Pada Negara-Negara Islam). *JEMES: Jurnal Ekonomi Manajaemen Dan Sosial*, *4*(2), 10–22.

Setiawan, I. (2021). Pembiayaan UMKM, Kinerja Bank Syariah dan Pertumbuhan Ekonomi di Indonesia. *Islamic Banking: Jurnal Pemikiran Dan Pengembangan Perbankan Syariah*, *6*(2), 263–278. https://doi.org/10.36908/isbank

Sukmana, R. (2020). A Critical Assessment of Retail Sovereign Sukuk in Indonesia. *Qualitative Research in Financial Markets*, *12*(2), 243–262. https://doi.org/10.1108/QRFM-10-2018-0109

Supriani, I., Fira, B. A., Fauziah, N. N., & Maulayati, R. R. (2021). Revisiting the Contribution of Islamic Banks' Financing to Economic Growth: The Indonesian Experience. *Shirkah: Journal of Economics and Business*, *6*(1), 18–37. https://doi.org/10.22515/shirkah.v6i1.383

Tabash, M. I., Abdulkarim, F. M., Akinlaso, M. I., & Dhankar, R. S. (2022). Islamic Banking and Economic Growth: Fresh Insights from Nigeria using Autoregressive Distributed lags (ARDL) Approach. *African Journal of Economic and Management Studies*, *13*(4), 582–597. https://doi.org/10.1108/AJEMS-03-2021-0138

Trung, N. K. Q. (2021). Determinants of Bank Performance in Vietnamese Commercial Banks: An Application of The Camels Model. *Cogent Business & Management*, *8*(1), 1–35. https://doi.org/10.1080/23311975.2021.1979443

Wesiah, S., & Onyekwere, S. C. (2021). The Relationship Between Financial Development and Economic Growth in The United Kingdom: A Granger Causality Approach. *Quantitative Economics and Management Studies*, *2*(1), 47–71. https://doi.org/10.35877/454RI.qems258

Yıldırım, S., Yıldırım, D. C., & Diboglu, P. (2020). Does Sukuk Market Development Promote Economic Growth? *PSU Research Review*, *4*(3), 209–218. https://doi.org/10.1108/prr-03-2020-0011