Do Islamic Financial Instruments and Inflation Affect Indonesia’s Economic Growth?

Srie Shailla Meidhany
Fakultas Ekonomi dan Bisnis Islam IAIN Langsa
meidhany@ianlangs.ac.id

Early Ridho Kismawadi
Fakultas Ekonomi dan Bisnis Islam IAIN Langsa
kismawadi@ianlangs.ac.id

Zulkarnaini
Fakultas Ekonomi dan Bisnis Islam IAIN Langsa
zulkarnaini@ianlangs.ac.id

M. Irvanni Bahri
Universitas Airlangga
Correspondent m.vanni.bahri-2021@feb.unair.ac.id

Abstract
Economic growth is a rise in national revenue or output over a certain period, often one year. There are two approaches for determining income: income and cost. The Indonesian economy is supported by exports and investments, as well as high consumption, owing to its large population. Thus, government expenditure contributes significantly to the Indonesian economy. This study examined the impact of Sharia equities, sukuk, Sharia mutual funds, and inflation on economic growth. This quantitative study is based on secondary data collected between 2012 and 2021. Data analysis methods included multiple linear regression equations, t-tests, F test, and coefficient of determination (R²). The multiple linear regression equation test showed Sharia stocks, Sukuk, and Sharia mutual funds have positively influenced Indonesia’s economic growth inflation has a negative impact. The results of t-test indicated that Sharia stocks and inflation significantly affect Indonesia’s economic growth. However, Sukuk and Sharia mutual funds have no effect on Indonesia's economic growth. The results of the F test indicate that Sharia stocks, Sukuk, Sharia mutual funds, and inflation significantly influence Indonesia's economic growth. The results of the R² test indicate that Sharia stocks, Sukuk, Sharia mutual funds, and inflation may all be used to explain economic progress.

Keywords: Sharia Stocks, Sukuk, Sharia Mutual Funds, Inflation and Economic Growth

INTRODUCTION
Economic growth is one of the most important metrics for assessing a country's economic progress. Economic growth is a rise in aggregate national income or production over a specific period, generally one year. The income and expenditure methods are two ways of calculating national income. Exports and investments, as well as substantial consumption owing to the country's vast population, underpin the Indonesian economy. There is government expenditure, which is a major part of the Indonesian economy. Indonesia's exports remain stagnant owing to low global demand, and the investment side is still plagued by uncertainty (Andika, 2016).
Investment and inflation changed Indonesia's economic development from 2012 to 2021. Economic growth in Indonesia is remained around 5%, according to figures from the Indonesian Central Statistics Agency (BPS, 2020). The rise will come from various sources, including local and international investments and the inflation rate, which may be managed investment as a barometer of economic progress. The capital market movement can be considered an indicator of investment in sustaining the Indonesian economy. The conventional and Islamic capital markets are two capital-intensive sectors in Indonesia. The Islamic capital market is an essential factor in Islamic finance as support for Islamic banking, Islamic insurance, and other Islamic financial institutions (Aziz, 2010). The growth of Sharia products, such as Sharia shares, Sukuk, and Sharia mutual funds, reflects the growth of the Islamic capital market. Companies that need money to function have also contributed to capital market growth. Consequently, with its tools, the capital market may be a means for investors to profit from a company (Zulkarnain, 2020). Sharia shares are products available on the stock exchanges.

Sharia shares are evidence of ownership in a corporation that issues share and must fulfil Sharia issuer standards. According to the Financial Services Authority, Sharia shares will increase annually by 2021. This growth does not seem to be large, owing to a lack of public knowledge of the sharia-based capital market, which has discouraged investors from participating. This is attributable to the lack of socialisation by linked institutions (Bareks.com, 2019). As one of the instruments, Sukuk has an economic link because it is used to fund the construction of infrastructure projects. The issuing of state Sukuk in project finance is governed by the terms of SBSN (National Sharia Valuable Tribes) Law No. 19 of 2008 (Mardi, 2012). The Islamic financial sector is capable of long-term growth. It plays a significant role in the national economy, meeting public demand for Islamic financial goods and services and national development requirements, particularly infrastructure development. Furthermore, inflation can negatively influence economic growth. Inflationary pressures stifle economic development and progress (Sukirno 2015).

Economic development varied, although Sharia shares gained in quantity and index from 2012 to 2021, except for 2015, as did Sukuk, which climbed every year from 2012 to 2021, and mutual funds, which increased every year except 2015. Then, inflation peaked in 2013 but is expected to fall to 2.72 per cent the following year. Economic growth is predicted to improve in the future due to the three forms of investment in Sharia shares, Sukuk, and Sharia mutual funds, as well as lower inflation. Previous studies have found that Islamic stocks and mutual funds positively impact economic growth (Siregar, 2018) and (Rinanda, 2018). In contrast, other studies have found that Islamic stocks and mutual funds negatively impact economic growth (Kartika, 2019), as well as Rinanda's research findings.
Other studies have shown that Islamic mutual funds have a negative impact on economic development, stating that Islamic mutual funds have a negative impact on economic growth (Widodo, 2018; Irawan & Almaid, 2019). Previous research has discovered that Sharia shares, Sukuk, and Sharia mutual funds have a negative effect on economic growth in Indonesia, implying that increasing Sharia shares, Sukuk, and Sharia mutual funds can reduce economic growth. However, these shares are a source of capital for the business world. Due to the strong inflation in 2013 and 2014, investors may be less interested in investing because they are less rewarding. The economy continued to decrease, dropping from 2013 to 2015. Meanwhile, this research aims to see how Sharia shares, Sukuk, Sharia mutual funds, and inflation affect Indonesian economic development.

THEORETICAL BASIS

Investment

The desire for products and services to generate or grow future production capacity or revenue is an investment. Investment is the money spent on capital goods and production equipment to replace or add capital goods to the economy that will be used to generate products and services in the future (Sukirno, 2015).

According to Harrod-Domar, Keynes’s theory was developed by assigning investment a central role in economic development, particularly its dual character. First, investment generates revenue (i.e. the effect of investment demand). Second, investment boosts the economy's output capacity by increasing capital stock (the impact of investment supply) (Arsyad, 2010).

The Market for Sharia Capital

The Sharia capital market is a capital market based on the Sharia principle, in which every securities trade conforms to Sharia transaction regulations. The Islamic capital market is developing not only in Indonesia but also in neighbouring nations such as Malaysia. The Amanah Income Fund, created in June 1986 by members of The North American Islamic Trust in Indiana, United States of America, was the first institution to pay attention to running its portfolio using Islamic portfolio management in the Islamic market (Yuliana, 2010).

Shariah-Compliant Securities

Sharia shares are those in a corporation that follow Sharia standards. DES has a complete list of Sharia shares (Sharia Securities List). According to Sharia principles, equity involvement is carried out in enterprises that do not breach Sharia principles, such as gambling, usury, or the production of banned commodities. Sharia shares are regular stock with unique features, such as strict regulations over the halal scope of corporate activity. The Jakarta Islamic Index was released
by the PT Indonesia Stock Exchange and is a topic of the Jakarta Composite Index, which includes Sharia shares in its computation (Yuliana, 2010).

Market prices may be used to define stock prices. As the market price represents the price of a stock in the current market, it is the simplest price to calculate. The market price is the closing price when the stock market is closed. Consequently, market prices reflect a stock's ups and downs (Indarti and Purba, 2017).

**Sukuk**

Sukuk and Sharia bonds are financial products based on an underlying transaction or Sharia contract, which may be in the form of *ijarah* (lease), *mudarabah* (profit-sharing), *musyarakah*, or others (Sutedi, 2009).

**Sharia Mutual Funds are a kind of mutual fund based on Islamic**

Mutual money is used to gather funds from the investor community for further investment in securities portfolios by investment managers, according to Law No. 8 of 1995, addressing the capital market. Mutual Assets, as defined above, are venues where the general public may invest their money, with the funds being invested in a securities portfolio by the management, mainly the investment manager. A securities portfolio is a controlled collection (combination) of securities and instruments (Inggi, 2010).

**Inflation**

Inflation is a rise in commodity prices induced by a misalignment of commodity procurement system programs (production, pricing, printing money, etc.) with the community's level of income (Putong, 2010).

**Growth of the economy**

Economic growth may be defined as a rise in national income due to the addition of Gross Domestic Product (GDP). The fact that the community's real income increased over the prior period illustrates the effects of economic expansion's effects. GDP growth rate is a statistic used to estimate people's actual income. GDP is the market value of all commodities and services generated in an economy at a certain time (Mankiw, 2007).

**Picture 1. Framework**
METHODS

Secondary data from the Financial Services Authority (OJK) website and the Indonesian Central Statistics Agency website were used in this research (BPS). Secondary data are information gathered indirectly and published. Sharia shares, Sukuk, Sharia mutual funds, inflation, and economic development are among the statistics gathered. The classical assumption test, which includes the normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test (Setiawan, 2010), was used to analyse the data in this study (Ghozali, 2016). Additionally, a multiple linear regression test (Sugiyono, 2017).

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \]

Description:
\( Y = \) Economic growth
\( a = \) constant
\( X_1 = \) Sharia shares
\( X_2 = \) Sukuk
\( X_3 = \) Sharia mutual funds
\( X_4 = \) Inflation
\( b_1, b_2, b_3, b_4 = \) Koefisien regresi
\( e = \) error term

The hypothesis test comprises the t-test, F-test, and coefficient of determination (R2). R2 represents the regression equation's overall fluctuation in Y (dependent or independent variables).

Analysis and Discussion Results

Data from quarters 1-4 in 2012-2019 were evaluated, with a total of 32 data points. The following are the results of the classical assumption test on the 32 datasets.

Normalitas Test

![Picture 2. P-P Plot](image)
Table 1. One Sample Kolmogorov Smirnov Test

<table>
<thead>
<tr>
<th>Unstandardised Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal Parameters</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td>Absolute</td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
</tr>
<tr>
<td>Test Statistic</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Source: SPSS Output, 2021 (Processed Data)

Testing for normality using the normal P-P plot of the regression standardised residual graph shows that the plotting points of the data distribution are still on the diagonal line so that the assumption of normality for the residual value in the multiple linear regression analysis in this study can be fulfilled. Likewise, the one-sample Kolmogorov–Smirnov test obtained a significance value of more than 0.05, namely 0.191, and it can be stated that the assumption of normality is fulfilled.

Multikolinearitas Test

Table 2. Multikolinearitas Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.148</td>
<td>6.768</td>
</tr>
<tr>
<td>Sharia Stock Log</td>
<td>.156</td>
<td>7.961</td>
</tr>
<tr>
<td>Sukuk Log</td>
<td>.151</td>
<td>7.654</td>
</tr>
<tr>
<td>Sharia Mutual Fund Log</td>
<td>.414</td>
<td>2.418</td>
</tr>
<tr>
<td>Inflation Log</td>
<td>.414</td>
<td>2.418</td>
</tr>
</tbody>
</table>

Source: SPSS Output, 2021 (Processed Data)

The tolerance value of the multicollinearity test was greater than 0.1, and the variance inflation factor (VIF) was less than 10. According to these findings, all the independent variables, including Sharia shares, Sukuk, Sharia mutual funds, and inflation, show no signs of multicollinearity.
Heteroskedasticity Test

Picture 3. Scatterplot

Source: SPSS Output, 2021 (Processed Data)

The dots on the scatterplot do not form a single collection but are spread between the 0 points on the Y-axis. According to the figure, there was no heteroscedasticity in the study data. This signifies that there is no relationship between the amount of data and the residual, such that as the data becomes larger, the residual (error) does not grow.

Autocorrelation Test

The value of DW is obtained

\[ DW = 2.172(d) \]

\[ dl = 1.109 \text{ (derived from } n = 32, k =5) \]

\[ du = 1.818 \]

\[ (4-dl) = 2.891 \]

\[ (4-du) = 2.182 \]

\[ du < d < 4 – du, \text{ that is, } 1.818 < 2.172 < 2.182, \text{ indicates no positive or negative autocorrelation, and the analysis results are free from autocorrelation.} \]

Analysis of Multiple Regressions

The influence of the independent variable’s Islamic stocks, Sukuk, Islamic mutual funds, and inflation on the dependent variable of economic growth was investigated using multiple regression analysis. A regression model was created to test the study’s hypotheses. The findings of the multiple linear regression are as follows.

<table>
<thead>
<tr>
<th>Table 3. Multiple Regression Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Sharia Stock Log</td>
</tr>
<tr>
<td>Sukuk Log</td>
</tr>
</tbody>
</table>
The coefficients in column beta (B) of Table 3 represent the results of several regression equations, which are as follows:

$$\log Y = 4.146 + 0.559 \log X_1 + 0.065 \log X_2 + 0.005 \log X_3 - 0.074 \log X_4$$

When the variables of Sharia shares, Sukuk, Sharia mutual funds, and inflation are all set to zero, the constant 4.146 represents the value of economic growth. The Islamic stock variable had a regression coefficient of 0.559. With the premise that the variables of Sukuk, Sharia mutual funds, and inflation remain or do not change, it may be claimed that an increase in Islamic stock by one unit would improve economic growth by 55.9%. With the premise that the variables of Sharia shares, Sharia mutual funds, and inflation remain or do not change, the regression coefficient for the Sukuk variable of 0.065 may indicate that an increase in Sukuk by one unit would enhance economic growth by 6.5 per cent. For Islamic mutual funds, the regression coefficient was 0.005. A one-unit rise in Islamic mutual funds would improve economic growth by 0.5 per cent, provided that the variables of Islamic equities, Sukuk, and inflation remain constant. The inflation variable regression coefficient of -0.074 may be expressed as follows: a one-unit rise in inflation reduces economic growth by 7.4%, provided the variables of Islamic equities, Sukuk, and Islamic mutual funds remain unchanged.

**Test Hypothesis (T-Test)**

T count $> t$ table (2.899 $> 2.051$) and 5% (0.007 $> 0.05$) Sharia stock variables Ho are rejected, and Ha is approved, indicating that Islamic equities have a significant impact on economic development. The Sukuk variable achieved a t count t table (0.636 $> 2.051$) and t sig $> 5%$ (0.530 $> 0.05$), indicating that Ho is accepted, and Ha is rejected, suggesting that Sukuk has no meaningful influence on economic growth. The Sharia Mutual Funds variable received t-count t-table (0.062 $> 2.051$) and t-sig $> 5%$ (0.951 $> 0.05$) values, indicating that Ho is accepted, Ha is rejected, and Islamic mutual funds have no substantial impact on economic development. The inflation variable was produced using the t count t table (-1.423 $> 2.501$) and t sig 5% (0.033 $> 0.05$). H0 was rejected, whereas Ha was approved, indicating that inflation substantially impacted economic growth.

**Test hypothesis (F test)**

When the F count exceeds the F-table (5.837 $> 2.73$), and F-sig is less than alpha (0.002 $> 0.05$), the variables of Islamic stock, Sukuk, Islamic mutual funds, and inflation all have a substantial impact on the variable of economic growth. Consequently, it may be argued that the regression model can forecast economic growth.
Test of Determination Coefficient ($R^2$)

The coefficients of determination ($R^2$) are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.681*</td>
<td>.464</td>
<td>.384</td>
<td>.32922</td>
</tr>
</tbody>
</table>

Source: SPSS Output, 2021 (Processed Data)

The coefficient of determination ($R^2$) was 0.384 or 38.4% in the Adjusted R Square column (used because there were more than two independent variables). This indicates that the variables Sharia shares, Sukuk, Sharia mutual funds, and inflation may explain 31.6% of the economic growth variable, with the remaining 61.6% explained by factors not included in the model.

DISCUSSION

The Impact of Sharia Stocks on the Economy

According to the results of several linear regression equations and a t-test, Islamic stocks considerably impact Indonesia's economic growth (partial test). Each portion of a company's sharia must be enlarged to impact its economic growth. The rising number of Islamic equities demonstrates public interest in them, maybe a source of revenue for investors and can influence the economy or economic growth. According to other findings released by Radjak (2020), Islamic stocks have no substantial impact on national economic development. Changes in stock prices affect Islamic stock income, which may also affect economic development.

Sukuk's Impact on Economic Growth

Several linear regression equations and a t-test revealed that Sukuk has a positive but not statistically significant impact on economic growth in Indonesia (partial test). This indicates that investors are interested in Sukuk or Islamic bonds, which comprise a portion of a firm’s capital. In 2021, the outstanding value of Sukuk was $29.829 billion, appealing to investors. Sukuk plays a significant role in financing large-scale projects by providing funds and bolstering local capital markets. Consequently, Sukuk financing could probably be utilised to support and finance projects promoting economic development. Sukuk do not contribute to economic growth since the number of Sukuk issued must be raised for them to be relevant. According to Asiyah, B. N., Aini, I. N., Mahardika, R. P and Laili, L. N. (2020), Sukuk are a source of funding for the government to finance development, thereby generating long-term employment opportunities for the community. As a result of the effects of COVID-19, Sukuk provides liquidity advantages to Islamic financial institutions and investment possibilities for the community.
The Impact of Sharia Mutual Funds on the Economy

According to the findings of multiple linear regression equations and the t-test, Islamic mutual funds have a favourable but not significant influence on economic development in Indonesia (partial test). This implies that Sharia mutual funds are an investment option for businesses and may assist them in increasing capital and competitiveness. Sharia mutual funds are also significant in the national economy, as they help to address public demand for Sharia financial sector goods and services, as well as national development demands, particularly infrastructure development. Sharia mutual funds are insignificant for economic development because their number must grow again for economic growth to occur. Andriza, D. R., Kaban, R. F., and Widjaja, H. S. (2021) described the connection between the direction of change in Sharia mutual funds and unidirectional economic development. This conclusion is consistent with the current theory presented by Todaro and Sulistiawati (2012), they state that investment plays a crucial role in the economic life of a country since capital creation or investment boosts capacity, output, and national revenue. Sharia-compliant mutual funds are among the investing vehicles. If the value grows, economic growth will likewise increase. The findings of this study are consistent with Nur's (2016) finding that Islamic mutual funds have a favourable, but not statistically significant, influence on economic growth.

Inflation's Impact on Economic Growth

According to the findings of the multiple linear regression equations and the t-test, inflation has a negative and substantial influence on economic growth in Indonesia (partial test). This indicates that high inflation rates may generate economic disruptions, such as higher costs of commodities, particularly industrial resources, and enterprises would cut output due to lower demand for their products, eventually affecting economic growth. Salim, Fadilla, and Purnamasari (2021) find that an unanticipated economic event occurred in Indonesia, namely inflation that occurred in 2020, specifically inflation that rose owing to the COVID-19 pandemic that struck Indonesia, which affected the economy. The increase in the prices of gasoline and basic commodities, the reduction in consumer interest, and the rise in unemployment in Indonesia are all contributing factors. The greater the inflation rate in Indonesia, the greater its impact on economic growth. Looking at the data, the inflation rate in Indonesia between 2016 and 2020 was still within the usual range and might still present the Indonesian government with a chance to strengthen its economy.
Economic Growth and the Impact of Sharia Stocks, Sukuk, Sharia Mutual Funds, and Inflation

Based on the F-test, Islamic stocks, Sukuk, Islamic mutual funds, and inflation significantly affect Indonesia's economic growth (simultaneous test). This shows that if Sharia share, Sukuk, Sharia mutual funds, and inflation continue to increase, Indonesia's economic progress will be faster, and the public will feel the benefits. Inflation, Islamic stocks, Sukuk, and Islamic mutual funds have a large and positive effect on national economic growth. According to Fadila (2019), Islamic stocks, Sukuk, and mutual funds positively affect national economic growth.

CONCLUSION

The increasing number of Islamic equities shows public interest, can generate income for investors, and can affect the economy or economic growth. By 2021, the value of outstanding Sukuk will be $29.829 billion, which is attractive to investors. Stock price changes affect Islamic shares' income, which may also affect economic development. Sharia mutual funds also play an important role in the national economy because they help meet the public's need for goods and services in the Islamic financial sector, as well as the needs of national development. Sharia mutual funds are not significant for economic development because the number must increase again for economic growth. This study's findings align with those of Nur (2016) that Islamic mutual funds have a beneficial but not statistically significant effect on economic growth. High inflation rates can cause economic disruptions, such as higher commodity costs and cutting production, resulting from lower demand for their products. An unexpected economic event occurred in Indonesia. Namely, inflation occurred in the year due to the COVID-19 pandemic that hit Indonesia, which impacted the economy. Based on the simultaneous test of Sharia shares, Sukuk, Sharia mutual funds, and inflation significantly affect Indonesia's economic growth.

In Indonesia, the number of mutual funds for Sukuk and sharia should be increased to boost economic development. The Indonesian government should keep inflation under control since excessive inflation may stifle growth.

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