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# Examining the impact of *zakah* and Islamic finance on national economic growth

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## Abstract

**Purpose** – This study aims to analyze the effect of Islamic financial instruments, including social funds zakah, infak, and sadaqah (ZIS), Islamic financing, Sharia stocks, and corporate sukuk, on economic growth.

**Methodology** – This study uses monthly data from 2013 to 2022 to examine the relationship between ZIS distribution, Islamic bank financing, Islamic stock capitalization, corporate sukuk issuance, and economic growth proxied by the production industry index (IPI). The Vector Error Correction Model (VECM) was utilized.

**Findings** – According to the short-term estimation results, sukuk significantly hinders economic growth, whereas only the ZIS variable has a positive and significant impact. Long-term economic growth is positively impacted by the ZIS and Islamic financing variables, negatively impacted by sukuk, and not significantly impacted by Sharia stock. The Impulse Response Function and Variance Decomposition analysis results also demonstrate that the variables of the Islamic financial sector have a shock effect on Indonesia's economic growth, with ZIS funds making up the majority of the contribution and Sharia stocks the least.

**Implications** – This study will help policymakers, industry, and academia accelerate the Islamic finance sector in Indonesia and strengthen its role in supporting and advancing Indonesia's economic recovery.

**Originality** – Islamic finance, commonly known as Islamic banking–extends beyond Indonesian banks. Non-bank Islamic institutions, including capital markets and social finance, play a vital role in optimizing Islamic financial instruments for national economic growth.

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## Introduction

Economic growth is an indicator of the success of a country's development. Greater economic growth in a country leads to increased prosperity in its society (Mulyadi & Mulyati, 2023). Economic growth is undertaken to improve the standard of living of a nation, as measured by high and low real income per capita (Faiza & Shafiyatun, 2018). Economic growth is the state of development of the gross domestic product (GDP), which reflects the growth of output per capita and the improvement of people's living standards (El Ayyubi et al., 2018).

The financial sector is believed to play an important role in increasing economic growth and driving the development of the real sector. According to the National Development Planning Board (Badan Perencanaan Pembangunan Nasional, 2019), Indonesia revealed that the financial services sector is one of the important sectors needed to finance investment and development and

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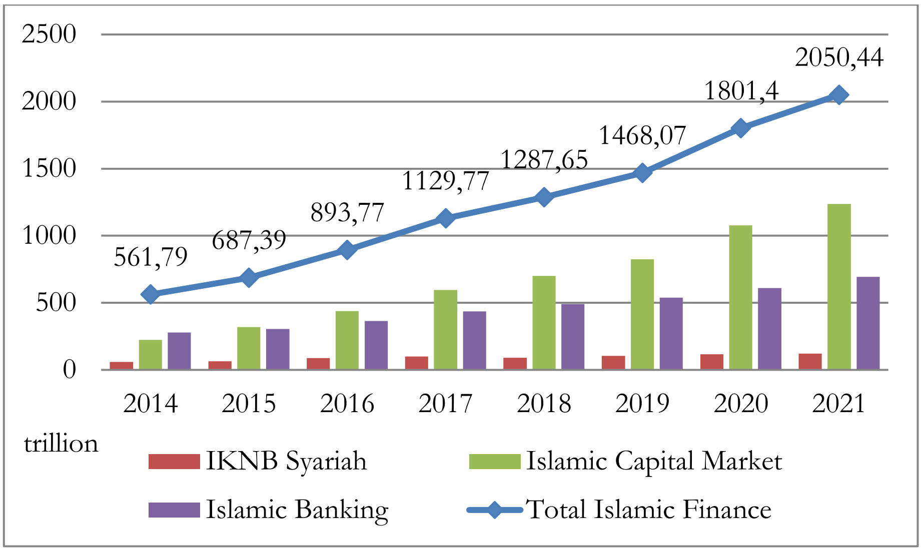
to encourage economic growth. Investment not only directly contributes to the construction of GDP, but also contributes greatly to the economy and society (Faiza & Shafiyatun, 2018). The financial sector can mobilize savings by providing borrowers with high-quality, low-risk financial instruments, leading to increased investment and accelerated economic growth (Kaluge & Nirwana, 2020). Currently, the financial services sector in Indonesia is still low, with inclusiveness also being very low; therefore, many Indonesians do not formally use financial services formally (Badan Perencanaan Pembangunan Nasional, 2019).

According to Finance Minister Sri Mulyani, Islamic finance has grown faster than conventional financial markets over the last ten years. Most believe that Islamic finance plays a role in supporting economic recovery and reducing poverty through the economic empowerment of communities and businesses (Kementerian Keuangan, 2021). A study conducted by Boukhatem and Ben Moussa (2018) stated that financial development can create conditions that are more conducive to economic growth and poverty reduction in a stable macroeconomic environment. Islamic finance is regarded as a stable financing system capable of supporting long-term growth and job creation (Santoso & Nurzaman, 2020).




Source: Financial Services Authority, 2022

**Figure 1.** Chart of Indonesia's Islamic financial assets (2014-2021)

Based on data from the Financial Services Authority (Otoritas Jasa Keuangan, OJK), Indonesia's Sharia financial assets reached IDR 2,050.44 trillion. This number increased by 13.82% from the previous year, amounting to IDR 1,801.40 trillion. Of this amount, the Islamic capital market has the largest portion of assets, namely IDR 1,235.83 trillion. This value also increased by 14.83% from 2020, amounting to IDR 1,076.22 trillion. Islamic banking assets reaching IDR 693.80 trillion. This number grew by 13.94% compared to the previous year, which amounted to IDR 608.9 trillion. Meanwhile, Sharia's non-bank financial industry (IKNB) assets were valued at IDR 120.81 trillion. Its value was recorded to increase by 3.89% from the previous year, which was only IDR 116.28 trillion (Bayu, 2022). As Islamic financial instruments, Islamic banking and Islamic capital markets have shown impressive financial performance, which is reflected in high asset growth. Investment is an instrument with strategic urgency in a country. Investment not only contributes directly to the formation of GDP, but also contributes greatly to the economy and society in general through investment in corporations. Economic growth will become more rapid, one of which is to increase investment efficiency (Latifah, 2020).

Research conducted by Yüksel et al. (2017) and Zarrouk et al. (2017) mentioned that Islamic financing does not have a significant effect on economic growth. These results can be attributed to the fact that conventional financial institutions have converted based on Islam, and with this, the market share of Islamic finance has increased over time with a high degree of resilience and consistency. This is inversely proportional to research conducted by Santoso et al.

(2020) and Sumiyati et al. (2020), which suggests that Sharia financing has a significant effect on Indonesia's economic growth.

Research conducted by Bist (2018) suggests that financial development is indispensable for economic growth. This theory is in line with Solow's growth model, which states the importance of human capital in production, supported by the fact that finance influences the growth of savings, investment, and technological innovation. A well-functioning Islamic financial system can encourage economic growth (Majid & Kassim, 2015; Nawaz et al., 2019). However, this is inversely proportional to the second thought, which argues that finance is not the main source of growth. This theory is supported by the concept of endogenous growth, or the Romer (1986) growth model, in which the educated workforce plays a special role in determining the level of technological innovation and long-term growth. The second theory is in line with the research results presented by Zarrouk et al. (2017), who state that Islamic finance does not cause the development of real GDP.

Positive economic growth can be seen from several factors that affect national economic growth, including the ZIS (Muthohar, 2016; Ridlo et al., 2020). Based on Badan Pusat Statistik, BPS (2023), Indonesia's economic growth in the fourth quarter of 2022 remained high at 5.01% (yoy), in the middle of a slowing trend in global economic growth. The higher collection of social funds supports maintained public consumption, which contributes positively to GDP growth (Otoritas Jasa Keuangan, 2021a). In other words, an increase in ZIS funds stabilizes the GDP value.

Research conducted by Andiansyah et al. (2022), Badriyah and Munandar (2021), Ridlo et al. (2020), and Suprayitno (2019, 2020) stated that, in the long run, zakah has a significant positive effect on economic growth, both directly and indirectly. This is inversely proportional to the research conducted by Khasandy et al. (2019), Lutfi and Fitria (2023), and Sumiyati et al. (2020), who state that zakah does not have a significant effect on national economic growth either directly or indirectly.

Based on several previous studies showing inconsistent results and the fact that the variables used experience significant growth every year, which fluctuates, it needs to be reviewed with the following objectives: The results will later strengthen the existing theory: provide an overview of whether Indonesia's Sharia financial system can contribute to Indonesia's economic growth, and provide a real picture of the condition of Islamic finance in the economic system in Indonesia so that it can serve as a reference for relevant authorities in formulating or determining appropriate policies for the development of Islamic finance in the future. Therefore, this study aims to determine how much influence the extent to which ZIS and Islamic finance, which includes Islamic financing, Sharia stocks, and sukuk, affect national economic growth.

## Literature Review

### Economic Growth and Islamic Financial Sector

Economic growth is the development of economic activity that causes goods and services produced in society and people's prosperity to increase (Fajar et al., 2022). The indicator used to measure economic growth was the GDP growth rate. Economic growth can be viewed as a long-run macroeconomic problem. According to macroeconomics, economic growth is an increase in gross domestic product (GDP), which means an increase in national income. GDP is the amount of value-added produced by all business units in a particular region or is the sum of the final value of goods and services produced by all economic units in the region (Athoillah, 2018). According to Sumiyati et al. (2020), a positive increase in GDP often does not match the distribution of wealth and income in society. One of the variables that ensures fairness in a country's economic growth is the balance between income and wealth distribution. Due to data limitations during the monthly period, the Industrial Production Index (IPI) was used to proxy GDP (Rahmawati & Laila, 2020). The IPI is an economic growth indicator that shows changes in a country's industrial activity over time.

The financial sector plays an important role in driving the growth of various economic sectors of the economy (Sumiyati et al., 2020). The relationship between financial development and economic growth has been one of the most debated issues regarding the financial sector's contribution to the real sector in the process of economic development. The development of the Islamic financial system plays a significant role in the country's economic growth of the country concerned (Tabash, 2014).

## *Zakah, Infaq* and *Sadaqah*

According to Law Number 23 Year 2011 on Zakah Management, *zakah* is an asset that must be issued by a Muslim or business entity to be given to those entitled to receive it in accordance with Islamic law. Meanwhile, *infaq* is property issued by a person or business entity outside *zakah* for public benefit, and *sadaqah* is property or non-wealth issued by a person or business entity outside zakah for public benefit (Purwanti, 2020; Sudarsono et al., 2022). ZIS are the foundations of the Islamic economy, which is the pillar of Ummah's economy and has a special position in Islam because ZIS are closely related to economic, financial, and community activities (Apriliyah & Arifianto, 2022; Pratama et al., 2022). According to Siddiqi (1996), zakat is based on the concept that all properties and wealth belong to Allah (God). Therefore, trust is given to humanity (*Amanah*).

Zakah can be used as an important tool to stimulate human development to improve the social life of recipients. Increasing *zakah* in the short term can improve social life, quality of education, and quality of recipients. In the long term, an increase in income affects consumption. In the long run, it can increase consumption, investment, and demand for labor and stimulate *zakah* recipients to become *zakah* payers. In this case, the main objective of *zakah* was to achieve sustainable *zakah* funds and economic growth was successfully achieved (Suprayitno et al., 2017).

### Sharia Financing

According to Antonio (2001), financing is a funding activity carried out by an institution or financial institution, such as Islamic banking, for customers who need funding (Andiansyah et al., 2022). Financing is one of the main tasks of the bank, namely, the provision of funds to meet the needs of parties who lack funds. When Islamic banks increase funding in various business sectors, it will increase customers' productive business capital; increasing productivity will improve the real sector economy and increase economic growth (El Ayyubi et al., 2018).

In the implementation of financing, Islamic banks must fulfill two aspects: the Sharia aspect and the economic aspect. The Sharia aspect means that in every realization of financing to customers, Islamic banks must remain guided by Islamic law (including not containing elements of *maisir, gharar,* and *usu*ry, and the field of business must be halal) while the Economic Aspect, besides considering Sharia matters, Islamic banks still consider the acquisition of profits for both Islamic banks and Islamic bank customers. The principles of financing distribution by Islamic banks are justice, equality, and tranquility. There are three types of financing: *musyarakah*, *mudharabah,* and financing based on the estimated rate of return (Astuty, 2015).

### Sharia Stocks

Islamic stock markets play an important role in encouraging economic growth. Pujoalwanto (2014) states that high investment levels positively impact economic growth. Shares are evidence of ownership of a share of the company's capital, which gives rights to dividends, and so on, according to the size of the capital invested. The Indonesia stock exchange (IDX) defines Sharia stocks as securities in the form of shares that are not contrary to Sharia principles in the capital market (Bursa Efek Indonesia, 2021).

The Indonesia sharia stock index (ISSI) was officially published precisely on May 12, 2011. In general, it includes the Sharia stock indices listed on the IDX. ISSI is a representation of the implementation of Islamic stock market share in Indonesia. The IDX defines ISSI as a representation of the overall movement of sharia stocks listed on the IDX. Stock valuation at ISSI is carried out every six months, namely, in May and November.

### Corporate Sukuk

The Islamic capital market has three instruments, one of which has been widely issued by the state, and corporations are Sharia bonds and sukuk. Sukuk has become an instrument of state budget financing in several countries (Azwar, 2014). The sukuk market fulfills a very important role in funding major projects by acting as a source of fundraising and promoting local capital markets. Sukuk guarantees undeniable asset allocation mechanisms and maintains an important fund management tool for Islamic companies and financial institutions (Saleem et al., 2016). Corporate sukuk is issued by a company, whether a private company or state-owned enterprise (Badan Usaha Milik Negara, BUMN), based on the regulations of the Financial Services Authority, which has the obligation of Underlying Assets and the use of funds, must be in accordance with Sharia principles (Bagus, 2020; Dewi et al., 2020).

### Hypotheses

Based on previously discussed theories and a review of the literature, this study develops four hypotheses. First, it is hypothesized that there is a one-way causal relationship between ZIS funds and economic growth. The greater the zakat funds that can be raised, the more optimal is its potential to encourage better social, economic, health, and religious life and will affect the rate of economic growth. This can be realized if ZIS funds are productively managed (Beik & Arsyianti, 2016). Research conducted by Anggraini et al. (2018), Qoyyim and Widuhung (2020), and Suprayitno (2019, 2020) state that the distribution of ZIS affects economic growth either directly or indirectly.

$H_1$: ZIS has a positively effect on economic growth

Second, as with zakat, the greater the Islamic financing issued by Islamic banking in institutions, the greater the number of business sectors (companies, MSMEs, private sector), and the greater the contribution to economic growth (Komite Nasional Ekonomi dan Keuangan Syariah, 2019). Research conducted by El Ayyubi et al. (2018), Mifrahi and Tohirin (2020), Prastowo (2018), and Terminanto and Rama (2017) found that financing from Islamic banking has a positive and significant impact on national economic growth in the long run. Based on this, we propose the following hypothesis:

$H_2$: Sharia financing positively affects economic growth

Based on research, Auliyatusaa'adah et al. (2021) found that Sharia stocks contribute significantly positively to economic growth; in other words, changes in stock prices will affect Islamic stock income, which can contribute to economic growth. Therefore, the following hypothesis is proposed:

$H_3$: Sharia stocks positively affect economic growth

Sukuk is important for companies that require operational cost funds. Over a relatively long period of time, the existence of sukuk will affect economic growth through the growth of companies that use sukuk support (Ridlo et al., 2020). For example, Ardi (2018), Faiza and Shafiyatun (2018), Latifah (2020), and Sukuk affect economic growth in GDP through funding from the issuance of corporate sukuk, where when a company issues bonds or sukuk, the company will get funds when the bonds have been sold.

$H_4$: Corporate sukuk has a positively effect on economic growth

## Research Methods

This study used time-series data for the monthly period from January 2013 to December 2022. The data used were secondary data sourced from the National Board of Zakat (Badan Amil Zakat Nasional, BAZNAS), the Financial Services Authority (OJK), and the Central Statistics Agency

(BPS). In this study, the dependent variable used to describe Indonesia's economic growth is GDP proxied by IPI. IPI data were used because monthly economic growth data were not available. The independent variables used include funds for the distribution of ZIS, financing channeled by Islamic banks, Sharia stocks, and corporate sukuk. The data analysis method used in this research is the vector error correction modeling (VECM) method, which is a modeling method in multivariate time series. The VECM is a restricted form of vector autoregression (VAR) (Eka et al., 2019; Sakinah et al., 2022; Santoso & Nurzaman, 2020).

**Table 1.** Description of Variables

| Type of Variable | Symbol | Name | Variable Definition | Source of Data | Reference |
|---|---|---|---|---|---|
| Dependent | GDP | Economic Growth | Gross Domestic Product (GDP) proxied by the industrial production index (IPI) | BPS | (Rahmawati & Laila, 2020; Sakinah et al., 2022; Santoso & Nurzaman, 2020) |
| Independent | ZIS | Zakah, Infaq, Sadaqah | Total distribution of zakat, infaq, sadaqah | Monthly publication of reports on the receipt and distribution of zakat in BAZNAS | (Andiansyah et al., 2022; Muslihatul Badriyah & Munandar, 2021; Ridlo et al., 2020) |
| | PBS | Islamic Bank Financing | Total financing disbursed by Islamic Banks | Islamic Banking Statistics, OJK | (Astuty, 2015; Sakinah et al., 2022) |
| | SH | Sharia Stock | Capitalization of ISSI Sharia Stock Index | OJK, IDX | (Auliyatusaa'adah et al., 2021) |
| | SK | Sukuk (Sharia Bonds) | Number of outstanding Sharia bonds corporate (Sukuk) | Islamic Banking Statistics, OJK | (Harahap et al., 2022) |

Based on the description of the variables given in Table 1 and the research by Santoso and Nurzaman (2020) and Sakinah et al. (2022), the model explanation of the relationship between variables is written as follows:

$$\Delta Yt = \alpha 1 + \sum \delta 1 ipi = 1 \Delta Yt - i + \sum \psi 1 ipi = 1 \Delta X\ t - i + \sum \gamma 1 ipi = 1 \Delta Zt - i$$
$$\Delta Xt = \alpha 2 + \sum \delta 2 ipi = 1 \Delta Yt - i + \sum \psi 2 ipi = 1 \Delta Xt - i + \sum \gamma 2 ipi = 1 \Delta Zt - \mathrm{i}$$

The VECM equation in this study is as follows:

$$GDP = C + ZIS + PBS + SH + SK + \varepsilon$$

Description
GDP = Economic Growth
ZIS = Distribution of ZIS funds
PBS = The value of Islamic bank financing disbursed
SH = Capitalization of the Indonesia Sharia Stock Index (ISSI)
SK = Corporate Sukuk
C = Constant
ε = Residual

The research model consists of several stages of analysis and testing, including unit root tests to check variable stationarity, optimum lag tests to determine the optimal lag of the model, and VAR stability tests to validate the model and data (Gujarati, 2021). Furthermore, the Granger Causality and Cointegration tests were carried out to analyze the causal relationship between variables and determine long-term relationships. Finally, the VECM method produces several outputs: Granger Causality, Impulse Response Function (IRF), and Variance Decomposition

(VDC) (Afandi & Amin, 2018). The Impulse Response Function (IRF) approach was also studied to track the response of the dependent variable to the shock of each variable in the VAR. Meanwhile, Variance Decomposition (VDC) provides the proportion of movement in the dependent variable caused by shocks on the variable itself compared to shocks with other variables (Mitsaliyandito et al., 2017).

## Results and Discussion

### Stationary Test

A stationary data test in a study is very important when starting the first step in estimating the model to see whether there is a unit root in the time-series data. In this study, stationary testing was performed using the unit root test. The criteria for assessing stationary data if the ADF t-statistic value is smaller than the McKinnon critical (1, 5, 10 percent) or if the p-value or probability is below 5%, then H0 is rejected; in other words, the data are stationary. Based on the results of the research output in Table 2, the stationary test results show that only the GDP and ZIS variables are stationary at this level. After testing the First Difference, the test results obtained from all the data show that all variables are stationary, as evidenced by the overall ADF value, which is smaller than the McKinnon critical value of 5%. Therefore, further testing was performed to determine the optimum lag length.

**Table 2.** Stationary Test Results

| | Level | | | First Difference | | |
|---|---|---|---|---|---|---|
| Variable | ADF t-Statistik | Critical Value Mackinnon 5% | Description | ADF t-Statistik | Critical Value Mackinnon 5% | Description |
| GDP | -5.540 | -2.889 | Stationary | -11.206 | -2.889 | Stationary |
| ZIS | -6.135 | -2.889 | Stationary | -17.541 | -2.889 | Stationary |
| PBS | 2.580 | -2.889 | Non-stationary | -10.977 | -2.889 | Stationary |
| SH | -0.180 | -2.889 | Non-stationary | -9.486 | -2.889 | Stationary |
| SK | 0.699 | -2.889 | Non-stationary | -13.132 | -2.889 | Stationary |

### Optimal Lag Test

Table 3 presents the lag optimum test is used to eliminate autocorrelation problems in the VAR system and shows how long a variable reacts to another variable. Testing lag length can be done using information criteria such as the Akaike Information Criterion (AIC), Schwarz Criterion (SC), and Hanan–Quinn Criterion (HQ). This study used the optimal lag determination by looking at the minimum value of the smallest AIC value of 79.7779 at lag 2. Thus, the optimum lag was lag 2.

**Table 3.** Optimum Lag Test Results

| Lag | LR | FPE | AIC | HQIC | SBIC |
|---|---|---|---|---|---|
| 0 | | 3.3e+28 | 79.8665 | 79.9147* | 79.9852* |
| 1 | 53.765 | 3.2e+28 | 79.8341 | 80.1232 | 80.5462 |
| 2 | 56.52 | 3.1e+28* | 79.7779* | 80.3079 | 81.0834 |
| 3 | 49.674* | 3.1e+28 | 79.7807 | 80.5516 | 81.6797 |

### Model Stability Test

The stability test aims to determine the validity of the Impulse Response Function (IRF) and Variance Decomposition (VD). The results of the stability testing in this study are shown in Figure 2. Based on the VAR stability test, the VAR model is considered stable because it has a modulus smaller than one, which lies in the range of 0.176125–0.668033. Therefore, the next VECM preestimation test can be performed.

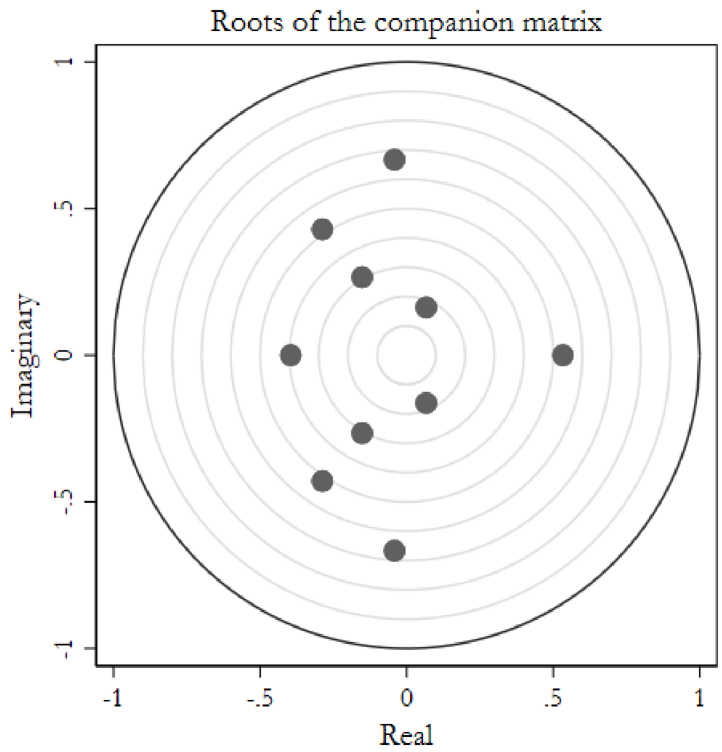



**Figure 2.** VAR Stability Test Results

## Cointegration Test

A cointegration test is needed to determine how each of the research variables used relates to each other. A cointegration study According to Lamia and Naziha (2019), a cointegration study determines whether a series is integrated and whether it has the same long-run cointegration rank. In fact, a cointegration relationship is interpreted as a long-run equilibrium relationship between variables. The cointegration test was conducted by comparing the trace statistic value with the critical value of 5%. Cointegration occurs if the trace statistic value is greater than the critical value.

**Table 4.** Johansen Cointegration Test Results

| Hypothesized No. of CE(s) | Eigenvalue | Trace statistic | Critical value 5% |
|---|---|---|---|
| None * | - | 320.9945 | 59.46 |
| At most 1 | 0.61551 | 209.1618 | 39.89 |
| At most 2 | 0. 55518 | 114.3813 | 24.31 |
| At most 3 | 0. 40207 | 54.2107 | 12.53 |
| At most 4 | 0. 29234 | 13.7532 | 3.84 |
| At most 5 | 0. 11090 | | |

Table 4 presents the estimated results shown in Table 4. The value of the trace statistic is greater than the critical value, which means that this model has a cointegration. Thus, it can be concluded that there is a long-term relationship between the model and variables of this study. This is indicated by a trace statistical value greater than the critical value of 0.05.

## Granger Causality Test

The Granger Causality Test was used to determine the causal relationship between the research variables. Causality occurs when the probability value is lower than the level of the hypothesis used (1%, 5%, and 10%). The results of the Granger Causality test are shown in Table 5.

**Table 5.** Granger Causality Test Results

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| ZIS does not Granger Cause GDP | 118 | 3.83585 | 0.0244 |
| GDP does not Granger Cause ZIS | | 1.48952 | 0.2299 |
| PBS does not Granger Cause GDP | 118 | 6.87160 | 0.0015 |
| GDP does not Granger Cause PBS | | 1.11063 | 0.3329 |
| SH does not Granger Cause GDP | 118 | 6.59731 | 0.0020 |
| GDP does not Granger Cause SH | | 2.72035 | 0.0702 |
| SK does not Granger Cause GDP | 118 | 7.69423 | 0.0007 |
| GDP does not Granger Cause SK | | 0.66807 | 0.5147 |

The criterion for rejecting H0 is if the F-statistic value is greater than the critical value of 10 percent, or if a probability smaller than the critical value of 5% can also be used. The Granger Causality test results confirm that there are four rejections of H0, namely: "ZIS does not Granger Cause GDP" with a probability value of 0.0244; this means that the ZIS variable has a significant effect on the GDP variable, but not vice versa. Then "PBS does not Granger Cause GDP" with a probability value of 0.0015, meaning that the PBS variable has a significant effect on the GDP variable and does not apply otherwise. Next, SH does not Granger-cause GDP, with a probability value of 0.0020, meaning that the SH variable has a significant effect on the GDP variable and does not apply otherwise. Finally, "SK does not Granger Cause GDP," which means that the SK variable has a significant effect on the GDP variable with a probability value of 0.0007, but does not apply otherwise.

### VECM Test

Based on the results of the long-term tests of the VECM method in Table 6, in the short term, ZIS and SK variables affect GDP, while PBS and SH variables have an insignificant negative effect on GDP. In the long term, the ZIS and PBS variables have a significant positive effect on GDP, with significance values of 0.000 and 0.033, while the SK variables have a significant negative effect on GDP, and the SH variables have an insignificant positive effect on GDP.

**Table 6.** Long and short-term VECM Estimation Results

| | Long Term | | | Short Term | | |
|---|---|---|---|---|---|---|
| beta | Coefficient | Std. err | P>\|z | Coefficient | Std. err | P>\|z |
| _ce1 | | | | | | |
| GDP | 1 | - | - | 0.1654907 | - | - |
| ZIS | 0.0009938 | 0.0001596 | 0.000 | 0.0004962 | 0.0001008 | 0.000 |
| PBS | 0.0007512 | 0.0003526 | 0.033 | -0.0000549 | 0.0003752 | 0.884 |
| SH | 0.0066983 | 0.0143359 | 0.640 | -0.0082227 | 0.0124701 | 0.510 |
| SK | -0.0064728 | 0.0018029 | 0.000 | -0.0033422 | 0.0012362 | 0.007 |

### Impulse Response Function (IRF) Analysis

Based on the output results in Figure 3, it can be seen that the response of the GDP variable due to a shock or shock from the ZIS, PBS, and SH variables shows a negative trend response. The GDP response to the ZIS shows a negative trend starting from the first and second periods, but in the third period, it fluctuates and reaches stability in the 14th period. The same results are shown by the response of the GDP variable due to a shock to the PBS and SH variables, which show a negative trend response starting from period one and experiencing shocks close to 0 in periods 3 and 4, and reached stability in periods 12 and 13. Meanwhile, the response of the GDP variable to a shock to the SK variable experiences a positive trend. The peak of the shock occurs in periods 1 to 3, and the next period decreases and fluctuates, reaching the point of stability in the 13th period.

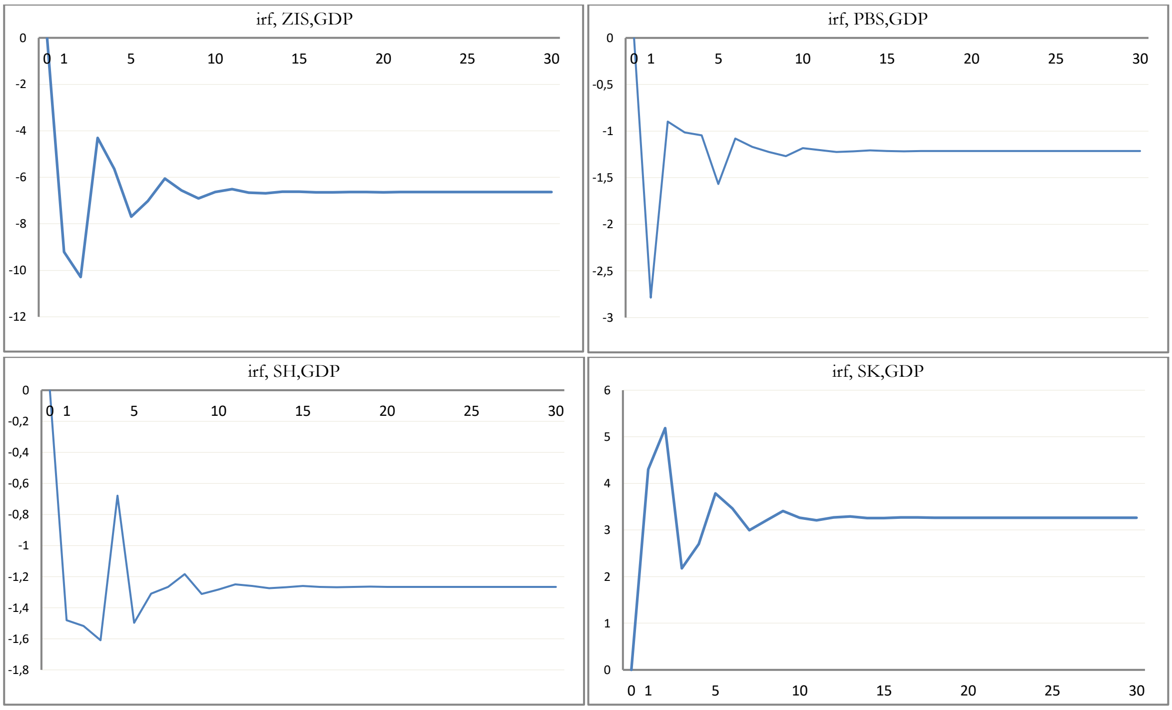



**Figure 3.** Output Analysis IRF Results

**Variance Decomposition (VDC) Analysis**

Variance Decomposition (VDC) can be described as a test of causality beyond the estimation period. VDC decomposes variations in endogenous variables into component shocks to endogenous variables. VDC indicates the percentage of forecast error variance for each variable that can be attributed to its own shocks and fluctuations in other variables in the system, that is, it describes the contribution of each variable to the observed shocks of the main endogenous variable.

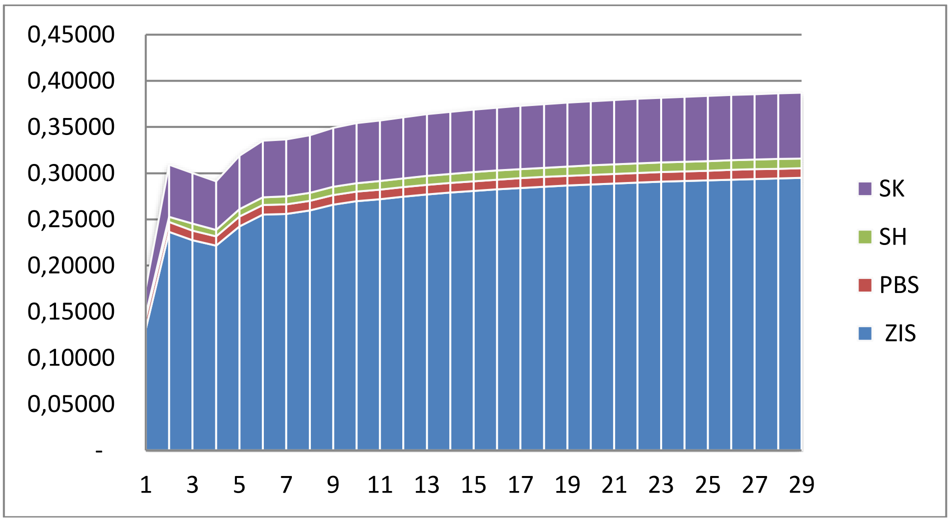



**Figure 4.** Variance Decomposition Results

From the output in Figure 4, it can be seen that the ZIS variable has a greater contribution than the Islamic financial variables, including PBS, SH, and SK, to IPI as a representation of GDP. This can be seen from the comparison of each variable; the ZIS variable has an influence of 76.12%, whereas the PBS variable has an influence of 2.97%. SH has an influence of 2.60%, and SK has an influence of 18.30%.

## Discussion

Based on the results of tests that have been carried out with the Vector Error Correction Model (VECM) and the Granger Causality Test, there is a relationship between the growth of the financial sector and economic growth, in this case, the effect of ZIS, and Islamic finance on national economic growth. The development of Islamic financial instruments that are increasingly rapid can provide an alternative for Muslims who have excess funds to choose a type of investment that is halal and free from elements of *maisir, gharar, and usury*. The long- and short-term tests show that the ZIS variable has a positive and significant effect. This result supports the findings of Anggraini et al. (2018), Qoyyim and Widuhung (2020), and Suprayitno (2019, 2020), which suggest that zakat has a significant positive impact on economic growth, which shows that the greater the zakat funds channeled, the greater the effect on economic growth. Indonesia has huge potential for benevolent funds supported by the largest Muslim population in the world. In 2022, BAZNAS managed to collect social ZIS funds, amounting to IDR 21.3 trillion, up 52.14% from the previous year's amount of IDR 14 trillion. In addition, BAZNAS is also highly effective in national distribution, reaching an IDR of 20 trillion and achieving an effectiveness rate of 93.83 percent (Badan Amil Zakat Nasional, 2022). Therefore, ZIS funds must be used as a tool to improve society's welfare, one of which is through productive zakat programs that will increase per capita income and overall national economic growth.

In the short term, Islamic financing has no effect on economic growth, whereas in the long term, it has a positive relationship with economic growth and is statistically significant. This result also verifies the research that has been found by Abduh and Azmi Omar (2012), Boukhatem and Ben Moussa (2018), Santoso and Nurzaman (2020), Sumiyati et al. (2020), and Tabash (2014) that Islamic banking financing has a strong positive relationship where financing has a long-term impact on Indonesia's economic growth. This can be seen in the allocation of funds to Islamic banks to invest in the real sector in accordance with the Islamic financial system. An increase in total financing disbursed will lead to an increase in capital for businesses, which in turn leads to an increase in the real sector economy, which will lead to further economic growth (El Ayyubi et al., 2018). In addition, Islamic financing drives a country's economic growth through a long process and does not directly have a significant impact. The improvement in performance is shown by the total financing of Islamic banking, which has experienced a positive trend, reaching USD 957 billion (Otoritas Jasa Keuangan, 2021a). The highest growth in Islamic financing was still recorded in the miscellaneous sector, driven by the distribution of financing for the household subsector, followed by the trade sector, which grew by 16.23% (yoy) and 11.00% (yoy); the deepest contraction currently comes from the mining and business services sectors at -13.53% (yoy) and -9.75% (yoy), respectively, and MSME financing increased by 8.98% (yoy) to Rp75.07 trillion.

Sharia stocks have no significant effect on economic growth in either the short or long term. These results can be attributed to changes in stock prices that affect Islamic stock income and economic growth. Indicators of economic decline can be seen in the decline in stock prices, which affects the decline in stock income. In theory, an increase in economic growth can increase consumer purchasing power for company products, thereby increasing profitability. This is due to Covid-19, many stocks have weakened, including BUMN stocks and Islamic banks, in December to March 2020, all banks experienced fluctuations in their intermediation functions and tended to experience a decrease in both capital sources and capital mobilization (Ningsih & Mahfudz, 2020). Compared with the end of 2020, the Islamic stock index generally decreased as of June 30, 2021, whereas the ISSI index decreased by 3.12% compared with the end of 2020. However, it increased in terms of stock capitalization by 0.22% (Otoritas Jasa Keuangan, 2021b). This is not in accordance with the research of Auliyatusaa'adah et al. (2021), who state that Sharia stocks contribute significantly positively to economic growth.

Corporate Sukuk has a negative and significant effect on economic growth in both the short and long term. This is related to Indonesia's economic situation, which is recovering from the stunted economic growth caused by the Covid-19 pandemic. This affects the decline in the real sector related to investment activities. Investment activities will only affect the economy if investment is used to finance the real sector (Andiansyah et al., 2022). Based on research conducted by Mitsaliyandito et al. (2017), the domestic sukuk market has the greatest influence on Indonesia's GDP compared with the corporate sukuk market. This is due to the fact that the development of the corporate sukuk market in Indonesia is still not maximized. Based on the OJK Publication Report for June 2019, the proportion of corporate sukuk issuances was only 3.56 percent of the total sukuk market issuance.

## Conclusion

The financial sector plays an important role in driving economic growth, in which the demand for financial services increases along with economic growth. Islamic finance is considered to be a stable financing system capable of promoting growth and creating long-term employment. This study aims to analyze the effect of Islamic financial instruments, including social funds ZIS, Islamic financing, Sharia stocks, and corporate sukuk, on economic growth. Based on the test results that have been carried out with the Vector Error Correction Model (VECM) and Granger Causality Test, it is shown that there is a positive relationship and impact between the growth of the financial sector and economic growth. The VECM test shows that the distribution of ZIS has a positive and significant effect on economic growth in the long and short terms, while corporate sukuk has a significant negative effect on economic growth in both the short and long terms. Furthermore, the distribution of Islamic banking financing has an insignificant negative effect in the short-term but a significant positive effect in the long-term. Sharia stocks have a negative and insignificant effect on economic growth in the short term and a positive and insignificant effect in the long term.

The results of the impulse response function (IRF) and variance decomposition (VDC) analysis also show that the Islamic financial sector variables have a shock effect on economic growth in Indonesia, with the dominant contribution coming from the distribution of ZIS, followed by corporate sukuk, while the lowest contribution comes from Sharia stocks. This is in line with the increase in the ZIS distribution from year to year. The role of ZIS funds is to improve the welfare of the community to encourage a better social life and contribute to economic growth.

These results underline the importance of the development and efficient management of the Islamic financial sector, social funds of ZIS and Islamic banking and capital markets as a support for the future development of the Indonesian economy. Based on these findings and analyses, it is suggested that future researchers add other variables related to national economic growth.

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## References

Abduh, M., & Azmi Omar, M. (2012). Islamic banking and economic growth: the Indonesian experience. *International Journal of Islamic and Middle Eastern Finance and Management*, *5*(1), 35–

47. https://doi.org/10.1108/17538391211216811

Afandi, M. A., & Amin, M. (2018). Determinan konsumsi pada negara mayoritas berpenduduk muslim dan non-Muslim: Studi kasus Indonesia dan Singapura. *JEBA (Journal of Economics and Business Aseanomics)*, *3*(1). https://doi.org/10.33476/jeba.v3i1.738

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. https://doi.org/10.15548/al-masraf.v7i1.288

Anggraini, R., Ababil, R., & Widiastuti, T. (2018). Pengaruh penyaluran dana ZIS dan tingkat inflasi terhadap pertumbuhan ekonomi Indonesia periode 2011-2015. *FALAH: Jurnal Ekonomi Syariah*, *3*(2), 1. https://doi.org/10.22219/jes.v3i2.7231

Apriliyah, R. P., & Arifianto, B. (2022). Evaluation of zakat literature: A bibliometric analysis and systematic literature review. *Review of Islamic Social Finance and Entrepreneurship,* 1(1), 50–62. https://doi.org/10.20885/RISFE.vol1.iss1.art4

Ardi, M. (2018). Pengaruh Sukuk terhadap pertumbuhan ekonomi Indonesia. *Iqtishaduna*, *9*(1), 85–97. https://doi.org/10.20414/iqtishaduna.v9i1.685

Astuty, W. (2015). Pengaruh pembiayaan Syariah terhadap pertumbuhan ekonomi di Sumatera Utara. *Kumpulan Jurnal Dosen Universitas Muhammadiyah Sumatera Utara*, *21*(1), 1–13. http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203

Athoillah, M. A. (2018). The Zakat effect on economic growth, unemployment, and poverty in the island of Java: Panel data analysis 2001-2012. *Ekspansi*, *10*(2), 205–230. https://doi.org/10.35313/ekspansi.v10i2.1211

Auliyatusaa'adah, N., Handayani, D. I., & Farekha, F. (2021). Pengaruh saham dan reksadana Syariah terhadap pertumbuhan ekonomi Indonesia tahun 2013-2019. *JIEF : Journal of Islamic Economics and Finance*, *1*(1), 37–45. https://doi.org/10.28918/jief.v1i1.3453

Azwar. (2014). Pengaruh penerbitan sukuk negara sebagai pembiayaan defisit fiskal dan kondisi ekonomi makro terhadap perkembangan perbankan Syariah di Indonesia. *SSRN Electronic Journal*, *2(12)*(January 2014), 1–21. https://doi.org/10.2139/ssrn.2834656

Badan Amil Zakat Nasional. (2022). BAZNAS Optimis peningkatan pengelolaan zakat nasional 2022 tumbuh 52 Persen. *Badan Amil Zakat Nasional, BAZNAS*. https://baznas.go.id/Press_Release/baca/BAZNAS_Optimis_Peningkatan_Pengelolaan_Zakat_Nasional_2022_Tumbuh_52_Persen/1331

Badan Perencanaan Pembangunan Nasional (BAPPENAS). (2019). Siaran pers hasil kajian pendalaman keuangan di Indonesia : Sektor keuangan untuk pertumbuhan ekonomi lebih baik. *bappenas.go.id*. https://www.bappenas.go.id/files/ef6788db-3ceb-4a7d-bfd0-ace73391da37/download

Badan Pusat Statistik. (2023). *Ekonomi Indonesia tahun 2022 tumbuh 5,31 persen*. www.bps.go.id. https://www.bps.go.id/pressrelease/2023/02/06/1997/ekonomi-indonesia-tahun-2022-tumbuh-5-31-persen.html#:~:text=Ekonomi Indonesia tahun 2022 tumbuh sebesar 5%2C31 persen%2C lebih,Pergudangan sebesar 19%2C87 persen.

Badriyah, U. M., & Munandar, E. (2021). Pengaruh dana zakat, infak, sedekah (ZIS) dan inflasi terhadap pertumbuhan ekonomi periode 2010-2019. *Jurnal Ekonomi Rabbani*, *1*(1), 21–31. https://doi.org/10.53566/jer.v1i1.10

Bagus, K. (2020). *Mengenal lebih dalam sukuk korporasi, plus contohnya!* Finansialku. https://www.finansialku.com/sukuk-korporasi/

Bayu, D. (2022, April 28). Aset keuangan Syariah RI tumbuh 13,82% pada 2021. *DataIndonesia.Id*. https://dataindonesia.id/bursa-keuangan/detail/aset-keuangan-syariah-ri-tumbuh-1382-pada-2021

Beik, I. S., & Arsyianti, L. D. (2016). *Ekonomi Pembangunan Syariah*. PT. Rajagrafindo Persada.

Bist, J. P. (2018). Financial development and economic growth: Evidence from a panel of 16 African and non-African low-income countries. *Cogent Economics and Finance*, *6*(1). https://doi.org/10.1080/23322039.2018.1449780

Boukhatem, J., & Ben Moussa, F. (2018). The effect of Islamic banks on GDP growth: Some evidence from selected MENA countries. *Borsa Istanbul Review*, *18*(3), 231–247. https://doi.org/10.1016/j.bir.2017.11.004

Bursa Efek Indonesia. (2021). *Fatwa dan regulasi (Fatwa tentang pasar modal Syariah)*. Indonesia Stock Exchange (IDX). https://www.idx.co.id/id/idx-syariah/fatwa-regulasi

Dewi, D. M., Nugroho, L., Sukmadilaga, C., & Fitijanti, T. (2020). Tinjauan sukuk korporasi di Indonesia dari perspektif penawaran, permintaan dan regulasi. *Journal of Business and Economics Research (JBE)*, *1*(1), 11–16. https://doi.org/10.47065/jbe.v1i1.57

Eka, H., Maruto, P., & Basuki, U. (2019). Analisis pengaruh investasi dan budget deficit terhadap pertumbuhan di Indonesia. *Diponegoro Journal of Economics*, *1*, 67. https://ejournal2.undip.ac.id/index.php/dje

El Ayyubi, S., Anggraeni, L., & Mahiswari, A. D. (2018). Pengaruh bank Syariah terhadap pertumbuhan ekonomi di Indonesia. *Al-Muzara'ah*, *5*(2), 88–106. https://doi.org/10.29244/jam.5.2.88-106

Faiza, N. A. R., & Shafiyatun. (2018). Pengaruh nilai outstanding sukuk korporasi terhadap produk domestik bruto (PDB) Indonesia (Periode triwulanan tahun 2011-2017). *Jurnal El-Qist*, *08*(01), 1580. https://doi.org/10.15642/elqist.2018.8.1.1577-1596

Fajar, F., Rizali, R., & Rahmini, N. (2022). Kontribusi saham Syariah, sukuk, reksadana Syariah dan saham konvensional terhadap pertumbuhan ekonomi nasional. *Syntax Idea*, *4*(1), 77. https://doi.org/10.36418/syntax-idea.v4i1.1750

Fiskal Kemenkeu. (2021, August 25). Keuangan Syariah sangat berperan dalam pemulihan ekonomi nasional. *fiskal.kemenkeu.go.id*. https://fiskal.kemenkeu.go.id/baca/2021/08/25/4308-keuangan-syariah-sangat-berperan-dalam-pemulihan-ekonomi-nasional

Gujarati, D. N. (2021). *Essentials of econometrics*. Sage Publications.

Harahap, M. I., Imsar, I., & Dongoran, R. N. (2022). Pengaruh sukuk korporasi dan total aset perbankan syariah terhadap pertumbuhan ekonomi di Indonesia tahun 2016-2020. *Jurnal Ilmiah Ekonomi Islam*, *8*(1), 370. https://doi.org/10.29040/jiei.v8i1.3592

Kaluge, D., & Nirwana, H. (2020). Analisis pengaruh inklusi keuangan terhadap pertumbuhan ekonomi di provinsi Nusa Tenggara Timur tahun 2015-2019. *Jurnal Ilmiah Mahasiswa FEB*, *9*(1). https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/7015

Khasandy, Aisha, E., & Badrudin, R. (2019). The influence of zakat on economic growth and welfare society in Indonesia. *MPRA (Munich Personal RePEc Archive)*, *3*(1), 65–79. https://mpra.ub.uni-muenchen.de/91574/

Komite Nasional Ekonomi dan Keuangan Syariah. (2019). Indonesia Islamic economic masterplan 2019-2024. *Indonesian Ministry of National Development Planning*. https://kneks.go.id/storage/upload/1560308022-Indonesia Islamic Economic Masterplan 2019-2024.pdf

Lamia, K., & Naziha, K. (2019). Financial cointegration and the vector error correction model: The case of MENA countries. *International Journal of Economics and Financial Issues*, *9*(1), 160–168. https://www.proquest.com/openview/c327c4c8e7982e0439bbff941927979f/1?pq-origsite=gscholar&cbl=816338

Latifah, Si. (2020). Peran sukuk surat berharga Syariah negara (SBSN) dalam pertumbuhan pembangunan ekonomi Indonesia. *Jurnal Ilmiah Ekonomi Islam*, *6*(3), 421. https://doi.org/10.29040/jiei.v6i3.1369

Lutfi, M., & Fitria, M. N. (2023). Analisis pengaruh zakat, infaq, shadaqah (ZIS), indeks pembangunan manusia (IPM), tingkat pengangguran terbuka (TPT), dan kemiskinan terhadap pertumbuhan ekonomi di provinsi Sumatera Barat tahun 2017-2020. *Syar'ie: Jurnal Pemikiran Ekonomi Islam*, *6*(1), 70–83. https://doi.org/10.51476/syarie.v6i1.456

Majid, M. S. A., & Kassim, S. H. (2015). Assessing the contribution of Islamic finance to economic growth: Empirical evidence from Malaysia. *Journal of Islamic Accounting and Business Research*, *6*(2), 292–310. https://doi.org/10.1108/JIABR-07-2012-0050

Mifrahi, M. N., & Tohirin, A. (2020). How does Islamic banking support economics growth? *Share: Jurnal Ekonomi Dan Keuangan Islam*, *9*(1), 72–91. https://doi.org/10.22373/share.v9i1.6882

Mitsaliyandito, R. Q., Arundina, T., & Kasri, R. A. (2017). Impact of sukuk market development on Indonesian Economic Growth. *International Journal of Applied Business and Economic Research*, *15*(24), 537–549. https://www.researchgate.net/profile/Tika-Arundina-3/publication/322401799_Impact_of_sukuk_market_development_on_Indonesian_Economic_Growth/links/5da47c4492851c6b4bd40eff/Impact-of-sukuk-market-development-on-Indonesian-Economic-Growth.pdf

Mulyadi, S., & Mulyati, S. (2023). Hubungan kausalitas zakat dan pembiayaan terhadap pertumbuhan ekonomi. *MUSLIMPRENEUR*, *3*(4), 51–65. https://doi.org/10.31857/s013116462104007x

Muthohar, A. M. (2016). *Potret pelaksanaan zakat di indonesia studi kasus di kawasan jalur Joglosemar* (A. Aziz N.P (ed.); 1st ed.). LP2M IAIN Salatiga Press. http://e-repository.perpus.iainsalatiga.ac.id/1998/

Nawaz, H., Abrar, M., Salman, A., & Bukhari, S. M. H. (2019). Beyond finance: Impact of Islamic finance on economic growth in Pakistan. *Economic Journal of Emerging Markets*, *11*(1), 8–18. https://doi.org/10.20885/ejem.vol11.iss1.art2

Ningsih, M. R., & Mahfudz, M. S. (2020). Dampak pandemi Covid-19 terhadap manajemen industri perbankan Syariah: Analisis komparatif. *Jurnal Ekonomi dan Manajemen*, *2*(1), 1–10. https://doi.org/10.46918/point.v2i1.576

Otoritas Jasa Keuangan. (2021a). Laporan perkembangan keuangan Syariah Indonesia 2021. *www.ojk.go.id*. https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/laporan-perkembangan-keuangan-syariah-indonesia/Pages/Laporan-Perkembangan-Keuangan-Syariah-Indonesia-2020.aspx

Otoritas Jasa Keuangan. (2021b). Market update pasar modal Syariah Indonesia periode Januari - Juni 2021. *www.ojk.go.id*. https://ojk.go.id/id/kanal/syariah/tentang-syariah/Documents/Pages/Pasar-Modal-Syariah/Market Update Pasar Modal Syariah Indonesia Periode Januari - Juni 2022.pdf

Prastowo, P. (2018). Pengaruh pembiayaan perbankan syariah terhadap pertumbuhan ekonomi: studi empiris di 13 Negara. *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*, *2 (1)*, 61–76. https://doi.org/10.21009/hayula.002.1.05

Pratama, G., Novita, N., & Aziz, A. (2022). Strategi dalam menghimpun dana zakat, infaq dan shodaqoh. *Journal of Economy and Banking*, *3(1)*, 50–57. https://www.journal.bungabangsacirebon.ac.id/index.php/EcoBankers/article/view/881

Pujoalwanto, B. (2014). *Perekonomian Indonesia: tinjauan historis, teoritis, dan empiris*. Graha Ilmu.

Purwanti, D. (2020). Pengaruh zakat, infak, dan sedekah terhadap pertumbuhan ekonomi Indonesia. *Jurnal Ilmiah Ekonomi Islam*, *6*(1), 101. https://doi.org/10.29040/jiei.v6i1.896

Qoyyim, S. H., & Widuhung, S. D. (2020). Analisis strategi penyaluran dana zakat, infak, sedekah

(ZIS) dan tingkat inflasi terhadap pertumbuhan ekonomi di Indonesia pada periode 2015-2019. *Jurnal Al Azhar Indonesia Seri Ilmu Sosial*, *1*(2), 53. https://doi.org/10.36722/jaiss.v1i2.460

Rahmawati, I., & Laila, N. (2020). Pengaruh faktor internal dan eksternal bank terhadap kemampuan bank Syariah dalam menyalurkan pembiayaan. *Jurnal Ekonomi Syariah Teori dan Terapan*, *7*(8), 1484. https://doi.org/10.20473/vol7iss20208pp1484-1500

Ridlo, M., Muthohar, A. M., & Masruhan, K. M. (2020). The impact of zakah, Islamic financing, sukuk and inflation on national economic growth with poverty as a moderation variable. *Falah: Jurnal Ekonomi Syariah*, *6*(1), 17–29. https://doi.org/10.22219/jes.v6i1.14993

Sakinah, G., Kasri, R. A., & Nurkholis, N. (2022). Islamic finance and Indonesia's economy: An empirical analysis. *Jurnal Ekonomi & Keuangan Islam*, *8*(1), 47–59. https://doi.org/10.20885/jeki.vol8.iss1.art4

Saleem, M., Ben, Fakhfekh, M., & Hachicha, N. (2016). Sukuk issuance and economic growth: The Malaysian case. *Journal of Islamic Economics, Banking and Finance*, *12*(2). https://platform.almanhal.com/Files/2/115439

Santoso, M. H. E., & Nurzaman, M. S. (2020). Asesmen kontribusi keuangan Syariah terhadap pertumbuhan ekonomi di Indonesia. *Jurnal Ekonomi, Keuangan dan Perbankan Syariah*, *4*(1), 165–175. https://core.ac.uk/download/pdf/196255896.pdf

Sudarsono, H., Supriani, I., & Perdana, A. R. A. . (2022). Do perceived zakat institutions and government support affect entrepreneurs' intention to pay zakat?. *Review of Islamic Social Finance and Entrepreneurship,* 1(2), 85–96. https://doi.org/10.20885/RISFE.vol1.iss2.art1

Sumiyati, S., Juliprijanto, W., & Prasetyanto, P. K. (2020). Analisis pengaruh zakat, infaq, shadaqoh (ZIS), sukuk dan pembiayaan Syariah terhadap PDB di Indonesia tahun 2009-2018. *Dinamic : Directory Journal of Economic*, *2*(2), 469–486. https://doi.org/10.31002/dinamic.v2i2.1383

Suprayitno, E. (2019). Zakat and SDGs : The impact of zakat on economic growth, consumption and investment in Malaysia. *Proceedings of the 2018 International Conference on Islamic Economics and Business (ICONIES 2018),* 202–209. https://doi.org/10.2991/iconies-18.2019.39

Suprayitno, E. (2020). The impact of zakat on economic growth in 5 state in Indonesia. *International Journal of Islamic Banking and Finance Research*, *4*(1), 1–7. https://doi.org/10.46281/ijibfr.v4i1.470

Suprayitno Eko, Mohamed Aslam, & Azhar Harun. (2017). Zakat and SDGs : Impact zakat on human development in the five states of Malaysia. *International Journal of Zakat*, *2*(1), 61–69. https://ijazbaznas.com/index.php/journal/article/download/15/12/

Tabash, M. I. (2014). The flow of Islamic finance and economic growth: an empirical evidence of Middle East. *Journal of Finance and Accounting*, *2*(1), 11. https://doi.org/10.11648/j.jfa.20140201.12

Terminanto, A. A., & Rama, A. (2017). Pembiayaan bank Syariah terhadap pertumbuhan ekonomi: Studi kasus data panel provinsi di Indonesia. *Iqtishadia*, *10*(1), 97–129. https://doi.org/10.21043/iqtishadia.v10i1.2320

Yüksel, S., & Canöz, İ. (2017). Does Islamic banking contribute to economic growth and industrial development in Turkey? *Ikonomika*, *2*(1). https://doi.org/10.24042/febi.v2i1.945

Zarrouk, H., El Ghak, T., & Abu Al Haija, E. (2017). Financial development, Islamic finance and economic growth: Evidence of the UAE. *Journal of Islamic Accounting and Business Research*, *8*(1), 2–22. https://doi.org/10.1108/JIABR-05-2015-0020