# The Effect of Islamic Finance on Economic Growth and Financial Stability: ASEAN-4 Case Study

Azianatud Dian Hanif[a] [*], Syafiq Mahmadah Hanafi[a]

*[a]UIN Sunan Kalijaga Yogyakarta, Indonesia*

**Abstract:** This research aims to analyze the impact of Islamic finance (Islamic stock index and sharia banking assets) on economic growth and financial stability. The data utilized in this study are panel data from the ASEAN-4 countries during the period 2013-2022, employing panel data regression analysis with the Common Effect Model. The research findings indicate that simultaneously, the independent variables significantly affect economic growth and financial stability in the ASEAN-4 countries during the period 2013-2022. Partially, the Islamic stock index variable does not have a significant impact on economic growth but has a significant impact on financial stability. Meanwhile, the sharia banking assets variable significantly affects economic growth but does not significantly affect financial stability.

**Keywords:** *Economic Growth, Financial Stability, FSI, GDP, Islamic Finance.*

## Introduction

Growth-oriented economic development is an important part of macroeconomic management in a country. It is a crucial annual agenda for the country in realizing a prosperous, just and prosperous society (Soediyono, 2000). One important indicator is economic growth as measured by a sustained increase in real GDP over a long period of time (Mankiw, 2014).

The ASEAN-4 countries are the four ASEAN-forming countries that are still developing countries. Even so, ASEAN-4 consisting of Indonesia, Malaysia, the Philippines and Thailand are developing countries with the largest economies in the ASEAN region (Hussin & Saidin, 2012). The existence of the ASEAN organization began with a four-country reconciliation process where at that time Indonesia, Malaysia, the Philippines rebuilt friendly relations between countries and Thailand acted as a mediator. With the same goals and desires, the four countries built cooperation within the regional scope until now (Saiidah, 2023).

Before joining ASEAN, each of the ASEAN-4 countries had a different history and economic development. However, in the last two years these four countries have experienced significant economic growth despite being affected by Covid-19 in 2020. Increased economic output such as household consumption, investment, government spending, net export value led to increased economic growth.
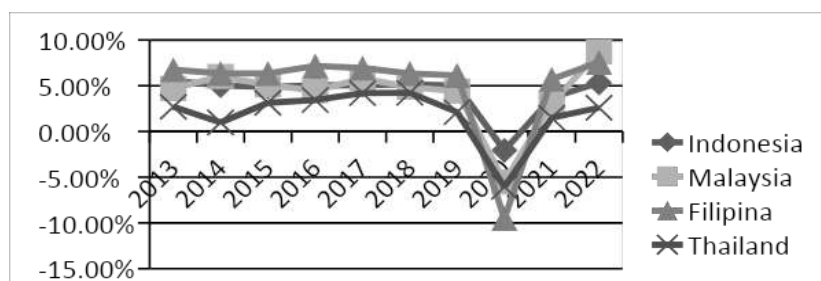


Figure 1. ASEAN-4 National Economic Growth
Source : The World Bank, World Development Indicator

*Corresponding Author

✉ azianadian2@gmail.com (A. D. Hanif).

In maintaining economic growth so that GDP does not contract and cause economic recession, a country must pay attention to the stability of its financial system. Financial stability refers to conditions in which a country's financial system is able to function properly and does not experience significant turmoil (Miskhin dkk., 2011). This includes the ability of the financial system to complete its functions effectively and efficiently, as well as being able to withstand risks and financial crises that occur (Sahabuddin dkk., 2021).

In this era of globalization, the financial industry has developed rapidly, including in ASEAN-4 countries. However, there are concerns over the stability of the conventional financial system which is vulnerable to the risk of a financial crisis. Therefore, Islamic principles-based finance as an alternative is becoming increasingly popular among the public (Benaissa dkk., 2005). According to Mansoor Khan & Ishaq Bhatti (2008) and Alasrag (2010), Islamic finance and its prospects are a viable alternative to the crisis-hit global financial system. Islamic banks have higher profit rates, are less affected by financial crises, and are more stable in the long run than conventional banks.



Figure 2. ASEAN-4 National Shariah Stock Index
Source**.** S&P Dow Jones Indices, S&P BMI Shariah

In ASEAN-4, Malaysia and Indonesia have developed a fairly advanced Islamic finance industry with a variety of Islamic products such as sukuk, sharia stocks, sharia banks, bonds, sharia savings, takaful and sharia pension funds. While Thailand has a sharia stock index figure of 133.26 USD greater than Indonesia and Malaysia. According to CNBC, Thailand has the richest and most liquid capital market in Asia with a stock market capitalization of 106%. Higher liquidity tends to be associated with rising share prices because it can drive greater demand for certain stocks (McKinsey & Company, 2022).

The development of the Islamic finance industry in ASEAN-4 is seen as a great potential in developing the economy and increasing financial access for the people. However, there are still contradictions from studies conducted by Mat Rahim et. al (2018), Huda et. al (2021), and Andiansyah et. al (2022) which states that Islamic finance cannot significantly affect economic growth. In this regard, it is also unknown how the role of Islamic finance related to financial stability and its potential to have the same impact on ASEAN-4 countries. The existence of theoretical, empirical, and inconsistent gaps between the results of one study and another makes this study will further examine the influence of Islamic finance on economic growth and financial stability with a case study of ASEAN-4 countries.

**Literature Review and Hypothesis**

**Islamic Finance**

Islamic finance can be defined as a financial system that is based on the principles of Islamic law and meets financing and investment needs in a manner that is in accordance with Islamic law. According to

(Arman, 2013), The Islamic financial system has the primary objective of creating balance in society and promoting social justice.

The development of Islamic finance from time to time is very rapid. The Islamic financial system encompasses a wide range of financial products and services, such as financing, investment, insurance, and asset management (Qureshi & Rehman, 2017). Islamic finance has a basic theory covering Islamic principles and values that are an important part of the Islamic financial system, such as sharia and PLS. Sharia is Islamic law that is the foundation for Islamic finance. PLS (*Profit and Loss Sharing*) is a principle in Islamic finance that divides profits and losses between parties involved in transactions.

The existence of the Islamic financial system is certainly a role mode for other aspects of the economy, such as financing, investment, banking, etc. In analyzing the performance and development of the Islamic finance industry and its impact on the economy and overall financial stability, Islamic finance indicators used include Islamic stock indices and Islamic banking assets (Anwar, 2013).

**Shariah Stock Index**

Sharia stock index is a statistical indicator of stock price movements in accordance with Islamic stock criteria. Performance measures of stocks that meet sharia principles are incorporated in the sharia stock index, which is a principle that prevents business activities that harm the community and ensures business activities are in accordance with sharia values (Sari, 2019). The index used is the S&P Dow Jones BMI Sharia Indices with detailed stock *screening using the* Shariah Board of Major Islamic Index *which has been determined by the S&P Dow Jones Sharia Council* .

$$Debt\ Screens = \frac{Total\ Debts}{Market\ Value\ of\ Equity} < 33\%$$

Companies with a debt ratio of more than 33% are considered not to meet the criteria of Islamic stocks and are not included in the Islamic stock index.

**Shariah Banking Assets**

Islamic banking assets refer to all types of assets and assets used to support all Islamic banking activities in each country. Then, total Islamic banking assets are used as the main indicator of Islamic banking in a country where the size of total assets will have an impact on *the country's* economy of scale (Harahap dkk. 2022). The data used is the total Islamic banking assets obtained from the Islamic banking financial statements of each country.

**Economic Growth**

Mankiw (2014) Economic growth is an increase in the percentage value of a country's real Gross Domestic Product (GDP) in a given year compared to the previous year, usually one year. To assess the occurrence of economic growth, it first calculates real GDP calculated according to prices prevailing in the base year. The value of real GDP is derived from the ratio between nominal GDP and the deflator. The existing value is called fixed price GDP, which is the price prevailing in the base year.

$$EG\ (Economic\ Growth) = \frac{PDB_t - PDB_{t-1}}{PDB_{t-1}} \times 100\%$$

Solow (1956) Explained that economic growth occurs due to increased production of inputs, such as labor, resources, technological advances, and capital accumulation. The workforce in question includes the total population in a country. Then, innovations that occur include the discovery of new methods of doing work and financial systems. Meanwhile, capital accumulation includes all types of asset funding against real sector investments invested in land, physical equipment, and human resources.

While Schumpeter's theory states that the main factor that causes economic development is the innovation process and the perpetrators are investors or entrepreneurs. The existence of an environment that supports creativity will give rise to some pioneering entrepreneurs who try to implement new ideas (Adisasmita, 2013). The supporting factors for innovation by entrepreneurs are the availability of new concepts and capital systems that can inject funds for them in realizing these concepts and ideas. When innovation occurs with the introduction of new technology or systems, it will eventually generate additional profits that become an important source of funds for companies that use the innovation (Fatmawati & Syafitri, 2015).

**Financial Stability**

In general, financial sector stability refers to the ability of the financial system to remain strong and resilient to stress. Stress in the financial sector is identified using risk indicators in each financial subsector (Asfari, 2015). Park & Mercado (2013) has analyzed financial stability through measuring stress indicators and forming a financial stress index which is still used as an indicator of financial sector stability.

FSI (Financial Stress Index) is a composite index of various market data that provides an overview of the level of stress in the financial system. In this case, FSI is used as an indicator to measure financial stability through a financial stress index. The establishment of FSI builds on the development pattern of elements of the country that measure financial stress. These elements consist of the banking sector, stock returns, stock volatility, debtspreads, and EMPI. Then, statistical algorithms capture these joint movements and generate a series of weights for financial stress gauge elements. The weights are then assembled into a composite index (Park & Mercado, 2013) using techniques developed by Bordo dkk. (2001) and Illing & Liu (2003).

$$I_t = \sum_{j=1}^{j} \omega_j h \frac{x_t^j - \bar{x}^j}{\hat{\sigma}_{a,b}}$$

Description :

$I_t$ = FSI (Financial Stability Index)
$\omega_j$ = Weighted values for each sector $j$
$x_t^j$ = value $x_j$ during $t$
$\underline{x}^j$ = median of $x_j$
$\underline{\sigma}_{a,b}$ = standard deviation from variables $x_j$

**Theoretical Framework**

Based on relevant phenomena, theories, and previous research, the relationship of Islamic wealth to economic growth and financial stability which can be described in the following framework:
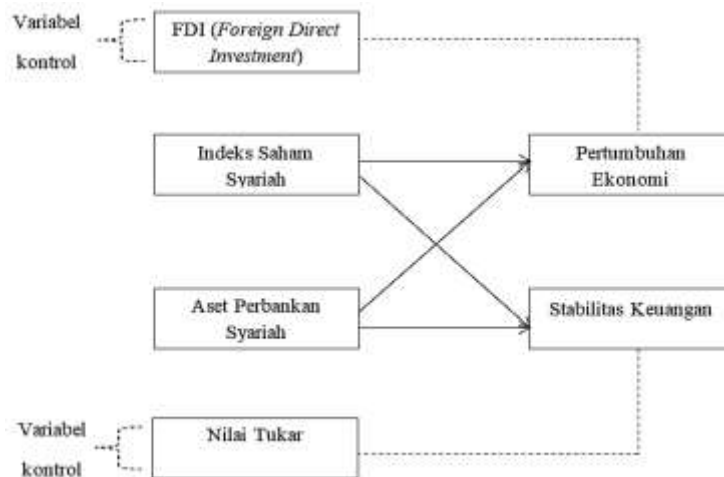


Figure 3. Theoretical Framework

The hypotheses in this study are as follows:

1. *Sharia Stock Index on Economic Growth*

   Stock indices become leading indicators for economic growth through the theory of wealth effect or wealth effect proposed by Pearce & Roley (1985). Rising stock prices can make investors richer (wealth effect) so that it will increase public consumption and encourage economic growth. The Islamic capital market allows companies to obtain capital by selling shares to investors. A fair share

price will allocate capital to the most productive sectors of the economy, which drives economic growth.

Research by Shahzad dkk. (2021) in Pakistan and Ibrahim & Rizvi (2020) in Malaysia found that the Islamic stock index has a positive and significant influence on economic growth through increased consumption and business activities based on sharia principles.

*H1 : Sharia stock index has a positive and significant effect on economic growth*

2. *Islamic Banking Assets on Economic Growth*

From Swan-Solow's theory, the expansion of Islamic banking assets will have a positive impact on economic growth through the accumulation of the main factor of production, namely capital. The allocation of Islamic banking financing focuses more on meeting the needs of the real sector so that it can further increase the investment component of economic growth Solow (1956).

Research by Hasan et. al (2020) in Indonesia and Kader et. al (2019) in Malaysia concluded that the growth of Islamic banking assets significantly positively affected economic growth, by increasing real sector investment and production as well as financing for halal businesses.

*H2 : Islamic banking assets have a positive and significant effect on economic growth*

3. *Sharia Stock Index on Financial Stability*

Islamic stock indices tend to be more stable and less volatile than conventional stock indices because they use stricter investment criteria to avoid high-risk sectors (Arouri dkk., 2013). Then, the Islamic stock index is well diversified into various sectors, thereby reducing systemic risk and stress levels on the financial system (Dewandaru dkk., 2014).

Mookim dkk. (2018) In its research in Malaysia, it shows that Islamic stock indices have a significant impact on financial stability because sharia principles prohibit investment in high-risk sectors. In addition, research by Saeed dkk. (2018) in Pakistan also concluded that the Islamic stock market has a positive diversification effect on financial system stability and reduces vulnerability to crises.

*H3 : Sharia stock index has a positive and significant effect on financial stability*

4. *Islamic Banking Assets on Financial Stability*

The development of Islamic banking assets plays an important role in maintaining financial stability in the financial system based on sharia principles. The PLS principle encourages Islamic banks' prudence in financing disbursement, thereby reducing the accumulation of systemic risks that could trigger a financial crisis. Then the synchronization of *risk sharing* between the parties involved and stricter regulations related to liquidity and capital adequacy make Islamic banking seen as able to mitigate financial stress (Beck dkk., 2013).

Islamic financing is more focused on the fundamental real sector rather than speculative activities that are prone to bubbles and sharp fluctuations. This helps reduce economic fluctuations, protects financial stability, and reduces the likelihood of a financial crisis (Bacha & Mirakhor, 2013)

*H4* : Islamic banking assets have a positive and significant effect on financial stability.

**Methodology**

This research is a quantitative research with panel data regression method. The panel data analyzed is a combination of cross section data and times series data. The times series data in the existing study covers the range of 2013 to 2022, while the cross-section data consists of four ASEAN representative countries, namely Indonesia, Malaysia, the Philippines, and Thailand.

In this study there are six variables, of which two variables are dependent variables, namely economic growth and financial stability (proxied with FSI), two independent variables namely Islamic stock index and Islamic banking assets. While the other two variables are control variables for each dependent

variable, FDI (Foreign Direct Investment) for economic growth and exchange rates for the dependent variable financial stability.

In order to test the hypotheses that have been formulated, this study utilizes several statistical tests such as descriptive statistical tests, model selection, classical assumption testing, and hypothesis testing. Regression analysis was performed using the *Eviews software* program. This study has two regression models because it examines two dependent variables with several dependent variables and each control variable. The basic general equation structure of panel data regression in this study can be formulated with the equation:

$$EG_{it} = \alpha + \beta_1[FDI_{it}] + \beta_2[ISI_{it}] + \beta_3[BSA_{it}] + \varepsilon_{it} \qquad .........(1)$$

$$FSI_{it} = \alpha + \beta_4[ER_{it}] + \beta_5[ISI_{it}] + \beta_6[BSA_{it}] + \varepsilon_{it} \qquad .........(2)$$

Description:
EGit                = Economic growth
FSIit               = Financial Stress Index
α                   = Constanta
$\beta_{1-6}$       = Model regression coefficient
FDIit               = Net inflow of state FDI i in year t
ERit                = Change value of country i in year t
ISIit               = National shariah stock index i in the year t
SBAit               = Total assets of Islamic banking of the country in year t
e                   = Error term

## Results

### Descriptive Statistics Test Results

Ghozali (2018) states that descriptive statistical tests aim to provide an overview of data such as mean value, standard deviation, kurtosis, variance, maximum, minimum, sum, range, and *skewness* (slope of distribution). related to each variable in a study. The following are the results of descriptive statistical testing.

Table 1. Results of Descriptive Statistical Analysis

| Variable | Number of Samples | Mean | Maximum | Minimum | Standard Deviation |
|---|---|---|---|---|---|
| EG (%) | 40 | 3,82 | 8,69 | -9,52 | 3,72 |
| FSI | 40 | -0,532 | 1,21 | -2,47 | 0,899830 |
| FDI (USD) | 40 | 11,8 miliar | 25,1 miliar | -4,95 miliar | 6,83 miliar |
| ER (per USD) | 40 | 3384,64 | 14849,9 | 3,2 | 5922,98 |
| ISI (USD) | 40 | 82 | 133,26 | 52,14 | 15,76 |
| SBA (USD) | 40 | 36 miliar | 131 miliar | 11,27 juta | 42,27 miliar |

Source: Eviews *output*, processed secondary data

Description:
EG      = *Economic Growth* atau pertumbuhan ekonomi
FSI     = *Financial Stress Index*
FDI     = Net inflow *Foreign Direct Investment*
ER      = *Exchange Rate*
ISI     = Islamic Stock Index
SBA     = Sharia Banking Asset

From the descriptive statistical test for the first dependent variable (economic growth) an average value of 3.82% was obtained. The standard deviation of this variable GDP is 3.72%. A standard deviation value that is smaller than the average value means that the variation in economic growth data

is smaller than the average value. The minimum value of this variable is -9.52% and the maximum value is 8.69%.

As for the second independent variable (financial stability) which in this case is measured by FSI, the average index value is 0.532. The standard deviation of this FSI variable is 0.89. The minimum value of this variable is -2.47 and the maximum value of the index is 1.21.

The independent variable ISI has an average index value of 82.0095 USD. The standard deviation of this ISI variable is $15.76114. The index threshold of this variable is $52.14 and the index maximum is $133.26. While the SBA's independent variables have an average value of USD 36 billion. The standard deviation of this SBA variable is USD 42.7 billion. The minimum value of this variable is USD 11.26 million and the maximum value is 131 billion.

Then, the FDI control variable has an average value of 11.8 billion USD. The standard deviation of this FDI variable is 6.83 billion USD. The minimum value of this variable is -4.95 billion USD and the maximum value is 25.1 billion USD. While the ER control variable has an average value of 3384.64. The standard deviation of this *variable exchange rate* is 5922.98. The minimum value of this variable is 3.2 and the maximum value is 14849.9.

**Model Selection Test Results**

Before applying regression estimation to panel data regression, it is necessary to take approach steps in determining the most suitable model for the estimate. Models that can be used are CEM (Common Effect Model), *FEM (Fixed Effect Model)*, and REM (*Random* Effect Model). To determine the most suitable model among these models, Perl performed the Chow Test, Hausaman Test and LM Test.

**Chow Test**

The Chow test is performed to determine the best model between CEM and FEM, by proposing the following hypothesis.
H0: CEM (*ChiSquare* > 0,05)
H1: FEM (*ChiSquare* < 0,05)
The following are the results of the Chow test on both dependent variables.

Table 2. Chow Test of Economic Growth Variables

| Effects Test | Signifikansi |
|---|---|
| *Cross-section* F | 0,1720 |
| *Cross-section Chi-square* | 0,1131 |

Source : Eviews *output*, secondary data processed

Based on table 2, from the Chow Test on the dependent variable of economic growth obtained the Significance value of Cross-section F and Cross-section Chi-square of 0.1720 (more than 0.05), so statistically accept H0 and reject H1, then the appropriate estimation model used in panel data regression is the Common Effext Model.

Table 3. Chow Test against FSI Variables

| Effects Test | Signifikansi |
|---|---|
| *Cross-section* F | 0,4221 |
| *Cross-section Chi-square* | 0,4221 |

Source: *output Eviews*, processed secondary data

From the results of the Chow Test on the FSI dependent variable in table 3, the significance value of Cross-section F and Cross-section Chi-square of 0.4221 and 0.4221 (more than 0.05) is obtained so that statistically accept H0 and reject H1, the appropriate estimation model used in panel data regression is the Common Effext Model .

**Hausman Test**

Because the results of the Chow Test on the dependent variable of economic growth and the dependent variable of FSI show that the results of the model that are more appropriate to use are CEM, there is no need to perform the Hausman test. What needs to be done next is the LM test for both regression models.

**LM Test**

The LM test in this study was conducted to find out the most appropriate estimation model between CEM and REM. This test was developed by Breusch Pagan which is based on the residual value of the OLS method with the following hypothesis.

H0: CEM (*ChiSquare* > 0,05)
H1: REM (*ChiSquare* < 0,05)
The following are the results of the Chow test on both dependent variables.

Table 4. LM Test of Economic Growth Variables

| Test Hypothesis | | | |
| --- | --- | --- | --- |
| | Cross-section | Time | Both |
| Breusch-Pagan | 0,102443 | 22,90801 | 23,01046 |
| | (0,7489) | (0,0000) | (0,0000) |

Source : *output Eviews*, processed secondary data

The Pagan Breusch test in table 4 shows an individual or *cross section* effect value of 0.2147 > 0.05 so that statistically accepts H0 and rejects H1. This suggests that the appropriate estimation model used for regression panel data on the dependent variable of economic growth is the Common Effext Model (CEM).

Table 5. LM Test Against FSI Variables

| Test Hypothesis | | | |
| --- | --- | --- | --- |
| | Cross-section | Time | Both |
| Breusch-Pagan | 1,539149 | 8,697857 | 10,23701 |
| | (0,2147) | (0,0032) | (0,0014) |

Source: Eviews *output*, processed secondary data

From table 5, the results of the Pagan Breusch Test on the FSI dependent variable show an individual effect value or *cross section* of 0.2147 > 0.05 so that statistically accept H0 and reject H1, the appropriate estimation model used in panel data regression is the *Common Effext Model* (CEM).

**Classical Assumption Test Results**

The advantages of research using panel data are that the data used becomes more informative, the variability is greater, and has low collinearity. Thus, a greater df (degree of freedom) will be produced as well as more efficiently (Gujarati, 2013). The data panel can detect and measure impact better, which cannot be done with cross section or time series methods. From the advantages possessed by panel data, the classical assumption test used is the multicollinearity test and heteroscedasticity test.

**Multicollinearity Test**

The multicollinearity test is used to detect whether there is a correlation between independent variables in a regression model (Ghozali, 2018). A regression model is considered a good model if it does not have a correlation between independent variables. This study used a multicollinearity test seen by calculating the correlation coefficient between independent variables. If between independent variables has a fairly high correlation (greater than 0.90), then this is an indication of multicollinearity.

Table 6. Multicollinearity Test Results of Economic Growth Variables

| | FDI | ISI | SBA |
| --- | --- | --- | --- |
| FDI | 1 | -0,418179 | 0,413707 |
| ISI | -0,418179 | 1 | -0,211074 |
| SBA | 0,413707 | -0,211074 | 1 |

Source: output Eviews, processed secondary data

Table 7. FSI Variable Multicollinearity Test Results

| | LOG_ER | LOG_ISI | LOG_SBA |
| --- | --- | --- | --- |
| LOG_ER | 1 | -0,556102 | 0,131375 |
| LOG_ISI | -0,556102 | 1 | -0,231584 |

| LOG_SBA | 0,131375 | -0,231584 | 1 |
|---------|----------|-----------|---|

Source: output Eviews, processed secondary data

Based on the results of the multicollinearity test in table 6 and table 7, it is obtained that all correlations between independent variables have a correlation value of less than 0.90. So it can be concluded that there is no multicollinearity in this study.

**Heteroscedasticity Test**

Heteroscedasticity can occur if there is an error from the observed model to have a difference in *variance* from one observation to another. In this study, the technique used to test the presence or absence of heteroscedasticity is the Glejser test by performing a regression test of residual absolute values against independent variables. If the significance value of the independent variable to the residual absolute value is less than the specified significance level, heteroscedasticity can be said. However, if the significance value of the independent variable to the residual absolute value is greater than the specified significance level, then it can be said that heteroscedasticity does not occur.

Table 8. Glejser Test Results of Economic Growth Variables

| Dependent Variable: ABSRES | | | |
|---|---|---|---|
| Method: Panel Least Squares | | | |
| Variabel | Koefisien | t-Statistik | Signifikansi |
| C | 4.346174 | 1.972974 | 0.0562 |
| FDI | -0.460709 | -1.208245 | 0.2348 |
| ISI | -0.012322 | -0.507201 | 0.6151 |
| SBA | 4.57E-12 | 0.458108 | 0.6496 |

Source: Eviews *output*, processed secondary data

Table 9. Hasil Uji Glejser Variabel FSI

| Dependent Variable: LOG_ABSRES | | | |
|---|---|---|---|
| Method: Panel Least Squares | | | |
| Variabel | Koefisien | t-Statistik | Variabel |
| C | -1,307883 | -1,397377 | C |
| LOG_ER | 0,005827 | 0,491660 | LOG_ER |
| LOG_SBA | 0,408902 | 2,109437 | LOG_SBA |
| LOG_ISI | -0,012195 | -1,403793 | LOG_ISI |

Source: Eviews *output*, processed secondary data

Based on the glacier test in table 8 and table 9, a probability is obtained for each independent variable $> \alpha$ . This means that the probability value is $> \alpha$ it is proven that heteroscedasticity does not occur.

**Panel Data Regression Test Results**

Regression testing of panel data in this study was carried out with a *Common Effect Model* (CEM) approach to both independent variables, namely economic growth and financial stability. The results of the panel data regression test are as follows.

Table 10. Results of CEM Model Panel Data Regression Analysis (Dependent Variable of Economic Growth)

| Variabel | Koefisien | t-Statistik | Sig |
|---|---|---|---|
| C | 0,671922 | 4,647182 | 0,0152 |
| FDI | 1,510415 | 2,262405 | 0,0298 |
| ISI | 0,000518 | 0,797218 | 0,4306 |
| SBA | 0,221494 | 2,941822 | 0,0248 |
| R-*squared* | : 0,917598 | | |
| F-statistik | : 5,142303 | | |
| Sig (F-statistik) | : 0,032041 | | |

Source: Eviews *output*, processed secondary data

Table 11. Results of CEM Model Panel Data Regression Analysis (FSI dependent variables)

| Variabel | Koefisien | t-Statistik | Sig |
|---|---|---|---|
| C | 4,985487 | 2,988923 | 0,0050 |
| LOG_ER | -0,232843 | 1,881538 | 0,0266 |
| LOG_ISI | -0,863377 | 2,499251 | 0,0171 |
| LOG_SBA | -0,003121 | 0,201557 | 0,8414 |
| R-*squared* | : 0,891523 | | |
| F-statistic | : 3,56108 | | |
| Sig (F-statistic) | : 0,011020 | | |

Source: Eviews *output*, processed secondary data

**Uji F (Uji Simultan)**

Based on the results of regression analysis in table 10 and table 11 above, a calculated F value of 5.142303 was obtained for the dependent variable of economic growth and a calculated F value of 3.56108 for the FSI dependent variable where both have a value greater than the F of table 2.874. Then, a significance value of 0.032 was obtained for the dependent variable of economic growth and a significance value of 0.011 for the dependent variable FSI smaller than $\alpha$ (0.05). The existence of these figures concludes that the independent variables of ISI and SBA simultaneously affect economic growth and financial stability. That is, Islamic finance significantly affects economic growth and financial stability.

**Uji R2 (R-Square)**

The estimation results shown by table 10 and table 11 show that the R2 value obtained in the economic growth equation is 0.917598. This shows that overall, Islamic finance with FDI (control) variables, ISI independent variables, and SBA has an influence of 91% on economic growth. Meanwhile, the financial stability equation obtained an R2 value of 0.891523 which shows that Islamic finance with ER control variables, ISI independent variables, and SBA has an effect of 89% on financial stability in ASEAN-4 countries in the 2013-2022 period.

**Uji t (Uji Parsial)**

The test results in table 10 and table 11 above show that :

1. The variable Islamic stock index (ISI) t-Statistic of 0.797218 is smaller than the table t value of 1.65468. The significance value obtained at 0.4306 is greater than 0.05. So it can be concluded that the variable Islamic stock index has no effect on economic growth.
2. The variable Islamic banking assets (SBA) showed a positive coefficient value of 0.221494. The t-Statistic value obtained is greater than the table t value, which is 2.941822. The significance value obtained at 0.0248 is less than 0.05. Therefore, it can be concluded that the variable of Islamic banking assets has a positive and significant effect on economic growth.
3. The variable Islamic stock index (ISI) shows a negative coefficient value of -0.863377. The t-Statistic value obtained is greater than the table t value, which is 2.499251. The significance value obtained is 0.0171. The significance value obtained is less than 0.05. Based on this value, the variable Islamic stock index has a negative and significant effect on FSI. Because the FSI number shows the level of *stress* so that it is inversely proportional to the value of financial stability, it can be concluded that the variable Islamic stock index has a positive and significant effect on financial stability.
4. Islamic banking assets variable (SBA) shows a t-statistic value of 0.201557 smaller than the t table value of 1.65468. The significance value obtained is 0.8414 greater than 0.05. Based on this value, it can be concluded that the Islamic banking assets variable has no effect on the financial stability of ASEAN-4 countries.

**Discussion**

**The Effect of Sharia Stock Index on Economic Growth**

Islamic stock indices have no effect on economic growth due to several mechanisms. Portfolios of Islamic stocks may be less involved in high-risk sectors, leading to slower economic growth in Islamic stock indices due to lower growth potential. Then, the Islamic stock index itself is still within the scope of economic and market dynamics so that its influence on economic growth is not directly or comprehensively. This is according to Andiansyah et al. (2022), although there is a positive increase in the Islamic stock index, if it is not accompanied by increased company expansion or decreased industrial output, it will have a negative impact on GDP in the short term. And the effect in the long run will have no effect on economic growth.

On the other hand, referring to conventional stock indices, Islamic stock index numbers are relatively less than conventional stock indices on S&P Dow Jones Indices so that they cannot directly and thoroughly affect economic growth. The existence of external factors such as global economic conditions can also cause variations in the relationship between Islamic stock indices and growth over time. So, in certain periods, Islamic stock indices may be influential, while in other periods they are not.

**The Effect of Islamic Banking Assets on Economic Growth**

The influence of Islamic banking assets on economic growth has a correlation with the Swan-Solow theory of economic growth. The expansion of Islamic banking assets will have a positive impact on economic growth through the accumulation of the main factor of production, namely capital. The allocation of Islamic banking financing focuses more on meeting the needs of the real sector so as to further increase the investment component of economic growth.

According to Munawir (2014) in similar research, capital is part of assets. While assets are wealth owned by a company resulting from operational and production processes. So, increasing the total assets of Islamic banking will make it easier for Islamic banking to carry out its operational activities, especially related to the distribution of funds or capital to customers for real assets so that it can directly increase GDP every year.

**The Effect of Sharia Stock Index on Financial Stability**

Sharia stock indices have a positive and significant effect on financial stability because stock volatility in Islamic stock indices is lower than conventional stock indices, due to stricter screening criteria that contribute to financial stability (Arouri et al., 2013). In addition, the Islamic stock index is well diversified into various sectors and industries so that risks are not only concentrated in certain sectors. This reduces systemic risk in financial markets thereby reducing the level of stress on a country's financial system (Dewandaru et al., 2014).

Then if judging from the components that make up FSI, this result is influenced by the components of stock return and stock volatility. S&P Dow Jones sharia stock index data states that stock returns from sharia stocks of ASEAN-4 countries in the last 10 years show positive numbers and the volatility of sharia stocks is stable. This makes the stress number obtained at a normal point or even no stress occurs so as to create financial stability.

**The Effect of Islamic Banking Assets on Financial Stability**

Referring to the elements that make up the *stress* index in ASEAN-4 countries, Islamic banking assets have no influence on financial stability due to limited Islamic banking assets in index measurement. In recent years, total conventional banking assets in each ASEAN-4 country have stood at 300 billion to 600 billion USD compared to the highest total conventional banking assets of 130 billion USD. In this case, the more dominating conventional banking sector causes the contribution of Islamic banking assets to overall financial stability to be limited. Furthermore, the existence of stock returns and volatility of Islamic banking stocks that are not significant to the overall market can also cause limited influence of Islamic banking assets on financial stability.

**Conclusion, Limitations, and Suggestions**

Islamic finance in ASEAN-4 countries has an important role. A strong and resilient financial sector will create a positive multiplier effect on a country's economy. The results of this study show that the Islamic stock index has a positive and significant relationship to financial stability, but has no influence on economic growth. Then Islamic banking assets have a positive and significant relationship to economic growth, but have no influence on financial stability. Nonetheless, Islamic finance in the test simultaneously had a significant influence on economic growth and financial stability in ASEAN-4 countries in the period 2013-2022.

**References**

Adisasmita, R. (2013). *Teori-Teori Pembangunan Ekonomi*. Yogyakarta : Graha Ilmu.

Alasrag, H. (2010). *Munich Personal RePEc Archive Global Financial crisis and Islamic finance*. *22167*.

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.

Anwar, M. (2013). Financial performance of Islamic banks during Covid-19 pandemic: An analysis of Islamic Banking in Indonesia. *Journal of Islamic Monetary Economics and Finance*, *7*(2), 485–510. https://doi.org/10.21098/jimf.v7i2.1354

Arman, S. M. (2013). Shariah Compliance Features of Islamic Financial Institutions and Its Challenges. *Oman Chapter of Arabian Journal of Business and Management Review*, *3*(4), 91–98. https://doi.org/10.12816/0016447

Arouri, M. E. H., Ben Ameur, H., Jawadi, F., Jawadi, N., & Louhichi, W. (2013). Are Islamic Finance Innovations Enough for Investors to Escape from A Financial Downturn? Further Evidence From Portfolio Simulations. *Applied Economics*, *45*, 3412–3420.

Asfari, D. D. (2015). Analisis Financial Stress Indicator Sebagai Alat Ukur Stabilitas Sektor Keuangan Indonesia. *Bina Ekonomi*, *19*(1), 15–25.

Bacha, O. I., & Mirakhor, A. (2013). *Islamic capital markets : a comparative approach*. Wiley : John Wiley & Sons Singapore Pte.

Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. Conventional Banking: Business Model, Efficiency and Stability. *Journal of Banking & Finance*, *37*(2), 433–447. https://doi.org/doi.org/10.1016/j.jbankfin.2012.09.016

Benaissa, N.-E., Parekh, M. P., & Wiegand, M. (2005). A growth model for Islamic banking. *McKinsey & Company*, *October*.

Bordo, M., Eichengreen, B., Klingebiel, D., Martinez-Peria, M. S., & Rose, A. K. (2001). Is the crisis problem growing more severe? *Economic Policy*, *16*(32), 51+53-82.

Dewandaru, G., Rizvi, S. A. R., Masih, R., Masih, M., & Alhabshi, S. O. (2014). Stock Market Co-Movements: Islamic Versus Conventional Equity Indices with Multi-Timescales Analysis. *Economic Systems*, *38*(4), 553–571. https://doi.org/https://doi.org/10.1016/j.ecosys.2014.05.003

Fatmawati, I., & Syafitri, W. (2015). Analisis Pertumbuhan Ekonomi Indonesia Model Solow Dan Model Schumpeter. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, 1–12. https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/1860/1702

Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25* (9 ed.). Badan Penerbit Universitas Diponegoro. http://slims.umn.ac.id//index.php?p=show_detail&id=19545

Gujarati, D. N. (2013). *Dasar-Dasar Ekonometrika* (R. C. Mangunsong (ed.); 5th ed.). Jakarta : Salemba Empat.

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

Hasan, I., Widiyanto, G., & Rahayu, R. (2020). The Role of Islamic Banks in Indonesia's Economic Development. *Journal of Islamic Monetary Economics and Finance*, *6*(2), 375–392.

Huda, M., Siregar, H., & Azzahra, A. . (2021). Islamic Finance and Economic Growth: Evidence from Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, *14*(1), 116–133.

Hussin, F., & Saidin, N. (2012). Economic Growth in ASEAN-4 Countries: A Panel Data Analysis. *International Journal of Economics and Finance*, *4*(9), 119–129. https://doi.org/10.5539/ijef.v4n9p119

Ibrahim, M. H., & Rizvi, S. A. R. (2020). Islamic Stock Market and Economic Growth: Evidence from Malaysia. *Journal of Economic Cooperation and Development*, *41*(4), 63–80.

Illing, M., & Liu, Y. (2003). An Index of Financial Stress for Canada. *Bank of Canada Working Paper*, *14*.

Kader, A., Rahman, A., Zainal Abidin, I., & Yusof, R. M. (2019). Islamic Banking Development and Economic Growth: Evidence from Malaysia. *International Journal of Academic Research in Business and Social Sciences*, *9*(2), 716–727.

Mankiw, N. G. (2014). *Principles of macroeconomics* (7 ed.). Cengage Learning.

Mansoor Khan, M., & Ishaq Bhatti, M. (2008). Islamic Banking and Finance: On its way to Globalization. *Managerial Finance*, *34*(10), 708–725. https://doi.org/10.1108/03074350810891029

Mat Rahim, N., Mat Noor, N. B., Mustapha, M. Z., & Abdul Majid, A. H. (2018). Does Islamic finance negatively impact economic growth? Empirical evidence from Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management*, *11*(2), 195–208.

McKinsey & Company. (2022). Improving Thailand ' s Capital Market Competitiveness and Efficiency. In *Thailand CMDF*.

Miskhin, S. M., Park, Y. C., & Lim, W. (2011). *Asia and the global economic crisis: Challenges for the development paradigm* (10 ed.). Edward Elgar Publishing.

Mookim, P., Matemilola, B. T., & Kolari, J. W. (2018). Do Islamic stocks offer diversification benefits? An application of MGARCH-DCC and wavelet correlation analysis. *Journal of Economic Behavior & Organization*, 122–141.

Munawir, S. (2014). *Analisa Laporan Keuangan*. Yogyakarta : Liberty.

Park, C. Y., & Mercado, R. V. (2013). Determinants of financial stress in emerging market economies. *ADB Economics Working Paper Series*, *356*(356), 1–47. https://doi.org/10.2139/ssrn.2588983

Pearce, D. K., & Roley, V. V. (1985). Stock Prices and Economic News. *The Journal of Business*, *58*(1), 49–67. http://www.jstor.org/stable/2352909

Qureshi, I. M., & Rehman, I. (2017). Islamic finance and economic growth: A review of literature. *Journal of Islamic Banking and Finance*, *5*(2), 87–98.

Saeed, M., Yousafzai, A., & Rathore, H. (2018). Islamic equity indices, financial crisis and crisis transmission. *Journal of Economic Behavior & Organization*, 195–210.

Sahabuddin, M., Zainal Abidin, A., & Abdul Hamid, B. (2021). Stability of Islamic banks and its implications on financial stability. *Journal of Islamic Monetary Economics and Finance*, *7*(1), 1–20.

Sari, M. R. (2019). *Analisis pengaruh struktur corporate governance dan kinerja keuangan terhadap pengungkapan sukuk di perusahaan non-keuangan yang terdaftar di Bursa Efek Indonesia*. Universitas Islam Negeri Maulana Malik Ibrahim Malang.

Shahzad, S. J. H., Raza, N., & Bano, S. (2021). Shariah-Compliant Stock Market Development and Economic Growth: Evidence from Pakistan. *Journal of Islamic Accounting and Business Research*, *12*(5), 1612–1632.

Soediyono, R. (2000). *Ekonomi Makro: Analisis IS-LM dan Permintaan Penawaran Agregatif*. Badan Penerbit Fakultas Ekonomi Yogyakarta.

Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, *70*(1), 65–94. https://doi.org/10.2307/1884513