Journal of Islamic Economics, Management, and Business (JIEMB)
Vol. 4, No. 1 (2022), 35-54, DOI: 10.21580/jiemb.2022.4.1.11859
Magister of Sharia Economy, Faculty of Islamic Economics and Business
Universitas Islam Negeri Walisongo (p-ISSN: 2721-0197; e-ISSN: 2721-0324)
Published online in http://journal.walisongo.ac.id/index.php/JIEMB

The impact of the Islamic finance sector and Covid-19 pandemic on Indonesian economic growth period 2004Q1-2021Q3

Safira Aulia Cahyaningrum[1], Muhammad Ghafur Wibowo[2]

[1,2]Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Indonesia,
Corresponding author: auliasaf15@gmail.com

Abstract

The Asian financial crisis in 1997 left the national banking system in disarray and liquidity problems. After that, following the Covid-19 pandemic which has increasingly complicated global economic sectors, such as tourism, trade and finance. In the financial sector, uncertainty has depressed the performance of global financial markets and caused the stock market to decline. A stock market is a place for transactions in financial instruments such as securities or stocks. This study aims to analyze the impact of the Islamic finance sector and the Covid-19 pandemic on the Indonesian economic growth period 2004Q1 – 2021Q3. The method used in this study is a quantitative method employing Autoregressive Distributed Lag (ARDL) analysis. This study demonstrates that Islamic finance has the potential to boost the economy. This study confirms the assumption that the financial sector affects economic growth (finance led growth). This research can be used as reference material in determining and making policies regarding the development of the Islamic finance sector in Indonesia, such as formulating strategies to encourage economic growth through Islamic finance.

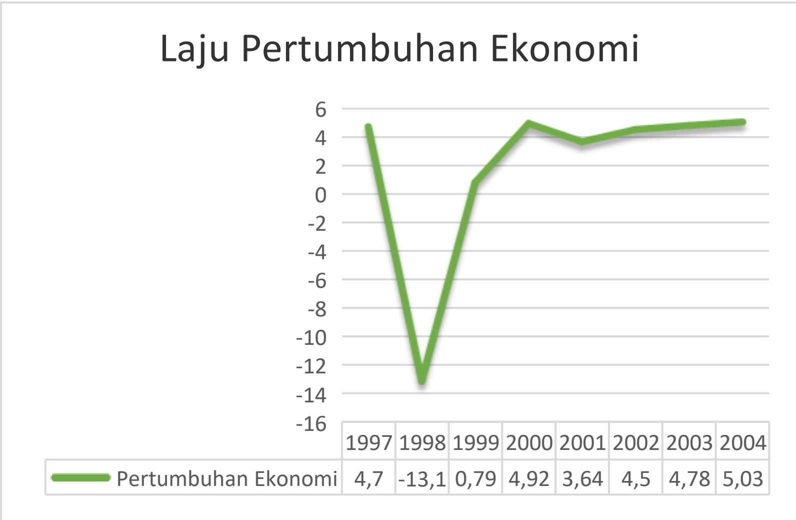
Keywords: Islamic finance; Covid-19; economic growth.

Introduction

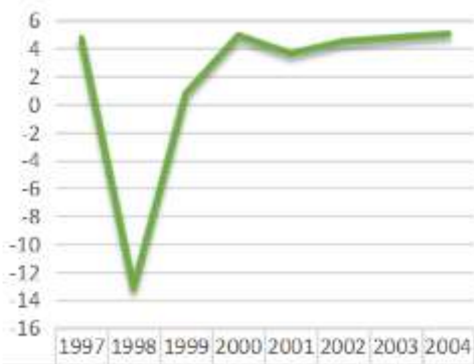
People's lives cannot be separated from economic activities. This happened hundreds of years ago, even during the colonial era. Economic conditions are always fluctuating and dynamic; it doesn't always prosperous and down. A country's economy goes hand in hand with development and economic growth. According to Todaro and Smith, economic development can be realized when the productivity of economic actors increases as measured by per capita income (Todaro & Smith, 2011). According to the new paradigm, development does involve not only aspects of industrialization but also comprehensive social aspects such as the economy, education, economic growth, poverty, and inequality (Mahri et al., 2021). Meanwhile, according to the Islamic paradigm, development involves not only industrialization and social aspects as a whole but also religious aspects known as the Islamic sharia principles. However, both paradigms assess economic growth as a component of realizing development.

Economic growth is often described as per capita income or real Gross Domestic Product (GDP). GDP is determined by several factors, which sometimes cause economic growth to fluctuate. As so happened from 1997 to 2004, when the Asian Region, including Indonesia, was hit by a financial crisis. The Asian financial crisis in 1997 was triggered by the shocks experienced by Thailand's financial condition. The weakening of currency values in countries in the Asian region, including Indonesia, has affected people's psychology and caused panic. In Indonesia, panic buying occurs when people compete to buy or get an item (when it is foreign exchange or dollars) (Boediono, 2016).

Chart 1. Indonesian economic growth



Source: bps.go.id



This situation left the national banking condition in shambles and liquidity problems, so Indonesia requested assistance from the International Monetary Fund (IMF), and the IMF closed 16 conventional banks in Indonesia. A different fate befell Islamic banking, where it was able to survive when a financial crisis hit the country. Even at the end of 2008, when the global financial crisis was not over, Islamic financial institutions could still earn profits and provide benefits to their customers (Marimin et al., 2015). In 2008, the world was hit by a global financial crisis. Economic observers say that the crisis is the toughest crisis the world has experienced since the 1930s (Boediono, 2016). Then, in 2020, the Indonesian economy experienced a drastic decline and even reached the point of crisis again. This condition occurred when Indonesia was hit by the Covid-19 pandemic, which urged the government to issue a policy limiting social activities. Based on economic growth data presented by the Central Statistics Agency (BPS), the worst condition of the Indonesian economy in 2020 was in the second quarter, when economic growth reached -5.32%.

On September 10, 2020, the Composite Stock Price Index (IHSG) fell 5.01% at closing and experienced a trading halt. This is because the JCI experienced a drastic decline in one day. Stock price declines often occur in Indonesia and several countries, such as the United States and China. The presence of the Covid-19 pandemic was able to make stock prices in the Chinese capital market plunge to their lowest levels in history, and the American stock market experience four unprecedented declines (Pinglin He et al., 2020).

According to Bank Indonesia, the Covid-19 pandemic has impacted several sectors of the global economy, including the tourism, trade, and financial sectors. In the financial sector, uncertainty has suppressed the performance of global financial markets and caused the stock market to decline (Ramadhani, 2021). The stock market, or capital market, is where transactions for financial instruments such as securities or shares occur. Indonesia has several stock indices that apply in the stock market, namely JCI, LQ45, JII, ISSI, etc. The Jakarta Islamic Index (JII) is a sharia stock index that has been assessed as having high financial performance and transaction liquidity.

The financial sector cannot avoid the effects of the economic downturn, but it also holds the responsibility of being a crutch for economic recovery. According to Bank Indonesia, the Islamic economy and banking sector plays three key roles in aiding postcrisis economic recovery. First, Islamic economic and financial policies are part of Bank Indonesia's monetary and macro-prudential policy mix. Bank Indonesia took this action to strengthen the liquidity of the Islamic financial sector, particularly banking, to stimulate and expand the use of Islamic finance in the real economy and support economic growth. Second, Bank Indonesia initiated to expand sharia business units in the Islamic boarding school economy Micro, Small, and Medium Enterprises (MSMEs) through mentoring and cooperation programs. Third, Bank Indonesia improved social finance (zakat, infaq, and alms) to reduce poverty and inequality (Bank Indonesia, 2020).

Previous research conducted by Prastowo (2018) used empirical studies in 13 countries to investigate the impact of Islamic banking on economic growth and found that Islamic banking financing has a favorable effect on economic growth. This research contrasts with previous research conducted by Hidayat and Irwansyah (2020), which shows that Islamic finance has no significant impact on economic growth.

Meanwhile, Ledhem and Mekidiche (2020) found that the banking liquidity variable did not affect economic development. This, of course, is in stark contrast to the reality in Indonesia's banking industry, where the IMF shuttered 16 commercial banks in 1997/1998 because they were deemed unhealthy due to insufficient financial liquidity. Beck and Levine (2004) discovered that the stock market and banking expansion had a major impact on economic growth.

Previous research on the financial sector and economic growth have been conducted, but there are still few that include extraordinary conditions, particularly Covid-19, in their studies. Each study has different results. Maybe this can be based on the period of year that is used as a research reference. This study focuses on the Islamic finance sector in the form of stock and banking indices as well as extraordinary conditions, namely the Covid-19 pandemic for the period 2004Q1– 2021Q3. Based on the background above, it can be formulated that the existing problems: (1) What is the effect of the Jakarta Islamic Index (JII) on Indonesia's economic growth for the period 2004Q1–2021Q3?; (2) What is the effect of total Islamic banking assets on Indonesia's economic growth for the period 2004Q1–2021Q3?; (3) What is the effect of the financing to deposit ratio (FDR) on Indonesia's economic growth for the period 2004Q1-2021Q3?; (4) What is the effect of Islamic banking financing on Indonesia's economic growth for the period 2004Q1-2021Q3?; and (5) What is the impact of the Covid-19 pandemic on Indonesia's economic growth for the period 2004Q1–2021Q3?

Literature review

Economic growth

The meaning of economic growth has existed since before World War II, and until now, economic growth has been used as a benchmark for the development of a region. Regions or countries with high economic growth are considered to have succeeded in carrying out development. There is a growth model in which the model assesses that development goes hand in hand with economic growth that occurs sequentially, through certain stages from low to higher levels. This growth model is called the linear growth model or the theory of economic growth, which focuses on a combination of savings, rapid foreign aid, and investment. There are four theories that have explained the linear growth model, including the theories of Adam Smith, Karl Max, Harrod-Domar, and Walt Whitman Rostow (Mahri et al., 2021).

The Harrod-Domar hypothesis gave rise to a formulation that illustrates to stimulate economic growth; each country must set aside a portion of its income for new capital stock investments. According to the Harrod-Domar formula, a country that can invest 15-20 percent of its revenue will see faster economic growth than those that invest less than that amount (Mahri et al., 2021). The growth theory of Harrod-Domar assumes that capital, investment, and savings are significant components or variables in achieving constant growth. Capital accumulation is a primary driver of development (Huda, 2017). At the same time, Islamic economics believes that economic progress should not be divorced from the maqashid sharia, which covers religion, the soul, the mind, lineage, and property (Mahri et al., 2021).

Islamic finance

According to Levine, the financial system has five primary goals. To begin with, it makes trading, hedging, and risk diversification easier. The second step is to assign resources. The third step is to keep an eye on your bosses and keep the organization under control. Fourth, make use of your savings. Fifth, to make it easier to trade products and services. The financial sector influences capital accumulation by affecting savings and allocating capital to investments, including real estate, human resources, and technological investment (Levine, 1997). The relationship between the financial sector and economic growth can be explained in various ways.

First, there's the Finance-Led-Growth or Supply-Leading View (the financial sector determines economic growth). Second, growth-led- finance or Demand-Following View (the financial sector follows economic growth). The Bidirectional Causality View is the third point to consider (the interplay between the financial sector and economic growth). The Independent Hypothesis is the fourth hypothesis (Patrick, 1966). The Islamic finance industry is split into non-bank finance and banking.

Sharia capital market

The capital market has a function and role in the economy to fund and finance the business sector and the government (Faniyah, 2017). The Indonesia Stock Exchange (IDX) is based on the 1977 Presidential Decree (Dinar & Hasan, 2018). BEI provides systems and means of transactions for securities and securities trading. In carrying out its duties, the IDX produces a stock price index that measures a stock's performance. The stock index is a statistical measure that can describe the overall movement of stock prices selected based on certain criteria and constantly evaluated (IDX, 2021).

According to the Indonesia Stock Exchange (IDX), stock indices can assist investment managers in determining the risks and returns of a particular investment (IDX, 2021). As a result, investors and investment managers can understand and assess the investment profile, allowing them to distribute investment money efficiently and wisely to achieve projected returns. The Jakarta Islamic Index (JII) is a sharia stock index in Indonesia. However, only 30 sharia shares with the best financial performance and liquidity are included in the JII.

Islamic banking

The Muslim community, which is the majority community in Indonesia, wants to continue using financial services, especially banking, without violating the rules and regulations contained in religious teachings. Islamic banking is a commercial bank that carries out its practice based on sharia/Islamic principles, one of which is replacing interest with a profit-sharing system. According to Ardini (2020), there are main indicators that encourage the growth of Islamic banking, namely assets, Disbursed Financing (PYD), and

Third-Party Funds (TPF). Based on the Sharia Banking Snapshot issued by the Financial Services Authority (Otoritas Jasa Keuangan, OJK), assets, PYD, TPF, Financing to Deposit Ratio (FDR), and Non-Performing Financing (NPF) are indicators or benchmarks for assessing and observing the development of Islamic banking which is the majority community in Indonesia wants to continue to be able to use financial services, especially banking without violating the rules and regulations that have been contained in religious teachings. Islamic banking is a commercial bank that carries out its practice based on sharia/Islamic principles, one of which is replacing interest with a profit-sharing system.

Hypothesis

The effect of the Jakarta Islamic Index (JII) on economic growth

Beck and Levine (2004) found that the stock market and banking had a major impact on economic growth. Investment has an impact on economic growth in the national income equation using the expenditure approach method, as seen in the following equation:

$$Y=C+I+G+(X-M)$$

With the information Y = National Income; C = Consumption; I = Investment; G = Government Expenditure; X – M = International Trade (Exports and Imports).

H1 = JII has a significantly positive effect on economic growth

The effect of total Islamic banking assets on economic growth

According to Harrison, one of the economic resources that will bring more optimism in the future is assets. According to Zumaidah et al. (2018), banking assets are resources owned and employed for commercial bank activities. These assets might be in the form of buildings, technology, currency, etc. According to research conducted by Rahma (2021), total banking assets favor banking efficiency, where efficiency is a measurement of a bank's performance. Rafsanjani dan Sukmana (2014) concluded in a previous study that the total assets of Islamic banks had a considerable positive effect on GDP.

H2 = Total assets of Islamic banking has a significantly positive effect on economic growth

The effect of financing to deposit ratio (FDR) on economic growth

During the Asian financial crisis, the IMF forced the closure of 16 commercial banks in Indonesia due to a lack of banking liquidity, resulting in hazardous bank circumstances. Based on this truth, there is an inherent relationship between bank liquidity and the quality of banking conditions. The FDR (Financing to Deposit Ratio) is a metric that measures the liquidity of a bank; the percentage comparison between the amount of disbursement and the amount collected evaluates the bank's capacity to repay funds/fulfill the customer's withdrawal of funds.

H3 = Financing to Deposit Ratio (FDR) has a significantly negative effect on economic growth

The effect of Islamic bank financing on economic growth

According to research by Inggrid (2006), the financial system can be an engine of economic growth based on the test's findings utilizing the VECM approach. The relationship between financial sector growth and growth can occur because the financial sector can spur growth in the real sector (Baroroh, 2012). The financial sector, such as banks, can indirectly impact economic growth by providing financial services in the form of funding, which subsequently leads to investment. According to RF Harrod and Evsey Domar's theory of economic growth, economic growth factors are the level of savings and investment (Siahaan, Purba, & Simangunsong, 2001).

H4 = Islamic bank financing has a significant positive effect on economic growth

The impact of the Covid-19 on economic growth

According to Bank Indonesia (2020) in the Indonesian Economic Report, Covid-19 is suppressing the global economy. The imposed mobility restrictions and other handling policies have triggered uncertainty for global financial markets, thus making investors very cautious when investing. The global economy's performance, especially in the second quarter of 2020, experienced a decline and resulted in a decline in world trade activity.

H5 = The Covid-19 pandemic has a significant negative effect on economic growth

Reseach methods

This study uses a quantitative approach, with the type of data used is secondary data in the form of time series from 2004Q1–2021Q3. The data was obtained through related sources, namely the Central Statistics Agency (BPS), the Financial Services Authority (OJK), and Yahoo Finance. In this study, the dependent variable, independent variable, and dummy variable were used to describe the Covid-19 pandemic period.

In this study, the data analysis test used was the Autoregressive Distributed Lag (ARDL) method. The data used in the ARDL method is stationary data at different levels. If the data is stationary at the same level of differentiation, then the correct method is the Error Correction Model (ECM) (Widarjono, 2018). The steps that must be carried out in the ARDL method are as follows:

Stationarity test

The stationarity test used in this method is the Unit Root-Test to determine whether the data is stationary or the data is stationary at different levels. It aims to avoid the occurrence of spurious regression, in which the test results show a relationship between two significant variables when it is not.

ARDL model estimation

Determining the optimal lag length is one of the crucial things in estimating the ARDL model. The lag length in this model can be determined using Akaike Information Criteria (AIC) and Schwarz Information Criterion (SIC). The smallest AIC and SIC values show the optimum lag based on AIC and SIC. The estimation result of the ARDL model is the estimation result of the ARDL model in general.

Autocorrelation test

The ARDL method is included in the method that applies multiple regression analysis with the Least Square approach. The classical assumption tests commonly used in the ARDL method are the autocorrelation and heteroscedasticity tests. The autocorrelation test shows the relationship between the disturbance variable and other disturbance variables (Ansofino, Jolianis, Yolamalinda, & Arfilindo, 2016). The autocorrelation test carried out in this study was the Durbin Watson test.

Heteroscedasticity test

Heteroscedasticity is a symptom where the residue of a regression equation changes in a certain period. If the data has heteroscedasticity, it will make the F test and t-test results less reliable (Widarjono, 2018). Therefore, heteroscedasticity testing was conducted to detect whether the residuals were constant. The heteroscedasticity test used in this study is the ARCH test.

Cointegration test

Cointegration testing in the ARDL method aims to determine whether there is a long-term relationship between variables in the model. The cointegration test used in the ARDL method is the Bound Testing Approach.

Short-term and long-term ARDL estimation

ARDL method is used to analyze the effect of variables in the long and short term. To determine the influence of variables in the short term, it is necessary to analyze or estimate the ARDL model using Error Correction.

Results and discussion

Results

Stationarity test

The results of the stationarity test with the Augmented Dickey Fuller (ADF) test revealed that the data in the study were stationary at various levels of stationarity. So, the ARDL model is the right analytical model for the data in this study.

Table 1. Result of stationarity test

Variable	Probability Value at Stationarity:	
	Level	1^{st} Diff.
PDB	0.6400	0.0000
JII	0.0612	0.0000
TA	0.0134	0.1219
FDR	0.6711	0.0000
PYD	0.0476	0.0361

ARDL model estimation

The analysis results show that the optimal lag for each variable in this study is (1,4,0,0,0,3) using criteria based on AIC. Based on these results, it can be said that the ARDL model can explain the effect of other variables on GDP well, as evidenced by the R-squared value of 0.9794, or 97.94%. Thus, it can be concluded that all independent variables contained in this study were able to explain a GDP of 97.94%, and the rest was explained by other factors or variables outside the study.

Table 2. Result of ARDL Model Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
PDB(-1)	0.779803	0.068980	11.30482	0.0000
JII	0.191766	0.158925	1.206643	0.2329
JII(-1)	-0.288690	0.232735	-1.240421	0.2203
JII(-2)	0.496433	0.233684	2.124378	0.0383
JII(-3)	-0.066756	0.216531	-0.308299	0.7591
JII(-4)	-0.305422	0.142139	-2.148765	0.0362
TA	3.755689	0.950292	3.952141	0.0002
FDR	1.921646	0.510072	3.767405	0.0004
PYD	-3.601288	0.955064	-3.770731	0.0004
DCOV	0.016627	0.137588	0.120848	0.9043
DCOV(-1)	-0.143971	0.194926	-0.738597	0.4634
DCOV(-2)	0.303350	0.197261	1.537807	0.1300
DCOV(-3)	-0.378142	0.158291	-2.388900	0.0205
C	-8.821586	2.694882	-3.273459	0.0019
R-squared	0.979374	Mean dependent var		14.17274
Adjusted R-squared	0.974315	S.D. dependent var		0.718214
S.E. of regression	0.115104	Akaike info criterion		-1.302444
Sum squared resid	0.702199	Schwarz criterion		-0.841762
Log likelihood	57.63188	Hannan-Quinn criter.		-1.120151
F-statistic	193.5858	Durbin-Watson stat		2.166702
Prob(F-statistic)	0.000000			

Autocorrelation test

The autocorrelation test carried out in this study is a test based on Durbin-Watson with the DW value obtained from estimating the ARDL model. Based on the estimation results of the ARDL model, it is known that the DW value in the study is 2.1667. It is known that the value of DWu = 1.736 and 4-DWu = 2.264. Thus, it can be concluded that the data is free from autocorrelation because of DWu = DWu.

Heteroscedasticity test

The heteroscedasticity test in this study was carried out using the ARCH test. Based on the results of the heteroscedasticity test with the ARCH method, it was found that the p-value was 0.6768, which was greater than the 0.05 alpha value. Thus, it can be concluded that there is no heteroscedasticity in this study.

Cointegration test

The cointegration test used in this study is the Bound Testing Approach. F-critical in the Bound Testing Approach is divided into two values: the lower bound or I(0) and the upper bound or I(1). If the value of F-statistics > I (1), then there is cointegration, and if the value of F-statistics I(0), then there is no cointegration. However, if the value of I(0) F-statistics I(1), then there is no decision (Widarjono, 2018).

Table 3. Result of Cointegration Test

	Value	Sig.	I(0)	I(1)	Des.
F-statistic	3.740084	10%	2.08	3	Cointegrated
k	5	5%	2.39	3.38	Cointegrated
		2.5%	2.7	3.73	Cointegrated
		1%	3.06	4.15	Not Cointegrated

Short-term and long-term ARDL estimation

The results of the long-term estimation of the ARDL model can be seen by conducting the Long Run Form test, which is carried out simultaneously with the Bounds Test or cointegration test.

Table 4. Result of Short-Term ARDL Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
JII	0.124120	0.523032	0.237309	0.8133
TA	17.05607	6.766047	2.520833	0.0148**
FDR	8.726960	3.483829	2.504991	0.0154**
PYD	-16.35488	6.757800	-2.420148	0.0190**
DCOV	-0.917981	0.465460	-1.972200	0.0538***
C	-40.06233	18.23831	-2.196603	0.0324**
EC = PDB - (0.1241*JII + 17.0561*TA + 8.7270*FDR -16.3549*PYD -0.9180*DCOV - 40.0623)				

*) sig on 1%, **) sig on 5%, ***) sig on 10%

The next step is to estimate the ARDL model in the short term. This estimation uses the ECM model and involves an error correction variable displayed in CointEq(-1). Suppose the value of the error correction variable is negative and significant. In that case, the ARDL ECM model estimate is valid and there is cointegration between the dependent and independent variables (Widarjono, 2018).

Table 5. Result of Long-Term ARDL Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(JII)	0.191766	0.133611	1.435252	0.1571
D(JII(-1))	-0.124254	0.134311	-0.925125	0.3591
D(JII(-2))	0.372179	0.131734	2.825219	0.0066
D(JII(-3))	0.305422	0.117192	2.606164	0.0119
D(DCOV)	0.016627	0.121521	0.136825	0.8917
D(DCOV(-1))	0.074792	0.127625	0.586028	0.5603
D(DCOV(-2))	0.378142	0.130331	2.901393	0.0054
CointEq(-1)*	-0.220197	0.040788	-5.398558	0.0000
R-squared	0.414645	Mean dependent var		0.028466
Adjusted R-squared	0.345196	S.D. dependent var		0.134818

Variable	Coefficient	Std. Error	t-Statistic	Prob.
S.E. of regression	0.109095	Akaike info criterion		-1.481549
Sum squared resid	0.702199	Schwarz criterion		-1.218302
Log likelihood	57.63188	Hannan-Quinn criter.		-1.377381
Durbin-Watson stat	2.166702			

* p-value incompatible with t-Bounds distribution.

Discussion

The effect of Jakarta Islamic Index (JII) on economic growth

Based on the ARDL regression model results in the long term, the JII variable has a positive relationship but has no significant effect on economic growth. At the same time, the results of the ARDL regression model in the short term show that JII will affect economic growth in the second to third periods. Thus, the results of this study reject the notion that JII has a significant positive effect on economic growth.

Results are not in line with research conducted by Beck and Levine (2004), which says that the stock market significantly affects economic growth. The Islamic stock market in Indonesia can cause this is not running optimally. As Levine (1997) explained in his research, the financial sector can contribute well and accelerate economic growth when it can run optimally and carry out its functions properly.

According to the Deputy Commissioner for Capital Markets of the Financial Services Authority (OJK) Justin Septiana, the Islamic capital market in Indonesia has good potential, as evidenced by its increasing trend, but the biggest challenge for the Indonesian Islamic capital market is the level of inclusion and literacy of Islamic finance in society. Based on a national survey conducted by OJK in 2019, the level of inclusion and Islamic financial literacy of the Indonesian people was only 9.1% and 8.93%, whereas when it is compared to the level of inclusion of conventional finance, there was a considerable difference, which the level of inclusion and financial literacy conventional reached 76.19% and 38.03% (OJK, 2021). The positive relationship formed between JII and GDP is certainly a sign that the Islamic stock market has the potential to encourage economic growth.

With the results of such research, it is hoped that related agencies or institutions, both government and private parties or companies, can work together to face the challenges of the Islamic capital market in Indonesia. Through literacy, socialization, appeals, or other informative communication from related parties regarding investment decision-making. This can also be used to promote the Islamic capital market to all levels of society, which is still a weakness of the Islamic capital market. All levels of society in question come from various parties, both investors and companies, so these efforts can attract investors and companies to join and contribute to the Islamic capital market.

The effect of total Islamic banking assets on economic growth

Based on the results of the ARDL regression model, it is known that the total assets of Islamic banking have a significantly positive effect on economic growth. When total Islamic banking assets increase by 1%, economic growth will increase by 17.056. Thus, the results of this test accept thatthe total assets of Islamic banking have a significant positiveeffect on economic growth. This is in line with research conducted by Afyandhiya (2007); Rahma (2021); dan Zumaidah et al. (2018), which state that total assets have a positive effect on Indonesia's economic growth. This is also reinforced by the theory that the financial sector can become acatalyst for economic growth, also known as finance-led growth.

Total assets in Islamic banking are assets owned by banks and can be used as internal capital for banks to run or improve their operations. Therefore, total assets can be used as an indicator to measure how big a bank is. If the asset is internal capital, the greater the total assets owned by the bank, the easier it is for it to develop.

Through this research, it is hoped that related institutions, namely Islamic banking, can increase Islamic banking assets through product innovation, which is preceded by market research so that products are suitable for the needs of the community to increase the attractiveness of Islamic banking to customers. Islamic banks can slowly expand their reach and increase customer satisfaction with Islamic banks. One of them can be done by increasing productive assets toimprove services to customers and the community, such as increasing the procurement of ATMs, creating cash deposit machines, and establishing cooperation with related institutions and institutions, one of which is the procurement of ATMs, as has been done by conventional banks. This can slowly expand the reach of Islamic banking and increasecustomer satisfaction with Islamic banks.

The effect of Financing to Deposit Ratio (FDR) on economic growth

A Financing to Deposit Ratio (FDR) is a banking ratio thatcan describe the ability or level of banking liquidity in the formof financing. However, in its determination, FDR involved third-party funds, which can be considered as external capital for Islamic banking. As an intermediary financial institution, Islamic banking is expected to pay close attention to financial risks when a crisis occurs. Even though there is an excess demand for financing when a crisis occurs, banks are expected to continue to pay attention to financing risk factors so that bad loans donot occur, as experienced by the United States in 2008. This is because the maximum percentage of FDR set by Bank Indonesia is 100%, with a minimum limit of 50%. Therefore, Islamic banking must maintain the FDR ratio so that it is not toolarge and not too small.

The effect of Islamic bank financing on economic growth

Based on the ARDL regression model results, Islamic financing has a significantly negative effect on economic growth. When financing provided by banks increases by 1%, economic growth will decrease by 16.35. Thus, the results of this study reject H4, which says that Islamic bank financing has a significant positive effect on economic growth. This can be seen in Appendix 2 of the data table on economic growth and Islamic bank financing. The data collected by the researcher shows that through out 2020 to 2021, Islamic bank financing will continue to increase, while economic growth will decline and fluctuate erratically.

According to OJK data for 2020, Islamic bank financing is still dominated by consumer financing or non-business sectors, namely Rp 83.7 trillion for home ownership and Rp 55.8 trillion for financing household appliances. As for the business sector, there are 37.3 trillion for wholesale and retail trade, 27.6 trillion for the processing industry, and 32.5 trillion for the construction sector (OJK, 2020).

In his research, Levine (1997) stated that banks that allocate their funds to the real sector and industry would be much faster in encouraging economic growth, as Germany has done. Ross Levine is a professor of financial economics and banking at the University of California and an expert on the role of the financial sector in economic growth. The results of this study support what has been conveyed by Levine and are also supported by the Harrod-Domar theory, which says that investment, especially in the real sector, can encourage economic growth. According to Harrod-Domar, capital is the main ingredient for encouraging economic growth.

The effect of Covid-19 pandemic on economic growth

The ARDL model regression analysis results stated that the Covid-19 pandemic significantly negatively affected economic growth. When the Covid-19 pandemic increases by 1%, economic growth will decrease by 0.918. Thus, it can be concluded that the study's results accept that the Covid-19 pandemic significantly negatively affects economic growth.

Policy makers, especially those related to controlling or handling crises such as Covid-19, are expected to continue to pay attention to and consider the sustainability of other sectors, one of which is the financial sector in making policies to overcome the crisis. Other Islamic financing instruments can be used and optimized to assist the Islamic finance sector and the government in dealing with issues related to the crisis and economic recovery. The biggest task is how to disseminate information by providing an understanding to the wider community about the urgency of its role in the financial sector and the economy. One of them is not implementing investor herding behavior (investment decisions based on following other investors) and not based on analysis or not optimally using business development funds provided by Islamic banks.

Conclusion

This study discusses the influence of the Islamic finance sector, represented by the Jakarta Islamic Index (JII), total Islamic banking assets, financing to deposit ratio (FDR), and Islamic bank financing, as well as the effect of the Covid-19 pandemic on economic growth in Indonesia. The Indonesian economy is increasingly fluctuating. In approximately 25 years, it has faced three times of crises.

Based on the results of the analysis and discussion, it can be concluded that: (1) JII is positively related but has no significant effect on economic growth; (2) The total value of Islamic banking assets has a significantly positive impact on economic growth; (3) The financing to deposit ratio (FDR) has a significantly positive effect on economic growth; (4) Islamic bank financing has a significantly negative effect on economic growth; and (5) The Covid-19 pandemic has a significantly negative effect on economic growth.

Thus, the Islamic finance sector must be able to expand market share and manage assets and realize programs very well and wisely. This is because Islamic finance has the potential to boost the economy. This study confirms the assumption that the financial sector affects economic growth (Finance Led Growth). The findings of this study are expected to benefit the readers. With the existing limitations and short comings, it is hoped that further research will analyze more complex matters.

References

Afyandhiya, M. H. (2020). Peran Perbankan Syariah Nasional terhadap Pertumbuhan Ekonomi Indonesia Tahun 2014-2018. *Jurnal Imiah Mahasiswa FEB Universitas Brawijaya*, *8*(2). Retrieved from https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/6701

Ansofino, Jolianis, Yolamalinda, & Arfilindo, H. (2016). *Buku Ajar Ekonometrika*. Yogyakarta: Deepublish.

Bank Indonesia. (2020). *Laporan Perekonomian Indonesia 2020*. Jakarta.

Baroroh, U. (2012). Analisis Sektor Keuangan terhadap Pertumbuhan Ekonomi Regional di Wilayah Jawa: Pendekatan Model Levine. *Etikonomi*, *11*(2), 180–195. https://doi.org/10.15408/etk.v11i2.1892

Beck, T., & Levine, R. (2004). Stock markets, banks, and growth: Panel evidence. *Journal of Banking and Finance*, *28*(3), 423–442. https://doi.org/10.1016/S0378-4266(02)00408-9

Boediono. (2016). *Ekonomi Indonesia dalam Lintas Sejarah*. Bandung: PT. Mizan Pustaka.

Dinar, M., & Hasan, M. (2018). *Pengantar Ekonomi: Teori dan Aplikasi* (1st ed.). Makassar: CV. Nur Lina & Pustaka Taman Ilmu.

Faniyah, I. (2017). *Investasi Syariah dalam Pembangunan Ekonomi Indonesia* (1st ed.; L. A. Simbolon, Ed.). Yogyakarta: Deepublish.

He, P., Sun, Y., Zhang, Y., & Li, T. (2020). COVID–19's Impact on Stock Prices Across Different Sectors—An Event Study Based on the Chinese Stock Market. *Emerging Markets Finance and Trade*, *56*(10), 2198–2212. https://doi.org/10.1080/1540496X.2020.1785865

Hidayat, S., & Irwansyah, R. (2020). Pengaruh Dana Pihak Ketiga dan Pembiayaan Perbankan Syariah terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, *5*(1), 1–21. https://doi.org/10.30651/jms.v5i1.4175

Huda, N. (2017). *Ekonomi Pembangunan Islam* (2nd ed.). Jakarta: Kencana.

Inggrid. (2006). Sektor Keuangan dan Pertumbuhan Ekonomi di Indonesia: Pendekatan Kausalitas dalam Multivariate Vector Error Correction Model (VECM). *Jurnal Manajemen Dan Kewirausahaan*, *8*(1), 40–50. https://doi.org/10.9744/jmk.8.1.pp.40-50

Ledhem, M. A., & Mekidiche, M. (2020). Economic growth and financial performance of Islamic banks: a CAMELS approach. *Islamic*

Economic Studies, *28*(1), 47–62. https://doi.org/10.1108/ies-05-2020-0016

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature*, *35*(2), 688–726. https://doi.org/10.1596/1813-9450-1678

Mahri, J. W., Cupian, Arif, M. N. R. Al, Arundina, T., Widiastuti, T., Mubarok, F., … Nurasyiah, A. (2021). *Ekonomi Pembangunan Islam* (1st ed.; M. Irfan, A. Sakti, S. E. Hidayat, & M. S. Nurzaman, Eds.). Jakarta: Departemen Ekonomi dan Keuangan Syariah- Bank Indonesia.

Marimin, A., Romdhoni, A. H., & Fitria, T. N. (2015). Perkembangan Bank Syariah Di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, *1*(02), 75–87. https://doi.org/10.29040/jiei.v1i02.30

Otoritas Jasa Keuangan. (2021). *Strategi Nasional Literasi Keuangan Indonesia 2021-2025*. 1–130.

Patrick, H. T. (1966). Financial Development and Economic Growth in Underdeveloped Countries. *Economic Development and Cultural Change*, *14*(2), 174–189. Retrieved from https://www.jstor.org/stable/1152568

Prastowo. (2018). Pengaruh Pembiayaan Perbankan Syariah terhadap Pertumbuhan Ekonomi: Studi Empiris di 13 Negara. *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*, *2*(1), 65–80. https://doi.org/10.21009/hayula.002.1.05

Rafsanjani, H., & Sukmana, R. (2014). Pengaruh Perbankan atas Pertumbuhan Ekonomi : Studi Kasus Bank Konvensional dan Bank Syariah di Indonesia. *JAM: Jurnal Aplikasi Manajemen*, *12*(3), 492–502. Retrieved from https://jurnaljam.ub.ac.id/index.php/jam/article/view/694

Rahma, N. A., & Mayasari, I. (2021). Pengaruh Total Aset , Profitabilitas , dan Likuiditas Terhadap Efisiensi Bank Umum Syariah Di Indonesia dengan Pendekatan Stochastic Frontier Analysis. *Prosiding 12th Industrial Research Workshop and National Seminar (IRWNS)*, *12*, 1562–1567. Retrieved from https://jurnal.polban.ac.id/proceeding/article/view/2985

Ramadhani, A. (2021). *Pengaruh COVID-19 Terhadap Indeks Saham Indonesia di Berbagai Sektor Industri* (Universitas Islam Indonesia Yogyakarta). Universitas Islam Indonesia Yogyakarta. Retrieved from https://dspace.uii.ac.id/bitstream/handle/123456789/31705/17313053 Almadita Ramadhani.pdf?sequence=1

Siahaan, S. R., Purba, E. F., & Simangunsong, R. M. (2001). *Pengantar Ekonomi Pembangunan*. Universitas HKBP Nommensen.

Todaro, M. P., & Smith, S. C. (2011). *Pembangunan Ekonomi* (11th ed.). Jakarta: Erlangga.

Widarjono, A. (2018). *Ekonometrika: Pengantar dan Aplikasinya Disertai Panduan EViews* (5th ed.). Yogyakarta: UPP STIM YKPN.

Zumaidah, L. N., & Soelistyo, A. (2018). Pengaruh Total Aset, Dana Pihak Ketiga, dan Kredit pada Bank Umum terhadap Pertumbuhan Ekonomi Provinsi-Provinsi di Indonesia pada Tahun 2013-2016. *Jurnal Ilmu Ekonomi*, *2*(2), 251–263. Retrieved from https://ejournal.umm.ac.id/index.php/jie/article/view/7028