

Examining the contribution of Islamic bank to Indonesia economic growth



Faz Fachry Taqiyya ^{a,1}, Heri Sudarsono ^{a,2,*}, Andika Ridha Ayu Perdana ^{a,b,3}

^a Department of Economics, Faculty of Business and Economics, Universitas Islam Indonesia, Indonesia

^a Department of Econometrics, Statistics, and Applied Economics, Faculty of Economics and Business, Universitat de Barcelona, Barcelona, Spain

¹ 18313048@students.uui.ac.id; ² heri.sudarsono@uui.ac.id*; ³ andika.ayu@uui.ac.id

* corresponding author

ARTICLE INFO

ABSTRACT

Received : 24-12-2024
Revised : 20-04-2025
Accepted : 10-05-2025
Published : 08-07-2025

Keywords:

Economic growth
Islamic finance
Total deposit
Total financing

JEL Classification:

G21; G32; E60

This study thoroughly examines the impact of Islamic finance on economic growth in Indonesia, considering key variables such as total financing, total deposits, inflation, and trade openness. This study uses quarterly data covering the period from the first quarter of 2005 to the fourth quarter of 2021, providing a comprehensive overview of the dynamics between Islamic finance and economic growth for more than a decade. Through panel data regression analysis using the ARDL model, this study effectively explains the interaction between the dependent and independent variables and identifies the long-term impact of Islamic finance variables on Indonesia's economy. The findings indicate that Islamic finance positively contributes to long-term economic growth in Indonesia, with increases in total financing and deposits playing crucial roles in accelerating economic growth. These results underscore the importance of further developing the Islamic finance sector as a key driver of economic growth with significant implications for policies that support financial inclusion and macroeconomic stability. This study offers new insights for policymakers and financial practitioners to maximize the potential of Islamic finance to promote sustainable economic growth in Indonesia.

This is an open access article under the [CC-BY-SA](#) license.



1. Introduction

Financial intermediaries play a crucial role in mobilizing savings, thereby increasing investable capital essential to the productive side of the economy. In this context, efforts to develop the financial sector are aligned with endeavors to enhance productive capacity in the economy (Abd. Majid & H. Kassim, 2015). The financial sector's mobilization of deposits and savings as credit from surplus to deficit parties, with lower risks, such as transaction costs and asymmetric information, is a key factor that makes it a primary driver of growth in the real sector, specifically in accumulation and allocation. The financial sector also facilitates the transfer of goods and services, payment schemes, and effective risk management. Consequently, the development of capital accumulation within the financial sector can lead to economic growth (Bakar & Sulong, 2018). In various countries, financial systems and banking play a crucial role in propelling economic activities. The movement of funds among lenders, investors, and borrowers facilitates the cycle of production and societal progress.

The relationship between the financial sector and the real economy has been a focal point in research given its fundamental interconnection. Numerous empirical studies have explored the dynamics between these two sectors. Beck & Levine (2004) investigated the impact of financial sector

development on the economy of 40 countries from 1976 to 1998. Utilizing stock markets and banks as indicators of financial sector development and Gross Domestic Product (GDP) as a gauge of economic growth, they employed the Generalized Method of Moments (GMM) technique designed for dynamic panels. Their findings provide robust evidence supporting the crucial and positive role of financial development in economic growth. [Beck et al \(2000\)](#) offer additional empirical evidence for the significance of financial sector development in economic growth and based on a substantial dataset from 77 countries spanning 1960 to 1995, examined various intermediary financial development indicators. The evaluation encompassed their impact on economic growth, total factor productivity growth, physical capital accumulation, and the private savings rate. The results reveal a substantial positive effect of the financial sector on total factor productivity growth, subsequently contributing to overall GDP growth. Several economic crises, including the Mexican crisis in the mid-1980s, Asian crisis in the mid-1990s, and US subprime crisis in 2007, vividly illustrate the close and significant link between the financial and real sectors ([Abd. Majid & H. Kassim, 2015](#); [Sudarsono et al., 2021](#)).

Indonesia's Islamic banking industry has seen significant growth compared with the same industry in other countries. The growth of Islamic bank assets in Indonesia is impressive and quadrupled. In the five years (2012-2017), the average growth of banking assets was 40%, while other countries only reached around 10-15% ([Suryanto & Susanti, 2020](#)). Lately, Islamic economics has experienced the fastest growth in the global financial industry sector, surpassing conventional financial market growth. According to the Global Islamic Economic Report 2020, the value of Islamic financial assets increased by 13% from \$2.52 trillion to \$2.88 trillion ([Dinar Standard, 2020](#)). Due to the impact of the COVID-19 crisis, the value of Islamic financial assets was expected to show no growth in 2020 but is projected to recover and grow at a five-year compound annual growth rate (CAGR) of 5% starting from 2019, reaching \$3.69 trillion by 2024 ([Dinar Standard, 2020](#)). The expansive scope of Islamic Economics in the industrial sector presents a significant opportunity for Islamic finance to expand and contribute. In line with [Bakar & Sulong \(2018\)](#), a sound financial system is expected to yield favorable outcomes for economic growth. Indonesian Islamic banks experienced remarkable growth in 2017, with their assets expanding by 13.5% and surprisingly it keeps the growing trend in the next following years, [Table 1](#) provides a detailed overview of this progress.

Table 1. Islamic Bank Indicators in Indonesia

Indicators	2016	2017	2018	2019	2020	2021	2022
Asset	254.184	288.027	316.691	350.364	397.073	441.789	531.86
Growth	5.14	13.31	9.95	10.63	13.33	11.2	20.3
Capital	27.153	31.105	36.764	40.715	46.854	50.661	71.270
ROA	0.63	0.63	1.28	1.73	1.40	1.55	2.00

Source: Financial Service Authority Report (2015-2023)

[Table 1](#) shows there has been continuous growth in asset, Capital and ROA over the last seven years. Bank assets are possessed by a bank, consisting of loans, securities, and reserves ([Chu, 2023](#)). Liabilities, on the other hand, are a bank's obligations to external parties, such as deposits and borrowings from other institutions. Capital, also known as net worth, equity capital, or bank equity, represents funds associated with banks. These funds can be obtained by selling new shares in the bank or by utilizing the retained earnings (profits) derived from the bank's assets after deducting its liabilities. Return on assets (ROA) measures how effectively a company utilizes its assets to generate profits during a specific time frame. Despite the significant growth of Islamic banking in Indonesia, its overall impact on economic growth remains relatively unexplored, particularly regarding the role of total deposits and financing. Previous studies have largely focused on conventional financial sector development, with limited research on how Islamic banking-specific indicators contribute to economic expansion. Additionally, previous research often overlooks the role of trade openness and inflation as determinants of economic growth in the Islamic banking context ([Tabash & Anagreh, 2017](#)). This study aims to fill these gaps by comprehensively analyzing the relationship between Islamic banking development and macroeconomic performance by introducing a novel perspective that integrates total deposits, total financing, inflation, and trade openness into a single analytical framework.

Unlike the existing literature, which predominantly examines individual financial indicators in isolation, this study provides a holistic assessment of how Islamic banking contributes to economic expansion. The incorporation of trade openness adds a new dimension, by evaluating how

international economic exposure influences financial intermediation in the Islamic banking sector. Islamic banking continues to expand, yet its market share in Indonesia remains relatively small at only 7% of the total financial market as of August 2022. Given the ongoing evolution of the financial sector and increasing emphasis on financial inclusion, it is crucial to examine the potential of Islamic banking as a catalyst for sustainable economic development. This study remains relevant because it provides timely insights into how Islamic banking mechanisms can be optimized to enhance economic resilience and stability, particularly in an era of economic uncertainty.

2. Literature Review

2.1. Financial Sector on Economic Growth

Studies on the relationship between financial and real sectors often attempt to find causal relationships between the two. There are several known relationships, two of which are supply leading and demand-following (Supriani et al., 2021). First, supply leading or financial growth-leading is a condition in which the financial sector provides the necessary capital needed for economic activities. In this case, effective allocation of capital from the financial sector is crucial and facilitates the occurrence of economic activities. The second relationship is demand-following, where the real sector provides stimulation for the financial sector to grow. The financial sector will grow along with the growth of the real sector, as the growth of the real economy will increase demand in the financial sector, which requires the financial sector to develop.

Economic growth and the financial sector have a strong connection, regardless of the direction of the two relationships. A study conducted Khalifa Al-Yousif (2002) reported that financial development had a positive influence on economic growth. Several studies have shown a connection between the real and the financial sectors. Financial intermediaries play a role in providing ease for the real sector to fulfill capital needs for investment and savings. In this case, financing and funding are key to investment. Economic growth and financial sector have a significant and positive relationship. Islamic banking has emerged as a vital component of financial sector development, contributing significantly to economic expansion by providing Shariah compliant financial services. The unique risk-sharing mechanism of Islamic banking ensures that capital allocation aligns with productive economic activities, thereby fostering sustainable economic growth. Unlike conventional banks, Islamic banks promote financial inclusion by catering to segments of the population that prefer Shariah compliant financial products. Additionally, the ethical investment principles followed by Islamic banks reduce excessive speculation, contributing to financial stability. With Indonesia's continuously expanding Islamic banking sector, its role in economic growth is expected to become more pronounced in coming years.

2.2. Investment Products in Islamic Bank on Economic Growth

In this study, the Islamic bank investment products used are *Musyarakah* and *Mudharabah*. The term "*Musyarakah*" within the realm of Islamic law denotes a form of joint partnership characterized by the principles of sharing. It encompasses the amalgamation of capital or labor among multiple individuals to establish a business, in which profits are allocated according to a predetermined ratio and losses are distributed based on the contribution ratio. For a *Musyarakah* arrangement to be deemed valid, certain prerequisites must be satisfied. First, the involved parties must possess the legal capacity to enter into a contract, indicating that they have attained the age of majority. Furthermore, the contract must be entered voluntarily without any form of coercion or undue influence (Adela, 2018). Within a *Musyarakah* partnership, each partner retains the right to actively participate in the management and contribute to the business. However, there may exist an agreement among partners, whereby one assumes a managerial role, while others remain inactive. In such scenarios, the "silent" partner is entitled to a proportionate share of the profit corresponding to their investment relative to the extent of their contribution. Conversely, if all partners unanimously agree to actively engage in the joint venture, each partner acts as an agent on behalf of the others in all business matters, and any actions undertaken by one partner within the ordinary course of business are deemed authorized by all partners (Nik Abdul Ghani et al., 2021).

Musyarakah can assume various forms, including an unlimited and equal partnership in which partners possess equal rights regarding capital, management, and decision-making authority. Alternatively, a more restricted investment partnership may be established, wherein partners contribute to a capital fund using monetary resources, assets, or labor, and each partner acts solely as

an agent for themselves, without assuming responsibility for the actions of other partners. In both forms, profits are distributed according to a mutually agreed-upon arrangement, whereas losses are borne proportionately in accordance with each partner's capital contribution. Unlike conventional interest-based loans, *Musyarakah* does not involve a predetermined rate of return. Instead, return in *Musyarakah* relies on the actual profit generated by the joint venture. This characteristic, coupled with the presence of risk, renders *Musyarakah* an acceptable Islamic financing instrument (Rammal, 2003).

In an interest-bearing loan, the financier is assured of a fixed rate of return, irrespective of the debtor's profit or loss. Conversely, in *Musyarakah*, the financier may incur losses if the joint venture fails to generate profit. *Musyarakah* (equity partnership) financing is crucial for driving economic activity in the Islamic economy. This involves depositors, banks, and investors pooling their resources to fund projects and to share profits and risks. This has a significant impact on savings, investment, and the domestic resource gap. Compared to traditional interest-based financing, *Musyarakah* financing is more flexible and involves three rates of return: a return rate for depositors, a return rate for banks, and a return rate for investors. By contrast, interest rates are determined arbitrarily based on loan maturities between the bank and depositor or investor, with the investor assuming financing risk. The implementation of interest rates in money market equilibrium delays the transformation of savings into investments and influences economic activity. Thus, *Musyarakah* financing ensures the participation of all parties simultaneously, including banks, savers, and investors, in the *Musyarakah* process, limiting any lag to the implementation period (Wicaksono et al., 2024).

Mudharabah (finance trusteeship), *Mudharabah* is a contract between two parties, one of which provides financing to the other for a specific purpose, as agreed upon. The party responsible for providing the funds is known as the *Rabb-ul-mal*, while the other party responsible for managing and executing the project is called the *Mudarib* or the entrepreneur. One of the requirements of *Mudharabah* is that the financier or *Rabb-ul-mal* cannot expect a fixed rate of return or any additional entitlement to the principal amount unless they share the risk of the venture (Rammal, 2003). The previous study conducted by Rammal (2003) and Adela (2018) shows that *Musharakah* and *Mudharabah* had a positive and significant impact on economic growth. *Mudharabah* and *Musharakah* have a direct impact on the economy, because they are substantially involved in real economics.

2.3. Macroeconomic Variables on Economic Growth

Bank Indonesia defines inflation as a general increase in the prices of goods and services over a specific period. The causes of inflation can be categorized into two types: supply side pressure, known as cost-push inflation, and demand-side pressure, known as demand-pull inflation, along with inflation expectations. The factors contributing to cost-push inflation include exchange rate depreciation, inflation in other countries, higher administered prices, negative supply shocks from natural disasters, and disruptions in the distribution chain. Conversely, demand-pull inflation arises when demand for goods and services surpasses the available supply. In macroeconomics, demand-pull inflation occurs when real output exceeds potential output or when aggregate demand surpasses economic capacity. Inflation expectations, influenced by public and economic actors' behavior in making economic decisions based on anticipated inflation, can be either adaptive or forward-looking. During festive periods (such as Eid-ul-Fitr, Christmas, and New Year) and when provincial minimum wages (UMP) are determined, producer and merchant prices tend to rise. Despite adequate availability of goods to meet increased demand, prices often exceed typical supply demand conditions. Additionally, when new provincial minimum wages are established, merchants tend to increase prices despite a moderate effect on demand.

The prevailing metric employed to gauge inflation is alteration in the headline consumer price index (CPI), denoted as a percentage. CPI encompasses both domestically manufactured and imported consumer goods, thereby encompassing the general expenses incurred by an average consumer. This choice to utilize the CPI as the focal point arises from its vast coverage across various countries, with data available on a monthly and quarterly basis. Furthermore, it is also the preferred indicator pursued by most central banks, as highlighted by the International Monetary Fund (2020). Previous studies by Abd. Majid & H. Kassim (2015), Supriani et al (2021) and Sakinah et al (2022) proves that inflation has a significant effect on economic growth. Abduh & Omar (2012) states the more inflation occurred, the worse its effect on economic growth. In this study, inflation was found to have a negative effect on economic growth. The result of the study is that inflation represents the volatility of the economy,

which would increase the uncertainty of the economy and inflation plays important role in domestic economy both in short and long run estimation (Kurniawan & Prawoto, 2014).

Trade liberalization/openness refers to the elimination or reduction of constraints and limitations impeding the unrestricted flow of goods across national borders. These barriers encompass tariffs, such as taxes and additional charges, as well as non-tariff barriers, such as regulations and quantity limits. Economists commonly perceive the relaxation or removal of these barriers as measures aimed at fostering principles of unrestricted commerce. The trade-to-GDP ratio is a commonly employed metric for assessing the significance of international transactions compared to domestic transactions. This indicator is computed by taking the average of total trade (the combined value of exports and imports of goods and services) relative to the GDP for each country. This is often referred to as the trade openness ratio, although the term "openness" can be somewhat misleading. A low ratio does not necessarily indicate the presence of high barriers (such as tariffs or non-tariff measures) to foreign trade but can be influenced by factors such as the size of the economy and geographical distance from potential trading partners.

Productivity growth plays a crucial role in the process whereby trade's contribution to economic expansion. When a country embraces trade and investment in research and development (R&D), its comparative advantage gradually shifts towards producing highly differentiated goods that yield larger profit margins. Grossman & Helpman (1994) examine the evolution of comparative advantage using an endogenous growth model. They demonstrated that countries rich in human capital tend to be net exporters of differentiated products while importing labor-intensive traditional products consistently over time. Furthermore, they established that if the development of new products requires a substantial amount of human capital compared to the production of existing differentiated products, the volume of international trade relative to global Gross National Product (GNP) or global expenditure will increase progressively (Dao, 2014). The link between open trade and economic growth is a highly controversial topic for growth and development experts. Despite much discussion, there is still no clear resolution for this issue. Theoretical growth studies have shown that the relationship between trade restrictions and growth is complex and unclear. Numerous models in the endogenous growth literature present differing viewpoints on how trade restrictions can either boost or decrease the global rate of growth (such as works by Romer, Grossman, and Helpman, Rivera-Batiz and Romer, and Matsuyama). It is important to consider that if trading partners have vastly different technologies and resources, even though economic integration can increase the global growth rate, it may harm certain countries (as shown in studies by Grossman and Helpman, Lucas, Rivera-Batiz and Xie, and Young) (Yanikkaya, 2003).

The impact of trade liberalization on economic growth is a widely discussed topic among economists. Both Mercantilists and Smith and Ricardo emphasized the significance of trade liberalization. Neoclassical growth theories, which form the basis for modern economic growth theories, suggest that trade liberalization can have a positive effect on economic growth in the medium term, but its impact may not be sustained in the long term (Parikh, 2004). One of the key ways in which trade liberalization affects economic growth is through increased capital inflows, including foreign direct investment, which fills investment gaps in the economy. This leads to increased investment, production, and market size as well as higher employment levels and reduced poverty. It also provides developing countries with access to new technologies from developed countries. Additionally, trade liberalization provides both consumers and producers with access to larger markets, allowing them to benefit from economies of scale. Another important impact of trade liberalization is the transmission of knowledge and technology (Qayyum et al., 2018). Keho (2017) investigates the impact of trade openness on the economic growth of Cote d'Ivoire between 1965 and 2014, and his study considered various factors, including capital stock, labor, and trade openness. The methodologies employed encompassed the Autoregressive Distributed Lag bounds test for cointegration and Toda and Yamamoto Granger causality tests. The findings revealed a positive influence of trade openness on both short- and long-term economic growth. Furthermore, the results emphasize a robust and positive connection between trade openness and capital formation as a driving force for economic growth.

3. Method

This study used secondary data in the form of time-series data obtained from various reputable sources, including the Financial Services Authority of Indonesia (OJK), the Central Bureau of

Statistics (BPS), and International Financial Statistics (IFS). The dataset spans a 16-year period, from 2005 to 2021, consisting of 64 quarterly observations, providing a comprehensive view of Indonesia's economic dynamics over time. This extensive dataset allows us to examine the relationship between Islamic financial development and macroeconomic indicators, offering insights into the long-term impact of Islamic banking on economic growth. To achieve robust empirical results, this study employs the Autoregressive Distributed Lag (ARDL) model, which is particularly well suited for analyzing long- and short-term relationships between variables in time-series data. The ARDL approach, developed by Pesaran et al (2001), has gained prominence in recent economic studies because of its ability to handle variables with different levels of integration, whether stationary at level $I(0)$ or first difference $I(1)$. This method provides several advantages over traditional time-series models, including flexibility in small sample sizes, ability to capture dynamic adjustments, and efficiency in testing cointegration among variables (Nkoro & Uko, 2016). Recent studies such as Saleem et al (2021) and Abduh & Omar (2012) have conducted applied the ARDL model to assess the relationship between Islamic financial indicators and economic performance, making it an appropriate choice for this research.

Table 2. Definition of Variables

No	Variable	Definition of Variables	Equation
1.	Growth	The Number which tells how are the GDP grows in compare to previous year	$Growth = \frac{GDP_T - GDP_{T-1}}{GDP_{T-1}} \times 100$
2.	TF	The total amount of capital invested (Mudharabah/Musyarakah) by bank to the non bank as third party	$\frac{\sum Musyarakah + \sum Mudharabah}{GDPD} \times 100$
3.	TD	The total amount of capital accumulated by bank though their product (deposit etc.)	$\frac{\sum Deposito + \sum Savings + \sum CA}{GDP} \times 100$
4.	INF	Change in Consumer Price Index (CPI)	$\frac{CPI_T - CPI_{T-1}}{CPI_{T-1}} \times 100$
5.	TR	The sum of exports and imports of goods and services measured as a share of GDP	$\frac{\sum Exports + \sum Imports}{GDP}$

Source: Author Calculation

This study examines the impact of four key independent variables on economic growth in Indonesia, measured by Gross Domestic Product (GDP). Table 2 shows the definition of variables and the explains of each independent variables used in this study as follows:

- A. Total Financing: This represents the total amount of Islamic bank financing provided by Islamic financial institutions from 2005 to 2021. Islamic bank financing plays a critical role in capital formation and business expansion, supports productive sectors, and fosters economic development (Abd. Majid & H. Kassim, 2015; Abduh & Omar, 2012; Kassim, 2016; Ginting & Widyawati, 2022; Estrada et al., 2023).
- B. Total Deposits: This includes the total amount of deposits held by Islamic financial institutions from 2005 to 2021. Deposits are essential for financial intermediation as they determine the capacity of Islamic banks to provide financing through profit-sharing contracts such as Mudharabah and Musyarakah (Abd. Majid & H. Kassim, 2015; Qurrata et al., 2021; Vegirawati et al., 2018; Anwar et al., 2020; Belkhaoui, 2023; Junaidi, 2024).
- C. Inflation Rate – This study employs the Consumer Price Index (CPI) as a measure of inflation, representing the price level in Indonesia over a 16-year period. Inflation has mixed effects on economic growth, as moderate inflation can stimulate spending and investment, whereas excessive inflation can erode purchasing power and create economic instability (Abd. Majid & H. Kassim, 2015; Kurniawan & Prawoto, 2014; Kusumatriana et al., 2022; Supriani et al., 2021; Sayifullah & Arifin, 2024; Syahda & Retnasih, 2025).
- D. Trade Openness, measured as the ratio of total trade (exports + imports) to GDP, reflects Indonesia's integration into the global economy. A higher trade openness ratio indicates

greater economic exposure to international markets, which can stimulate productivity and innovation (Sakinah et al., 2022; Solomon & Tukur, 2019; Supriani et al., 2021; Ur Rehman et al., 2021; Az-zakiyah et al., 2024).

This study employs an Autoregressive Distributed Lag (ARDL) model to empirically analyze the relationship between economic growth (GDP) and key macroeconomic variables, including total financing (FIN), total deposits (DEP), inflation (INF), and trade openness (TRADE). The model captures both short-term (β_1 - β_5) and long-term (θ_1 - θ_5) dynamics by incorporating lagged differences in the dependent and independent variables, as well as their levels, to estimate long-run equilibrium relationships. The short-run effects are represented by the summation terms of the lagged first differences, whereas the long-run relationships are captured by the coefficients of the level variables. The inclusion of an error term (ε_t) accounts for stochastic variations, ensuring robustness in capturing the impact of financial development and macroeconomic conditions on Indonesia's economic growth.

$$\begin{aligned} \Delta \ln GDP_t = & \alpha + \sum_{i=1}^n \beta_1 \Delta \ln GDP_{t-1} \\ & + \sum_{i=1}^n \beta_2 \Delta \ln FIN_{t-1} \\ & + \sum_{i=1}^n \beta_3 \Delta \ln DEP_{t-1} + \sum_{i=1}^n \beta_4 \Delta \ln INF_{t-1} + \sum_{i=1}^n \beta_5 \Delta \ln TRADE_{t-1} + \theta_1 \ln PDB_{t-1} \\ & + \theta_2 \ln FIN_{t-1} + \theta_3 \ln DEF_{t-1} + \theta_4 \ln INF_{t-1} + \theta_5 \ln TRADE_{t-1} + \varepsilon_t \end{aligned} \quad (1)$$

Recent studies have provided evidence that Islamic banking has a positive impact on economic growth. Islamic financial depth and intermediation contribute to sustainable economic growth in Pakistan, with a long-term relationship between finance and growth (Saleem et al., 2021). In Asian OIC countries, Islamic banks have a significantly greater positive effect on GDP growth and GDP per capita growth than conventional banks (Hambali & Muhsyaf, 2024). Islamic financing in Pakistan shows a substantial causal relationship with economic growth, supporting the supply leading view (Shah et al., 2020). However, a review of the literature reveals mixed support for Islamic banking as the main channel of economic growth, with most studies being single-country focused and difficult to generalize. Nevertheless, Islamic banking principles such as risk-sharing and asset-backed financing contribute to a more stable and inclusive financial environment, enhancing overall economic development (Hambali & Muhsyaf, 2024). Integrating these advanced econometric techniques and referencing the latest scholarly findings, this study provides a robust analytical framework to understand the role of Islamic banking in Indonesia's economic development.

4. Results and Discussion

When evaluating time-series data, it is critical to assess whether they are stationary. Nonstationary data can lead to incorrect analysis, hence, it is critical to run a stationarity test. If the data nonstationary will lead to no long run equilibrium (Melati & Kurniawan, 2023). The stationarity test is often performed using the augmented Dickey-Fuller test (ADF) unit root test, and in this study also used Phillips-Perron (PP) test to get more comprehensive results. The stationery test using for all approach the order of integration, if the variables non-stationery in level or I(0) can be transform to first difference or I(1).

Table 3. Result for Stationery Test

Variables	Level Order		First Order	
	ADF	PP	ADF	PP
Growth	0.0883	0.0000	0.0000	0.0001
FIN	0.5308	0.5000	0.0046	0.0000
DEP	0.7267	0.7281	0.0000	0.0000
INF	0.1553	0.0801	0.0000	0.0000
TRADE	0.7437	0.5507	0.0000	0.0000

Source: data processed

Table 3 shows the four independent variables listed meet the requirements of stationary variables, as demonstrated by the number of probability values less than 5%. As a result, the variables listed above fulfilled the criteria for the ARDL test. The purpose of cointegration testing is to identify whether there is a long-term relationship between variables. When variables are cointegrated, it indicates that there is a stable, long-term relationship (Pesaran et al., 2001). Conversely, if there is no cointegration between the variables, this suggests that there is no long-term relationship between them. To conduct the cointegration test in this study, the ARDL Bound Test was used.

Table 4. Result of Cointegration Test

ARDL Bounds Test		
Test Statistic	Value	K
F-statistic	17.081	4
Critical Value Bond Test		
Significance	I(0)	I(1)
10%	2.2	3.09
5%	2.56	3.49
1%	3.29	4.37

Source: data processed

Table 4 shows that H_0 is rejected because the value of F-statistic from Bound test is $17.081 > 4.37$ (critical value I1 Bound sig 1%). The result of Bound test indicate that there is a long-term connection between the variables FIN, DEP, INF, TRADE, and GDP at the 1% significance level, in which the variables TF, TD, INF, and TO are explanatory variables for the variable GDP. This reveals a long-term relationship between Economic Growth and Total Financing, Total Funding, Inflation, and Trade TO movements. The optimal lag used in this study is 4, 4, 2, 4, 3 based on Akaike Information Criteria (AIC).

Table 5. Short-run Estimation of ARDL

Variable	Coefficient	t-statistics
$\Delta GDP(-1)$	-1.135	-8.970***
$\Delta GDP(-2)$	-1.180	-8.032***
$\Delta GDP(-3)$	-0.834	-6.018***
$\Delta GDP(-4)$	-0.174	-1.500
ΔFIN	-3.024	-1.579
$\Delta FIN(-1)$	2.819	1.362
$\Delta FIN(-2)$	5.030	2.270**
ΔDEP	-1.673	-0.993
$\Delta DEP(-1)$	-4.747	-2.477**
$\Delta DEP(-2)$	-4.426	-2.281**
$\Delta DEP(-3)$	1.293	1.667
$\Delta DEP(-4)$	1.409	1.783*
ΔINF	0.506	1.476
$\Delta INF(-1)$	-0.205	-0.580
$\Delta INF(-2)$	-0.105	-0.421
$\Delta INF(-3)$	-0.424	-1.691*
$\Delta INF(-4)$	-0.793	-2.965***
$\Delta TRADE$	2.230	2.152**
$\Delta TRADE(-1)$	2.997	2,786***
C	2.046	2.234**

Source: data processed

Table 5 and **Table 6** shows Islamic bank financing, which provides capital to the deficit sector, has a dual effect on economic growth. In the short term, total finance exerts a negative influence, which may be attributed to capital misallocation, inefficiency in fund utilization, or the time lag required for investments to generate productive output. However, in the long run, total financing positively contributes to economic expansion, aligning with [Abd. Majid & H. Kassim \(2015\)](#) and [Abduh & Omar](#)

(2012) confirmed that Islamic financial instruments foster investment-driven growth. Islamic banks channel funds through risk-sharing mechanisms, such as murabaha and musharakah, enabling businesses to expand operations, invest in new projects, and enhance productivity. Compared with Malaysia, where Islamic banking institutions have a more structured approach to corporate financing, Indonesia still faces challenges in fully leveraging Shariah-compliant banking for economic acceleration.

The total deposits, which represent the capital entrusted by customers to banks, exhibit contrasting trends. Although they have a positive short-term effect on economic growth, their long-term impact becomes negative. This anomaly suggests inefficiencies in deposit mobilization and reinvestment, a challenge also observed in previous studies, such as those by [Qurrata et al \(2021\)](#) and [Vegirawati et al \(2018\)](#). Unlike Malaysia and Saudi Arabia, where Islamic banking deposits are effectively utilized for high-value investments, Indonesia's Islamic banking sector faces limitations due to regulatory constraints, limited product diversification, and relatively high operational costs. These factors hinder banks from fully optimizing deposits to stimulate sustainable growth.

Table 6. Long-run Estimation of ARDL

Variables	Coefficient	t-statistics
FIN	1.116	1.548
DEP	-1.884	-2.072**
INF	-0.236	-1.685*
TRADE	1.209	4.075***
C	0.473	2.169***

Source: data processed

Inflation, another critical determinant, has a nuanced impact on economic growth. While inflation has a significant positive effect in the long term, its short-term influence remains statistically insignificant. The negative relationship between inflation and economic growth is consistent with [Abd. Majid & H. Kassim \(2015\)](#) argued that economic stability is crucial for sustainable growth. Excessively high inflation erodes purchasing power, increases market uncertainty, and disrupts investment flows, all of which can offset the potential benefits of financial expansion. Countries such as Pakistan and Turkey have experienced similar inflation-driven economic challenges, while Malaysia and the UAE have managed inflation more effectively, allowing their Islamic banking sectors to contribute consistently to growth.

Trade openness plays a vital role in driving Indonesia's economic growth. In both the short and long run, trade liberalization fosters greater investment, enhances productivity, and facilitates knowledge transfers between nations. The results align with those of previous studies, such as [Sakinah et al \(2022\)](#), which emphasize that trade liberalization enables countries to capitalize on their comparative advantages. Malaysia has successfully integrated Islamic banking into its trade financing policies and supported businesses through instruments such as sukuk and Shariah-compliant export financing. Indonesia, however, remains in the early stages of leveraging Islamic banking for global trade, presenting an area for further development ([Solomon & Tukur, 2019](#); [Ur Rehman et al., 2021](#)).

Overall, the contribution of Islamic banking to Indonesia's economic growth is evident but requires further optimization. While financing contributes positively to long-term growth, short-term inefficiency hinders its immediate impact. Similarly, deposit mobilization challenges must be addressed to enhance the financial sector's role in capital formation. Inflation remains a significant macroeconomic factor that necessitates stable monetary policies to support economic expansion. Trade openness offers a promising avenue for growth, yet the integration of Islamic banking into international trade remains underdeveloped compared with leading Islamic finance hubs.

Compared with other countries, Indonesia's Islamic banking sector is still evolving. Malaysia and Saudi Arabia have demonstrated stronger Islamic financial ecosystems, benefiting from their robust regulations and well-established financial instruments. In contrast, Pakistan and Turkey face similar challenges, particularly in balancing inflation controls with financial sector growth. For Indonesia to fully realize the potential of Islamic banking in driving economic development, policymakers must strengthen regulatory frameworks, enhance the range of Shariah-compliant financial products, and promote greater financial literacy. By addressing these gaps, Indonesia can position itself as a competitive player in the global Islamic finance landscape, fostering sustainable and inclusive economic growth.

5. Conclusion

The findings of this study align with its research objectives, demonstrating that Islamic financial variables, particularly total finance and deposits, significantly influence economic growth in Indonesia. The results show that, while total finance has a positive but insignificant impact in the short term, it contributes positively to long-term economic expansion. Conversely, total deposits exhibit a significant negative effect on economic growth over the long term, highlighting the potential inefficiencies in fund allocation within the Islamic banking system. This study provides crucial insights to policymakers and financial regulators. The positive long-term impact of Islamic finance suggests a need for enhanced financial intermediation strategies to maximize economic benefits. Furthermore, the observed negative effect of total deposits on growth underscores the importance of improving financial product offerings, optimizing fund mobilization, and ensuring that deposit funds are efficiently allocated for productive investments. Although this study offers valuable contributions, several limitations must be acknowledged.

First, the analysis is confined to macroeconomic indicators and does not account for micro-level banking efficiency or consumer behavior. Second, this study focuses solely on Indonesia, limiting the generalizability of its findings to other economies with different regulatory environments and financial structures. Finally, reliance on secondary data may introduce limitations regarding data accuracy and consistency. The implication of the study is the Indonesian government continue to support and promote Islamic finance development. Encouragement in the financing and funding sectors is crucial to bolster economic growth in the financial market. The government should actively encourage and facilitate the establishment of additional Islamic commercial banks, Islamic windows, and rural Islamic banks. Simultaneously, Islamic banks should be encouraged to expand their branch networks. Additionally, introducing foreign Islamic banks to operate in Indonesia can foster innovation in the domestic Islamic banking industry.

Acknowledgment

The authors express their sincere gratitude to the Department of Economics, Faculty of Business and Economics, Universitas Islam Indonesia, for their invaluable support in facilitating this research. Their assistance was instrumental in ensuring that the study progressed smoothly and aligned with the intended research objectives. This support has greatly contributed to the successful completion of this research.

Declarations

- Author contribution** : All authors have made significant contributions and equally participated in the development of this paper.
- Funding statement** : This study did not receive any financial support from external sources or funding entities.
- Conflict of interest** : The author declares no conflict of interest.
- Additional information** : No additional information is available for this paper.

References

- Abd. Majid, M. S., & H. Kassim, S. (2015). Assessing the contribution of Islamic finance to economic growth: Empirical evidence from Malaysia. *Journal of Islamic Accounting and Business Research*, 6(2), 293–310. doi: [10.1108/JIABR-07-2012-0050](https://doi.org/10.1108/JIABR-07-2012-0050)
- Abduh, M., & Omar, M. A. (2012). Islamic banking and economic growth: the Indonesian experience. *International Journal of Islamic and Middle Eastern Finance and Management*, 5(1), 35–47. doi: [10.1108/17538391211216811](https://doi.org/10.1108/17538391211216811)
- Adela, H. (2018). The impact of Musharakah financing on the monetary policy in the Islamic economy. *Review of Economics and Political Science*, 3(3/4), 139–152. doi: [10.1108/REPS-10-2018-014](https://doi.org/10.1108/REPS-10-2018-014)
- Anwar, S. M., Junaidi, J., Salju, S., Wicaksono, R., & Mispiyanti, M. (2020). Islamic bank contribution to Indonesian economic growth. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(3), 519–532. doi: [10.1108/IMEFM-02-2018-0071](https://doi.org/10.1108/IMEFM-02-2018-0071)

- Az-zakiyah, N. A., Sukarniati, L., & Vieira, M. I. C. (2024). Effect of trade liberalization on ASEAN-China exports: A gravity model approach. *Optimum: Jurnal Ekonomi Dan Pembangunan*, 14(1), 32–39. doi: [10.12928/optimum.v14i1.6713](https://doi.org/10.12928/optimum.v14i1.6713)
- Bakar, H. O., & Sulong, Z. (2018). The role of financial sector on economic growth: theoretical and empirical literature reviews analysis. *Journal of Global Economics*, 6(4). doi: [10.4172/2375-4389.1000309](https://doi.org/10.4172/2375-4389.1000309)
- Beck, T., & Levine, R. (2004). Stock markets, banks, and growth: Panel evidence. *Journal of Banking & Finance*, 28(3), 423–442. doi: [10.1016/S0378-4266\(02\)00408-9](https://doi.org/10.1016/S0378-4266(02)00408-9)
- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *Journal of Financial Economics*, 58(1–2), 261–300. doi: [10.1016/S0304-405X\(00\)00072-6](https://doi.org/10.1016/S0304-405X(00)00072-6)
- Belkhaoui, S. (2023). Banking system and economic growth linkages in MENA region: complementarity and substitutability between Islamic and conventional banking. *Journal of Islamic Accounting and Business Research*, 14(2), 267–288. doi: [10.1108/JIABR-03-2021-0091](https://doi.org/10.1108/JIABR-03-2021-0091)
- Chu, J. C. (2023). *Bank asset problem and financial stability*. doi: [10.2139/ssrn.4649359](https://doi.org/10.2139/ssrn.4649359)
- Dao, A. T. (2014). *Trade openness and economic growth* (No. 2; Mark A. Israel '91 Endowed Summer Research Fund in Economics).
- Dinar Standard. (2020). *State of the global Islamic economy report 2020/2021*. <https://www.dinarstandard.com/post/state-of-the-global-islamic-economy-report-2020-2021>
- Estrada, G., Erce, A., & Park, D. (2023). Skewed credit and growth dynamics. *Singapore Economic Review*, 68(2), 563–608. doi: [10.1142/S0217590822500783](https://doi.org/10.1142/S0217590822500783)
- Ginting, A. L., & Widyawati, R. F. (2022). Analysis of commercial bank credit distribution on economic growth and employment absorption in Indonesia. *Optimum: Jurnal Ekonomi Dan Pembangunan*, 12(1), 33–40. doi: [10.12928/optimum.v12i1.4493](https://doi.org/10.12928/optimum.v12i1.4493)
- Grossman, G. M., & Helpman, E. (1994). Endogenous innovation in the theory of growth. *The Journal of Economic Perspectives*, 8(1), 23–44. doi: [10.1257/jep.8.1.23](https://doi.org/10.1257/jep.8.1.23)
- Hambali, M. S., & Muhsyaf, S. A. (2024). Assessing the economic contributions of Islamic and conventional banks in Asian OIC Countries. *Jurnal Sosial Ekonomi Dan Humaniora*, 10(3), 446–454. doi: [10.29303/jseh.v10i3.612](https://doi.org/10.29303/jseh.v10i3.612)
- International Monetary Fund. (2020). *Consumer price index manual; Concepts and Methods*. International Monetary Fund, Publication Services.
- Junaidi, J. (2024). Islamic banks contribution to Indonesia districts economic growth and poverty alleviation. *Journal of Economics, Finance and Administrative Science*, 29(58), 294–308. doi: [10.1108/JEFAS-06-2021-0097](https://doi.org/10.1108/JEFAS-06-2021-0097)
- Kassim, S. (2016). Islamic finance and economic growth: The Malaysian experience. *Global Finance Journal*, 30, 66–76. doi: [10.1016/j.gfj.2015.11.007](https://doi.org/10.1016/j.gfj.2015.11.007)
- Keho, Y. (2017). The impact of trade openness on economic growth: The case of Cote d'Ivoire. *Cogent Economics & Finance*, 5(1). doi: [10.1080/23322039.2017.1332820](https://doi.org/10.1080/23322039.2017.1332820)
- Khalifa Al-Yousif, Y. (2002). Financial development and economic growth: Another look at the evidence from developing countries. *Review of Financial Economics*, 2, 131–150. doi: [10.1016/S1058-3300\(02\)00039-3](https://doi.org/10.1016/S1058-3300(02)00039-3)
- Kurniawan, M. L. A., & Prawoto, N. (2014). Pertumbuhan ekonomi dan penentuan titik ambang batas inflasi di Indonesia. *Jurnal Ekonomi Dan Studi Pembangunan*, 15(1), 71–77.
- Kusumatriana, A. L., Sugema, I., & Pasaribu, S. H. (2022). Threshold effect in the relationship between inflation rate and economic growth in Indonesia. *Bulletin Ekonomi Moneter Dan*

Perbankan, 25(1), 117–132. doi: [10.21098/bemp.v25i1.1045](https://doi.org/10.21098/bemp.v25i1.1045)

- Melati, I., & Kurniawan, M. L. A. (2023). Money demand analysis through business cycle in Indonesia. *Ekuilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 18(2), 203–212. doi: [10.24269/ekuilibrium.v18i2.2023.pp203-212](https://doi.org/10.24269/ekuilibrium.v18i2.2023.pp203-212)
- Nik Abdul Ghani, N. A. R., Salleh, A. D., Jusoh @ Yusoff, A. F., Mat Zain, M. N., Yaacob, S. E., Ahmad, A. A., & Saleem, M. Y. (2021). Critical analysis of beneficial ownership in mushārah based home financing in Malaysia. *Qualitative Research in Financial Markets*, 3(2), 161–182. doi: [10.1108/QRFM-01-2020-0003](https://doi.org/10.1108/QRFM-01-2020-0003)
- Nkoro, E., & Uko, A. K. (2016). Autoregressive Distributed Lag (ARDL) cointegration technique: application and interpretation. *Journal of Statistical and Econometric Methods*, 5(4), 63–91.
- Parikh, A. (2004). *Relationship between trade liberalisation, growth and balance of payments in developing countries: An econometric study* (No. 20; Hamburg Institute of International Economics, Discussion Paper Series). doi: [10.2139/ssrn.575963](https://doi.org/10.2139/ssrn.575963)
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289–326. doi: [10.1002/jae.616](https://doi.org/10.1002/jae.616)
- Qayyum, M., Younas, N., & Bashir, M. A. (2018). The impact of trade liberalization on economic growth: A case study of Pakistan. *Journal of Economics and Sustainable Development*, 9, 65–71.
- Qurrata, V. A., Yusida, E., Seprillina, L., & Purnamasari, V. (2021). The determinant of mudharabah deposit sharing profit in Indonesian islamic banking. *Advanced International Journal of Banking, Accounting and Finance*, 3(6), 37–50. doi: [10.35631/AIJBAF.36004](https://doi.org/10.35631/AIJBAF.36004)
- Rammal, H. G. (2003). Mudaraba In Islamic finance: Principles and application. *Business Journal for Entrepreneurs*, 16, 105–112.
- 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. doi: [10.20885/jeki.vol8.iss1.art4](https://doi.org/10.20885/jeki.vol8.iss1.art4)
- Saleem, A., Sági, J., & Setiawan, B. (2021). Islamic financial depth, financial intermediation, and sustainable economic growth: ARDL approach. *Economies*, 9(2), 49–64. doi: [10.3390/economies9020049](https://doi.org/10.3390/economies9020049)
- Sayifullah, S., & Arifin, S. (2024). Relative risk of COVID-19 pandemic and regional inflation convergence in Indonesia: Spatial panel data approach. *Optimum: Jurnal Ekonomi Dan Pembangunan*, 14(1), 20–31. doi: [10.12928/optimum.v14i1.8935](https://doi.org/10.12928/optimum.v14i1.8935)
- Shah, S. M. A. R., Raza, K., & Shaherbano. (2020). The role of Islamic finance in achieving economic growth: An econometric analysis of Pakistan. In *Enhancing Financial Inclusion through Islamic Finance, Volume II* (pp. 241–258). Palgrave Macmillan, Cham. doi: [10.1007/978-3-030-39939-9_10](https://doi.org/10.1007/978-3-030-39939-9_10)
- Solomon, O. I., & Tukur, M. U. (2019). Trade openness and economic growth in the developing countries: evidence from Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 8(3), 30–42. doi: [10.6007/IJAREMS/v8-i3/6452](https://doi.org/10.6007/IJAREMS/v8-i3/6452)
- Sudarsono, H., Afriadi, F., & Suciningtias, S. A. (2021). Do stability and size affect the profitability of Islamic rural bank in Indonesia? *Jurnal Ekonomi Dan Keuangan Islam*, 7(2), 161–174. doi: [10.20885/jeki.vol7.iss2.art5](https://doi.org/10.20885/jeki.vol7.iss2.art5)
- Supriani, I., Fianto, B. A., Fauziah, N. N., & Maulayati, R. R. (2021). Revisiting the contribution of Islamic banks' financing to economic growth: The Indonesian experience. *Shirkah: Journal of Economics and Business*, 6(1), 18–37. doi: [10.22515/shirkah.v6i1.383](https://doi.org/10.22515/shirkah.v6i1.383)
- Suryanto, D. A., & Susanti, S. (2020). Analisis Net Operating Margin (NOM), Non Performing

- Financing (NPF), Financing to Debt Ratio (FDR) dan pengaruhnya pada efisiensi perbankan syariah di Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 8(1), 29–40. doi: [10.17509/jrak.v8i1.19331](https://doi.org/10.17509/jrak.v8i1.19331)
- Syahda, P. E., & Retnasih, N. R. (2025). The impact of globalization, macroeconomic variables, and financial development on economic growth: Evidence from ASEAN countries. *Optimum: Jurnal Ekonomi Dan Pembangunan*, 15(1), 98–110. doi: [10.12928/optimum.v15i1.12113](https://doi.org/10.12928/optimum.v15i1.12113)
- Tabash, M. I., & Anagreh, S. (2017). Do Islamic banks contribute to growth of the economy? Evidence from United Arab Emirates (UAE). *Banks and Bank Systems*, 12(1), 113–118. doi: [10.21511/bbs.12\(1-1\).2017.03](https://doi.org/10.21511/bbs.12(1-1).2017.03)
- Ur Rehman, M. A., Shaheen, R., & Munir, F. (2021). Impact of trade openness on economic growth in emerging economies: A panel data analysis. *Pakistan Journal of Humanities and Social Sciences*, 9(2), 210–216. doi: [10.52131/pjhss.2021.0902.01127](https://doi.org/10.52131/pjhss.2021.0902.01127)
- Vegirawati, T., Susetyo, D., Meutia, I., & Fuadah, L. (2018). Wadiah and mudharabah deposit, management commitment on profit and loss sharing financing. *International Journal of Scientific and Research Publications*, 8(5), 406–412. doi: [10.29322/IJSRP.8.5.2018.p7752](https://doi.org/10.29322/IJSRP.8.5.2018.p7752)
- Wicaksono, S. A., Wulandari, P., & Hendranastiti, N. D. (2024). Mudaraba In Islamic finance: Principles and application. *Journal of Islamic Accounting and Business Research*, 15(8).
- Yanikkaya, H. (2003). Trade openness and economic growth: A cross-country empirical investigation. *Journal of Development Economics*, 72(1), 57–89. doi: [10.1016/S0304-3878\(03\)00068-3](https://doi.org/10.1016/S0304-3878(03)00068-3)