**Sharia Economic and Management Business Journal (SEMBJ)**

| Volume 7, Issue 2, 2026 | Page 138-149 |
https://doi.org/10.62159/sembj.v7i2.2220
ISSN-Online: 2774-2679

https://siducat.org/index.php/sembj

# The Role of Islamic Banking in Economic Growth: Financial Deepening and Bank Efficiency

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**ARTICLE INFO**

**Keywords:**
Financial Deepening; Bank Efficiency; Economic Growth; Maqāṣid al-Sharīʿah; SDGs;

**ABSTRACT**

**Background:** The success of economic development is reflected in the level of welfare experienced by the society. According to data from the Financial Services Authority (OJK), the Islamic economy has become one of the largest contributors to the national economy, accounting for 46 percent of the total GDP. This study aims to analyze the role of Islamic banking in supporting economic growth in Indonesia.
**Method:** A quantitative approach is employed using secondary monthly time series data covering the period from January 2018 to December 2023. The research applies the Vector Autoregressive (VAR) method in its restricted form, known as the Vector Error Correction Model (VECM), using EViews 12 software. The variables used include total financing (TP) as a proxy for financial deepening, BOPO as a proxy for banking efficiency and Gross Domestic Product (GDP) as a proxy for economic growth.
**Results:** The results reveal that the role of the Islamic banking sector in Indonesia's economic growth is stronger and more significant in the long run than in the short run. In the short term, total financing (TP) has not shown a significant effect on GDP, while banking efficiency (BOPO) exerts a direct and significant influence. In the long term, however, total financing and banking efficiency exhibit a more stable and significant relationship with economic growth, with Islamic banking efficiency (BOPO) contributing the most to GDP, at around 20–21%.
**Conclusion:** These findings indicate that Islamic banking plays a pivotal role in sustaining Indonesia's long-term economic growth, aligning with the objectives of maqāṣid al-sharīʿah in realizing economic welfare (ḥifẓ al-māl and ḥifẓ al-nafs) and contributing to the achievement of the Sustainable Development Goals (SDGs), particularly in promoting inclusive and sustainable economic growth.

**Received:** 4/5/2026 **Revised:** 5/20/2026 **Accepted:** 5/25/2026

**How to cite this article:**
Inayah, N., Tarigan, A.A., Harahap, I. (2026). The Role of Islamic Banking in Economic Growth: Financial Deepening and Bank Efficiency. Sharia Economic and Management Business Journal (SEMBJ), 7(2), 138-149. https://doi.org/10.62159/sembj.v7i2.2220

## INTRODUCTION

Economic rowth is one of the main indicators used to measure a country's level of progress. This condition has led to a growing tendency to compare economic performance among nations. Countries that are able to maintain stable and positive economic growth generally become attractive partners for international cooperation and investment. The success of economic development is also reflected in the degree of welfare enjoyed by the population. Rapid economic growth is often accompanied by improvements in living standards, social harmony, and societal well-being. Empirically, this can be

observed through increasing demand for goods and services, both in terms of quality and quantity (Nainggolan et al., 2019).

According to Murni (2006), economic growth can be understood as a process of increasing the Gross Domestic Product (GDP), which reflects the rise in per capita output and the improvement of living standards. In other words, economic growth represents an increase in a country's real GDP over a certain period. Generally, economic growth is defined as an increase in GDP or Gross National Product (GNP) regardless of whether the rate of increase exceeds population growth or involves structural transformation (Asnawi & Fitria, 2018).

Economic growth in a country can be identified through an increase in the value of its Gross Domestic Product (GDP) (Ivonia Auxiliadora Freitas Marcal et al., 2024). In 2023, Indonesia's economic performance, measured by nominal GDP, reached IDR 20,892.4 trillion, with GDP per capita amounting to IDR 75.0 million or equivalent to USD 4,919.7. Based on data from Statistics Indonesia (BPS, 2024), Indonesia's GDP growth rate from 2017 to 2023 exhibited the following pattern:

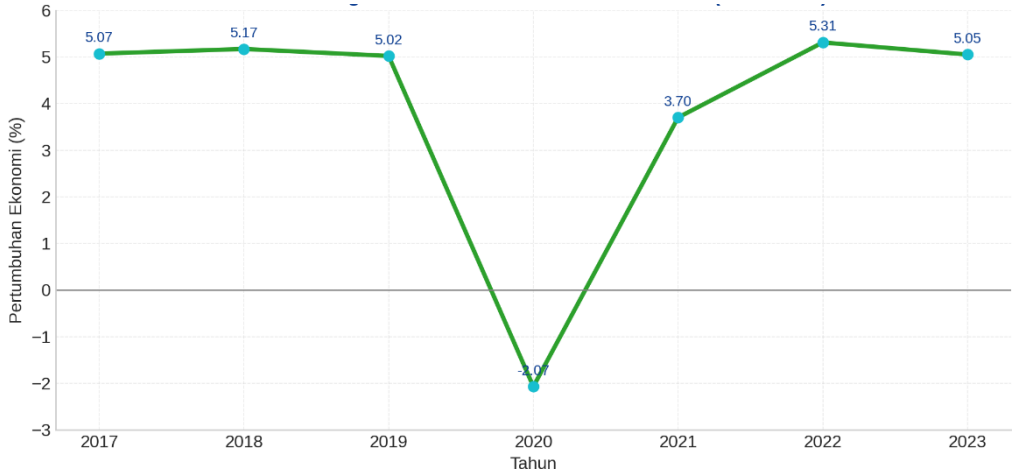


**Figure 1. Percentage Chart of Gross Domestic Product (GDP) Growth in Indonesia, 2017–2023**

*Source: Official Statistics Release No. 13/02/Th. XXVII, February 5, 2024*

Between 2017 and 2019, the national economy remained relatively stable at around 5 percent annual growth. However, in 2020, economic growth fell sharply to -2.07 percent due to the impact of the global crisis. The situation began to recover in 2021, recording a growth rate of 3.70 percent, and continued to improve in subsequent years. Nevertheless, in 2023, GDP growth slightly declined to 5.05 percent, compared to 5.31 percent in 2022. (BPS, 2024).

Economic growth is a crucial macroeconomic indicator describing the overall performance of an economy. Every country continuously strives to enhance its growth rate as part of the process toward sustainable economic development. Generally, the level of economic growth is measured through GDP, which is influenced by several key sectors, including the financial sector.

According to the Financial Services Authority (OJK, 2024), he Islamic economy has become one of the major contributors to Indonesia's national economy, accounting for 46 percent of the total GDP. By the end of December 2023, the total assets of Indonesia's Islamic financial industry amounted to IDR 2,500 trillion. Of this amount, IDR 892 trillion came from the Islamic banking sector, IDR 156 trillion from the Islamic non-bank financial industry (IKNB), and IDR 1,500 trillion from the Islamic capital market.

Based on the Islamic Financial Development Report (OJK, 2022), Indonesia's Islamic banking sector demonstrated robust and resilient performance in 2022. This was reflected in total assets reaching IDR 802.26 trillion, with an annual growth rate of 15.63 percent. Such achievement affirms the sector's ability to maintain stability and expansion amid national economic fluctuations.

The asset growth of 15.63 percent (yoy) in Islamic banking outpaced that of conventional banks, which stood at only 9.50 percent (yoy). This indicates that, in various performance indicators, Islamic

banking achieved superior results compared to its conventional counterparts. The number of Islamic Commercial Banks (BUS) changed from 14 institutions in 2020 to 12 in 2021 due to the merger of Bank Syariah Mandiri (BSM), BNI Syariah (BNIS), and BRISyariah (BRIS) into Bank Syariah Indonesia (BSI). The number of BUS increased again to 13 in 2022, with 20 Islamic Business Units (UUS) and 173 Islamic Rural Banks (BPRS) by 2023 (OJK, 2022).

This achievement also increased the market share of Islamic banking, surpassing the 7 percent threshold to reach 7.09 percent, compared to 6.74 percent in the previous year. All categories—BUS, UUS, and BPRS showed positive growth. (OJK, 2022).

The steady expansion of Islamic banking significantly contributes to the process of financial deepening. The term financial deepening refers to the growing role and activities of financial institutions in supporting economic development (Latifah, 2016). Shaw (1973) asserts that an optimal level of financial deepening strengthens financial system stability and acts as a vital driver of economic growth. Similarly, Gregorio (1999) emphasizes that the deeper a country's financial system, the greater its ability to allocate funds efficiently to productive sectors. Hence, an improvement in financial deepening indicators is expected to positively influence Indonesia's economic growth, provided that the financial system especially the banking sector effectively performs its intermediation function.

In the context of Islamic banking, the intermediation function plays a critical role in deepening financial systems. The primary role of banks as intermediaries is to collect funds from the public and redistribute them as productive financing. Latifah (2016) found that the degree of financial deepening can be reflected in the total financing channeled by banks. Several empirical studies also demonstrate that the deeper a nation's financial system including the contribution of Islamic banking the greater its potential to foster economic growth. This is due to broader financing access that stimulates economic activity, job creation, and the strengthening of the real sector. Putri and Mubin (2021) found a two-way causal relationship between financial deepening and economic growth in Indonesia, highlighting the close interconnection between the financial system's depth and national economic dynamics. (Putri & Mubin, 2021).

The performance of Islamic bank financing in 2022 showed significant improvement. Total financing grew by 19.93 percent (year-on-year), much higher than the 6.90 percent recorded in the previous year. This increase was primarily driven by a sharp rise in working capital financing, which grew by 11.28 percent compared to -1.49 percent the previous year. Consumer financing also expanded substantially, from 13.88 percent to 23.35 percent (yoy) in 2022. This recovery indicates strong post-pandemic resilience in the Islamic banking sector. Investment financing also grew markedly by 23.15 percent (yoy) in 2022, compared to only 3.57 percent in 2021. These findings confirm that Islamic banks have successfully strengthened their intermediation role and contributed meaningfully to national economic recovery and growth (OJK, 2022).

A study by Supriani et al. (2021) revealed that Islamic bank financing has a significant long-term contribution to Indonesia's economic growth. Such findings indicate that Islamic banking financing activities play a key role in driving national business cycles by increasing production and consumption among economic agents utilizing Sharia-compliant services. Hence, the banking sector serves as one of the most important indicators in assessing a nation's economic stability (Supriani et al., 2021).

If a country's banking sector experiences a decline in performance, it can trigger financial crises that disrupt national economic stability (Agus Suryanto et al., 2020). Therefore, maintaining financial soundness is an essential aspect of assessing overall banking performance, one of which is achieved through efficiency (Yahya, 2014).

Operationally, banking efficiency is measured by the ratio of operating expenses to operating income (BOPO). This ratio reflects a bank's ability to manage its costs relative to the revenue it generates. A lower BOPO ratio indicates higher operational efficiency (Mirah & Ayunani, 2024). In modern economics, banking efficiency represents not only the internal effectiveness of financial institutions in performing intermediation functions but also the competitiveness of the financial system as a whole. The higher the efficiency level, the greater the bank's contribution to national financial stability and economic growth (Berger & Humphrey, 1997).

One of the most commonly used indicators to assess banking efficiency is the ratio of Operating Expenses to Operating Income (BOPO). This ratio indicates how effectively a bank manages its

operational costs relative to its income. A lower BOPO ratio signifies a higher degree of efficiency, while a high ratio suggests resource inefficiency or suboptimal cost structure, potentially reducing profitability and competitiveness (Mirah & Ayunani, 2024). The following figure illustrates the development of the BOPO ratio in Indonesia's Islamic banking industry from 2019 to 2023.

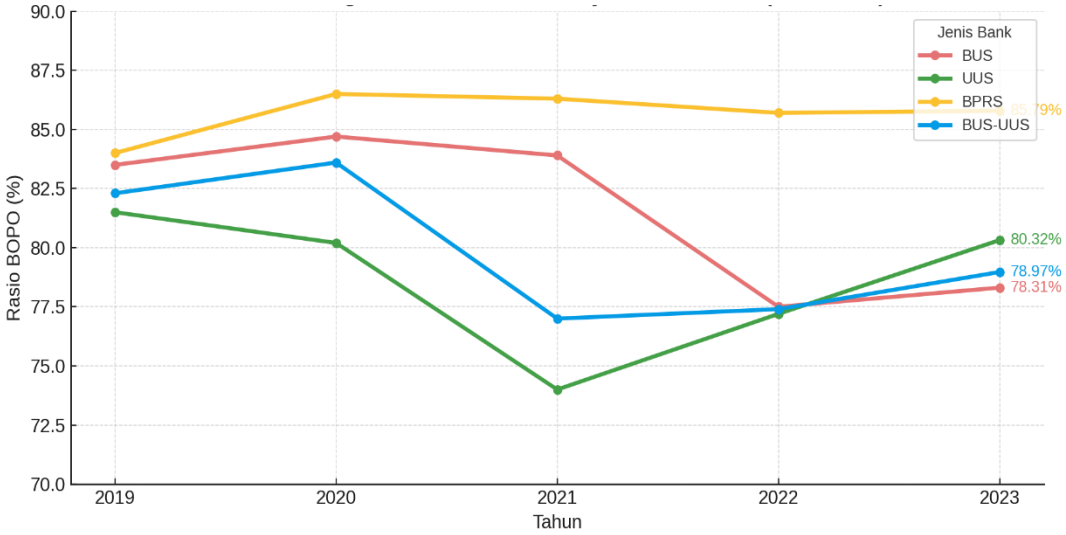


**Figure 2. BOPO Ratio of Islamic Banking in Indonesia, 2019–2023**

*Source: OJK, Islamic Banking Statistics (2023)*

The graph above illustrates the operational performance of Islamic banking in Indonesia, where efficiency is reflected by the ratio of Operating Expenses to Operating Income (BOPO). The BOPO ratio for Islamic Commercial Banks and Islamic Business Units (BUS–UUS) stood at 78.97%, while the BOPO ratio for Islamic Rural Banks (BPRS) reached 85.79%.

Islamic banking continues to demonstrate a positive growth trend, making its role in the national financial system increasingly significant. Islamic banks now occupy a strategic position as an ethical and inclusive alternative financial system that contributes to sustainable economic development. The increase in Islamic financing not only contributes to aggregate economic growth, but also has the potential to create a more equitable economic distribution through asset-based financing mechanisms and real economic activities. This condition highlights the importance of a deeper investigation into the extent of Islamic banking's role in influencing Indonesia's economic growth. Given that Islamic banking represents one of the major sectors shaping the dynamics of the national economy, this study explores its role in driving economic growth from multiple relevant dimensions.

## METHOD

This study uses a quantitative approach by employing secondary data in the form of monthly time series data covering the period from January 2018 to December 2023. Time series data are data collected, recorded, or observed sequentially over a specific period, allowing continuous analysis of variable dynamics (Sugiyono, 2013). The data used in this study consist of:

1. Financial Deepening, which includes the value of total financing obtained from Islamic Banking Statistics (SPS) within the period of January 2018 – December 2023.
2. Banking Efficiency, which includes the value of BOPO obtained from Islamic Banking Statistics (SPS) within the period of January 2018 – December 2023.
3. Indonesia's Economic Growth, represented by GDP data obtained from BPS (Statistics Indonesia) for the period January 2018 – December 2023, which were interpolated using EViews 12.

The data analyzed through EViews 12 were then interpreted to produce relevant findings. To test the long-term equilibrium of Islamic economic variables using secondary data, the Vector Autoregressive (VAR) method in its restricted form, known as the Vector Error Correction Model (VECM), was applied. The tests conducted include: Stationarity Test (Unit Root Test), Optimal Lag Length Test, VAR

Model Stability Test, Cointegration Test, Vector Error Correction Model (VECM) Estimation, Impulse Response Function (IRF) Analysis, and finally Variance Decomposition Analysis.

## RESULTS AND DISCUSSION

### Results

### Unit Root Test (Stationarity Test)

The results of the unit root (stationarity) test for the three variables show that only the GDP variable is stationary at the level, as indicated by the ADF t-statistic value being greater than the t-critical value at the 5% significance level, and the probability value being smaller than α (0.05).

**Table 1. Unit Root Test Results at Level**

| Variable | ADF test statistic | Test Critical Values | | | Prob. | Description |
|---|---|---|---|---|---|---|
| | | 1% | 5% | 10% | | |
| GDP | -3.125 | -3.540 | -2.909 | -2.592 | 0.0298 | stationary |
| Total Financing | -2.315 | -3.533 | -2,906 | -2.590 | 0.1703 | not stationary |
| BOPO | -2.630 | -3.525 | -2.902 | -2.588 | 0.0918 | not stationary |

*Source: Processed data using EViews 12 (2025)*

For the variables that are not stationary, the next step is to transform them through a differencing process so that the data become stationary. This is shown by the ADF t-statistic value being greater than the t-critical value for all tested variables. In other words, the results of the unit root test confirm that all research variables—GDP, Total Financing, and BOPO—are stationary at the first difference level. Therefore, the study can proceed to the next analysis stage. The results of the differencing process are presented as follows:

**Table 2. Unit Root Test Results at First Difference**

| Variable | ADF test statistic | Test Critical Values | | | Prob. | Description |
|---|---|---|---|---|---|---|
| | | 1% | 5% | 10% | | |
| GDP | -7193281 | -3.546 | -2.911 | -2.593 | 0.0000 | stationary |
| Total Financing | -6.328 | -3.533 | -2,906 | -2.590 | 0.0000 | stationary |
| BOPO | -8.703 | -3.527 | -2.903 | -2.589 | 0.0000 | stationary |

*Source: Processed data using EViews 12 (2025)*

### Optimal Lag Length Test

The determination of the optimal lag aims to overcome potential autocorrelation problems in the VAR system. The lag selection test produced the following results:

**Table 3. Optimal Lag Length Test Results**

VAR Lag Order Selection Criteria
Endogenous variables: D(GDP) D(TP) D(BOPO)
Exogenous variables: C
Date: 10/19/25 Time: 17:03
Sample: 2018M01 2023M12
Included observations: 65

| Lag | LogL | LR | FPE | AIC | SC | HQ |
|---|---|---|---|---|---|---|
| 0 | -678.4426 | NA | 256232.4 | 20.96746 | 21.06782 | 21.00706 |
| 1 | -659.1702 | 36.17271 | 186881.1 | 20.65139 | 21.05282 | 20.80978 |
| 2 | -636.9273 | 39.69504 | 124592.3 | 20.24392 | 20.94641* | 20.52110 |
| 3 | -628.5873 | 14.11394 | 127769.2 | 20.26422 | 21.26779 | 20.66019 |
| 4 | -621.8538 | 10.77354 | 138237.4 | 20.33396 | 21.63860 | 20.84872 |
| 5 | -603.3800 | 27.85288 | 104798.3 | 20.04246 | 21.64816 | 20.67601 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | -581.3279 | 31.21212* | 71675.75* | 19.64086* | 21.54763 | 20.39320* |

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion
*Source: Processed data using EViews 12 (2025)*

Based on the results using LR, FPE, and AIC criteria, the most appropriate lag length is **lag 6**, indicated by the lowest AIC value among all lag alternatives.

## VAR Model Stability Test

The results of the VAR stability test show that all characteristic roots (roots) have modulus values below 1 and are located inside the unit circle. This indicates that the VAR model used in the study meets the stability requirements. Therefore, the VAR system can be declared **stable and stationary**, allowing further analyses such as the Impulse Response Function (IRF) and Variance Decomposition (VD) to be conducted. The model's stability also ensures that the interpretation of relationships among endogenous variables will be more accurate and free from potential bias that could affect the validity of the findings.

## Granger Causality Test

**Table 4. Pairwise Granger Causality Test Results**

Pairwise Granger Causality Tests
Date: 09/16/25 Time: 13:36
Sample: 2018M01 2023M12
Lags: 6

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| GDP does not Granger Cause TP | 66 | 2.09441 | 0.0693 |
| TP does not Granger Cause GDP | | 0.58378 | 0.7416 |
| GDP does not Granger Cause BOPO | 66 | 0.65346 | 0.6871 |
| BOPO does not Granger Cause GDP | | 2.88971 | 0.0164 |

*Source: Processed data using EViews 12 (2025)*

Based on the results of the Granger causality test between **Total Financing (TP)** as a proxy for financial deepening and **Gross Domestic Product (GDP)** as a proxy for economic growth, the probability value obtained is **0.0693** for the hypothesis that GDP does not affect TP, and **0.7416** for the hypothesis that TP does not affect GDP. These results indicate that the relationship between the two variables is **unidirectional (one-way causality)**, where **GDP affects TP**, although at a significance level close to the 5% threshold. Conversely, TP does not have a significant effect on GDP.

Based on the results of the Granger causality test, the probability value obtained is **0.0164** for the hypothesis that **BOPO affects GDP**, which is smaller than the 5% significance level (0.05). This shows that the null hypothesis is rejected, so it can be concluded that **BOPO has a causal effect on GDP.** On the other hand, the probability value for the hypothesis "GDP does not affect BOPO" is **0.6871**, which is much higher than 0.05, indicating that there is no significant influence from GDP to BOPO. Thus, the relationship between the two variables is **unidirectional**, where **BOPO influences GDP**, but not vice versa.

## Cointegration Test

The cointegration test is used to identify long-term relationships among endogenous variables in the model, to prevent the occurrence of spurious regression that could lead to misleading analytical results. It also serves as the basis for selecting a subsequent model, such as the **Vector Error Correction Model (VECM),** which integrates short-term dynamics with long-term equilibrium.

**Table 5. Cointegration Test**

Date: 10/19/25 Time: 17:29
Sample (adjusted): 2018M09 2023M12
Included observations: 64 after adjustments
Trend assumption: Linear deterministic trend
Series: (GDP) (TP) (BOPO)
Lags interval (in first differences): 1 to 6

Unrestricted Cointegration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.452041 | 69.90645 | 29.79707 | 0.0000 |
| At most 1 * | 0.265940 | 31.40699 | 15.49471 | 0.0001 |
| At most 2 * | 0.166040 | 11.62045 | 3.841466 | 0.0007 |

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

| Hypothesized No. of CE(s) | Eigenvalue | Max-Eigen Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.452041 | 38.49946 | 21.13162 | 0.0001 |
| At most 1 * | 0.265940 | 19.78653 | 14.26460 | 0.0061 |
| At most 2 * | 0.166040 | 11.62045 | 3.841466 | 0.0007 |

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

*Source: Processed data using EViews 12 (2025)*

Under the Trace Statistic approach, the Trace Statistic values are consistently greater than the 5% critical values, with probability values below 0.05. Similarly, the Maximum Eigenvalue test also shows Max-Eigen Statistic values exceeding the corresponding critical values at the 5% significance level. These results indicate the presence of long-run relationships among GDP, TP, and BOPO.

Based on these findings, the VECM approach is employed to examine both the short-run dynamics and long-run equilibrium relationships among the variables. The use of VECM is further supported by the theoretical expectation that Islamic banking variables and economic growth may exhibit long-term equilibrium adjustments over time.

## VECM Estimation Test

1. Long-Run Estimation

The following presents a summary of the long-run and short-run VECM estimation results, as shown in the table below.

**Table 6. Long-Run VECM Estimation**

| Endogenous Variable | Exogenous Variable | Coefficient | Standar Error (SE) | *t*-Statistic | *t*-Table | Conclusion |
|---|---|---|---|---|---|---|
| D(GDP(-1)) | C | 0.046114 | | | 1,996 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | D(TP(-1)) | 1.549830 | 0.56379 | 2.74892 | | Significant |
| | D(BOPO(-1)) | 0.001211 | 0.00063 | 1.91122 | | Not Significant |

*Source: Processed data using EViews 12 (2025)*

The VECM estimation results indicate that the **Total Financing (TP)** variable has a **positive and significant effect** on GDP, while **BOPO** does not have a significant effect on GDP in the long run. Thus, careful formulation of economic policies related to **total financing** and **BOPO** is required to minimize potential negative impacts on national economic growth.

2. Short-Run Estimation

**Table 7. Short-Run Estimation**

| Variable | Coefficient | Standar Error (SE) | *t*-Statistic | *t*-Table | Conclusion |
|---|---|---|---|---|---|
| GDP | -1.380458 | 0.48577 | -2.84178 | 1,996 | Significant |
| TP | -0.064060 | 0.34452 | -0.18594 | | Not Significant |
| BOPO | -205.2754 | 72.7994 | -2.81974 | | Significant |

*Source: Processed data using EViews 12 (2025)*

Based on the VECM estimation results, the cointegration coefficient (CointEq1) in the **D(GDP)** equation is **–1.380458** with a *t*-statistic of **–2.84178**, which is greater than the *t*-table value of 1.996. This shows that the error correction component is **significant and negative**, indicating the presence of an adjustment mechanism toward long-term equilibrium. Thus, when deviations occur between GDP and other Islamic banking sector variables (TP and BOPO), economic growth adjusts by about **138 percent within one period** to return to equilibrium. This reflects the **dynamic stability** of the Islamic economic system in Indonesia, where the real sector can respond quickly to short-term imbalances.

The cointegration coefficient (CointEq1) in the **D(TP)** equation is **–0.064060** with a *t*-statistic of **–0.18594**, which is smaller than the *t*-table value of 1.996, and therefore **not statistically significant**. This indicates that total financing has not shown an adjustment mechanism toward long-term equilibrium. Accordingly, changes in Islamic financing do not immediately respond to imbalances occurring within the Islamic banking sector, but rather adjust gradually through more stable long-term policies.

Based on the VECM estimation results, the cointegration coefficient (CointEq1) in the **D(BOPO)** equation is **–205.2754** with a *t*-statistic of **–2.81974**, which exceeds the *t*-table value of 1.996. This shows that the error correction component is significant and negative, indicating the presence of an adjustment mechanism toward long-term equilibrium. Therefore, when the operational efficiency of Islamic banking experiences deviations due to changes in other banking sector variables (TP and GDP), the system performs a rapid correction to return to equilibrium. These results reflect the **adaptive capacity** of Indonesia's Islamic banking sector in maintaining long-term operational stability and efficiency.

## Analisis Impulse Response Function (IRF)

Berikut The following table briefly presents the response of GDP to the variables representing the role of Islamic banking.

**Table 8. Summary of GDP Response to Islamic Banking Role Variables.**

| Variable | Short-Term Response (Initial Shock) | Long-Term Stable Period | Long-Term Stability Pattern |
|---|---|---|---|
| GDP → GDP | Very strong response in periods 1–3 (approaching or above 1) | Begins to stabilize around period 30 | Consistent within the range of 0.3 – 0.4 |
| GDP → TP | Positive in periods 2–3, then sharply negative in periods 4–6 (–0.54 in period 6) | Stabilizes starting from period 30 | Small negative values (–0.07 to –0.14) |

| | | | |
|---|---|---|---|
| GDP → BOPO | Fluctuating: negative in period 2 (–0.20), positive peak in period 5 (0.65) | Stabilizes starting from period 25 | Moderately positive (0.20 – 0.25) |

*Source: Processed data using EViews 12 (2025)*

## Variance Decomposition Analysis

**Table 9. Summary of GDP Response to Shocks in Islamic Banking Role Variables in Indonesia.**

| No | Islamic Banking Variable | Contribution to GDP Variance (FEVD) | Economic Interpretation |
|---|---|---|---|
| 1 | Total Financing (TP) | 1.54% (period 5) → 8.45% (period 10) → 4.01% (period 100) | The effect of financing on economic growth is delayed; the deeper the Islamic financial system, the stronger its contribution in the long run. |
| 2 | BOPO | 15.14% (period 5) → 19.10% (period 10) → stable at 20–21% (period 100) | The most influential variable on GDP; improved efficiency (lower BOPO) strengthens intermediation and supports sustainable economic growth. |
| 3 | GDP on itself | 73.98% (period 5) → 62.41% (period 10) → stable at 66–68% (period 100) | Indonesia's economic growth is still largely driven by internal factors (consumption and investment), with the Islamic financial sector contributing to macroeconomic stability. |

*Source: Processed data using EViews 12 (2025)*

## Discussion

Based on the research findings, the following discussions can be drawn:

### Causality Between Islamic Banking Sector Variables and Economic Growth in Indonesia

Based on the results of the Granger causality test between Total Financing (TP) as a proxy for financial deepening and Gross Domestic Product (GDP) as a proxy for economic growth, the findings show that the relationship between the two variables is unidirectional (one-way causality), where GDP affects TP, although the significance level is close to the 5% threshold. Conversely, TP does not significantly affect GDP.These findings are consistent with previous studies stating that economic growth (GDP) precedes the development of Islamic finance. There is no evidence that the Islamic financial sector drives GDP; instead, GDP drives the development of Islamic finance (Zahirah et al., 2025).

Furthermore, the results of the Granger causality test between BOPO as a proxy for Islamic banking efficiency and GDP as a proxy for economic growth indicate a one-way causality, in which BOPO affects GDP but not vice versa. The causal relationship from BOPO to GDP suggests that the operational efficiency of Islamic banks plays an important role in supporting national economic growth. When Islamic banks are able to optimize their cost structures and improve intermediation performance, financing to the real sector can be carried out more effectively, which in turn increases productivity and aggregate economic output (Mhadhbi et al., 2020). This finding aligns with the principle of maqāṣid al-sharīʿah, particularly ḥifẓ al-māl (the protection and development of wealth). Good operational efficiency ensures that public funds are managed responsibly and productively, thereby generating real economic benefits and contributing to the overall welfare of society.

### Cointegration Relationship Between the Islamic Banking Sector and Economic Growth in Indonesia

Based on the results of the Johansen cointegration test, both the Trace Test and the Maximum Eigenvalue Test indicate that there are three cointegrating equations among the variables tested. These findings imply that Total Financing (TP), BOPO, and GDP have a stable long-term relationship. This

means that even though these three variables may experience short-term fluctuations due to economic shocks, in the long term they will move toward the same equilibrium. From the perspective of Islamic economics, the long-term relationship among TP, BOPO, and GDP strengthens the maqāṣid al-sharīʿah concept, especially in the aspect of ḥifẓ al-māl (the protection and development of wealth).

An efficient and stable Islamic financial system not only promotes economic growth but also ensures a fair and equitable distribution of funds to the real sector (Kazak et al., 2023).

### The Role of Islamic Banking Sector Variables in the Short and Long Run Toward Economic Growth in Indonesia

In the short run, the relationship between Total Financing and GDP is not significant, indicating that fluctuations in financing do not directly influence GDP. In contrast, in the long run, Total Financing significantly affects GDP, showing that increases in financing channeled by the Islamic banking sector can substantially drive national economic growth over time. The insignificance of the short-run Error Correction Term (ECT) indicates that the adjustment process between financing and economic growth occurs gradually, since funds allocated to the real sector require time to generate measurable economic effects. Therefore, the causal relationship between Islamic financing and economic growth exhibits a lagging effect, where the actual impact emerges only in the long term after productive activities contribute to national economic expansion. Based on these theoretical and empirical findings, it can be concluded that total Islamic banking financing acts as an important indicator of financial deepening, serving as one of the main drivers of Indonesia's economic growth (Effendi & Yuniarti, 2018). Through the distribution of funds to productive sectors, Islamic banking contributes to achieving inclusive and stable economic growth, consistent with the principles of maqāṣid al-sharīʿah and the objectives of the Sustainable Development Goals (SDGs).

### The Response of Economic Growth to Shocks in Islamic Banking Variables in Indonesia

The initial impulse from an increase in financing requires an adjustment process within the real sector. After period 10, the influence gradually stabilizes until period 100, with the contribution of financing shocks to GDP variation reaching 4.01%. This indicates that the effect of financial deepening on economic output is delayed (lagging) and becomes more apparent in the medium-to-long-term horizon. This pattern is consistent with financial deepening theory proposed by McKinnon (1973), which states that financial deepening takes time to enhance productivity in the real sector through continuous investment and financing. In other words, the deeper and more efficient the Islamic financial system is in channeling funds to productive sectors, the greater its long-term contribution to national economic growth. The response of GDP to shocks in BOPO displays an interesting pattern. After period 20, the GDP response to BOPO becomes more stable, with contributions reaching 20–21%, making it the variable with the greatest influence among other Islamic banking indicators. This is consistent with the financial intermediation theory, which posits that improved institutional efficiency enhances productivity and market confidence, ultimately strengthening the role of Islamic banking as a driver of sustainable economic growth. Overall, these findings are in line with the intermediation theory that efficiency improvements in financial institutions enhance productivity, trust, and overall macroeconomic stability — confirming that Islamic banking acts as a key engine for sustainable long-term economic growth in Indonesia.

## CONCLUSION

Overall, the results of this study show that the role of the Islamic banking sector in Indonesia's economic growth is stronger and more significant in the long run compared to the short run. In the short term, Total Financing (TP) has not shown a meaningful influence on GDP, while Banking Efficiency (BOPO) exerts a direct and significant impact. However, in the long term, Total Financing and Banking Efficiency demonstrate a more stable and significant relationship with economic growth, with Islamic banking efficiency (BOPO) contributing the most to GDP.

Thus, Islamic banking functions not only as a financial intermediary institution but also as an instrument for stability and a catalyst for sustainable economic growth.

In this regard, Islamic banking plays an important role in supporting Indonesia's long-term economic growth, in line with the objectives of maqāṣid al-sharī'ah to realize economic welfare (ḥifẓ al-māl and ḥifẓ al-nafs), and to contribute to the achievement of the Sustainable Development Goals (SDGs), particularly in promoting inclusive and sustainable economic growth.

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