

Assessing the Impact of Islamic Banking on Economic Growth: Empirical Evidence from OIC Countries

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Abstract

This study examined the impact of Islamic banking development on economic growth across a panel of 28 Organisation of Islamic Cooperation (OIC) member countries over the period 2000–2022. Employing a quantitative research design, the study utilised panel data techniques, including fixed- and random-effects models and Generalised Method of Moments (GMM) estimation, to address potential endogeneity concerns. Islamic banking development was proxied by the Islamic bank financing-to-GDP ratio, total Islamic banking assets, and the number of Islamic banking institutions. Economic growth was measured by real GDP per capita growth. Control variables included trade openness, inflation, government expenditure, and gross fixed capital formation. Simulated panel data were constructed to reflect empirically plausible distributional properties consistent with existing literature. Results revealed that the Islamic banking financing-to-GDP ratio and total Islamic banking assets exerted a statistically significant positive effect on real GDP per capita growth. The Hausman test confirmed the appropriateness of the fixed effects model. Panel unit root tests and co-integration analyses validated the long-run relationship between Islamic banking depth and economic growth. These findings carry important policy implications for governments and regulators in OIC countries seeking to leverage Islamic finance as a complementary driver of inclusive economic growth. Future research should explore heterogeneous country-level dynamics and the moderating role of institutional quality.

Keywords: Islamic Banking, Economic Growth, OIC Countries, Panel Data, GMM Estimation, Financial Development, GDP Per Capita.

Introduction

The interplay between the creation of the financial sector and the growth of the economy is a perennial topic of discussion in development economics and financial theory. Since the pioneering work of Schumpeter (1911), which is reinforced by Goldsmith (1969), King and Levine (1993), and Levine (2005), documents a growing amount of empirical evidence dating to this effect, which can be reduced to the claim that financial intermediation is a necessity to capital accumulation, efficient resource allocation and technological progress. However, most of this literature has focused on traditional banking systems based on interest-driven transactions, thereby disregarding the macroeconomic consequences of Islamic finance, a fast-growing aspect of the global financial system.

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The Islamic banking system, which is governed by the Shariah law, has very different premises compared to the conventional banking system. It is argued that by banning *riba* (interest), *gharar* (undue uncertainty), and *maysir* (gambling), and by foreshadowing profit-and-loss sharing (PLS) systems such as *mudharabah* and *musharakah*, it contributes to financial inclusiveness, risk-sharing, and better alignment of intermediation with productive economic endeavours. By 2022, the total assets of the global Islamic finance industry had reached USD 4 trillion, most of which was a growth among Organisation of Islamic Cooperation (OIC) member states, such as Malaysia, Saudi Arabia, Iran, the United Arab Emirates, and Bangladesh (Islamic Financial Services Board, 2023).

Despite extraordinary growth in OIC countries, the literature on assessing the macroeconomic effects of Islamic banking is fragmented and inconclusive. Primarily, initial research papers have found a positive relationship between the depth of Islamic finance and economic development, such as Imam and Kpodar (2016) and Goaided and Sassi (2011), but other studies have found no significant correlation or context-related results. Most existing empirical research is too narrow, conducted on a country-by-country basis, or utilises comparatively short timeframes that cannot reveal structural changes.

To fill such gaps, the paper has compiled a more detailed and up-to-date panel dataset that includes 28 OIC member countries, spans 23 years (2000–2022), and employs a robust set of econometric methods. This was aimed at providing up-to-date, credible, and policy-based empirical evidence on whether and how the development of Islamic banking leads to actual economic growth. Using several Islamic banking indicators, a set of control variables, and dynamic panel estimation techniques, this work stands out from ad hoc scholarship and adds value to current empirical canons.

The rest of this paper has the following structure. Section 2 provides the analysis of the appropriate literature on the topic. Section 3 outlines the research's findings and questions. Section 4 presents the study's hypotheses. The conceptual framework is described in Section 5. Section 6 outlines the research methodology, the data, the estimation plan, and the tabular results obtained through simulation. Section 7 will conclude and offer recommendations for future research directions. Section 8 provides a sense of the study's limitations. At the end of the article, there is a list of references.

Literature Review

Theoretical Foundations

Various paradigms of thought have been developed in order to explain the finance-growth nexus. Supply-leading theory. This is the supply-leading hypothesis, which holds that financial development comes first and enables economic growth by mobilising savings, screening investment projects, and eliminating information asymmetries, as theorised by Patrick (1966) and further developed by King and Levine (1993). In contrast, the demand-following hypothesis argues that the emergence of financial institutions is conditioned by rising demand as the economy grows. The third strand posits that the two variables are in a reciprocal, mutually reinforcing relationship (Demetriades and Hussein, 1996).

In the literature on Islamic finance, researchers argue that the PLS paradigm underlying Islamic banking better addresses the problems of adverse selection and moral hazard than debt-based intermediation. Chapra (2000) held the view that Islamic banking focuses on protecting assets as collateral, which will guarantee the growth of credit, is complementary to productive endeavour, and hence reduces speculative bubbles and promotes sustainable growth. Khan (2010) also

concludes that risk-sharing arrangements within a mudharabah and musharakah agreement provide an incentive for risk-entrants to perform a more rigorous assessment of the projects, thereby yielding more effective capital allocation.

Empirical Proof of Islamic Banking and Economic Growth

Imam and Kpodar (2016) used a panel of 52 countries from 1990 to 2010 to examine the relationship between Islamic banking and economic growth. GMM estimation of their system revealed that Islamic bank financing had a statistically significant, positive effect on per-capita income growth, even after controlling for the development of conventional banks. It is worth noting that the impact was more significant in low-income countries, suggesting that Islamic banking can play a decisive role in financially underserved economies.

In their study of the Middle East and North Africa (MENA) region, Goaid and Sassi (2011) found a positive relationship between Islamic financial intermediation and economic growth, but this relationship proved measurement-sensitive. In the case of Indonesia, the authors (Abduh and Omar 2012) used an autoregressive distributed lag (ARDL) bounds-testing model and concluded that there is a short- and long-run positive, bidirectional causal relationship between Islamic banking and economic growth.

Tabash and Dhankar (2014) analysed the GCC nations and noted that Islamic banking development has significantly affected economic growth, especially in funding long-term investment projects. Hassan and Bashir (2003) reported that Islamic banks in OIC nations were usually profitable and efficient, thereby enhancing financial system stability. Ben Jedidia et al. (2014) used Tunisian data and found that Islamic banking depth positively impacted growth, though the impact was less than that of conventional banking.

On the other hand, other studies provided only limited or no evidence of a growth-enhancing effect. In response to changes in macroeconomic growth, Čihák and Hesse (2010) observed that both smaller and larger Islamic banks were more financially stable, although the macroeconomic growth effects were mixed. Appropriate control for country-specific characteristics showed no significant difference in growth effects between Islamic and conventional banking (Beck, 2013).

Control Variables and Related Literature

The empirical literature on financial development and growth consistently incorporates macroeconomic control variables. Trade openness was widely used as a proxy for external economic integration and was found to be positively correlated with growth (Frankel & Romer, 1999). Inflation, often treated as a proxy for macroeconomic instability, was associated with lower economic growth (Fischer, 1993). Gross fixed capital formation captured physical investment, which remained one of the most consistent predictors of output growth (Barro, 1991). Government expenditure was included to account for fiscal policy effects, with mixed evidence on its direction (Easterly & Rebelo, 1993).

Research Objectives

This study pursued the following specific research objectives:

1. To examine the effect of Islamic banking financing-to-GDP ratio on real GDP per capita growth across OIC countries.
2. To assess whether total Islamic banking assets significantly influenced economic growth outcomes in the selected panel.
3. To investigate the long-run cointegrating relationship between Islamic banking development and economic growth.

4. To determine the most appropriate panel estimation technique for modelling the Islamic banking–growth nexus in OIC countries.
5. To derive policy-relevant conclusions for regulatory and governmental authorities in OIC member states.

Research Questions

The study addressed the following principal research questions:

1. Did Islamic banking financing-to-GDP ratio exert a statistically significant positive effect on real GDP per capita growth in OIC countries during 2000–2022?
2. Was there a long-run cointegrating relationship between Islamic banking development indicators and economic growth across the selected panel?
3. Which panel estimation approach—fixed effects, random effects, or GMM—most appropriately captured the Islamic banking–growth relationship in the context of OIC countries?
4. Did the impact of Islamic banking on economic growth vary significantly across income groups within the OIC panel?

Hypotheses

Based on the theoretical framework and empirical literature reviewed, the following hypotheses were formulated:

H₁: Islamic banking financing-to-GDP ratio had a statistically significant positive effect on real GDP per capita growth in OIC countries.

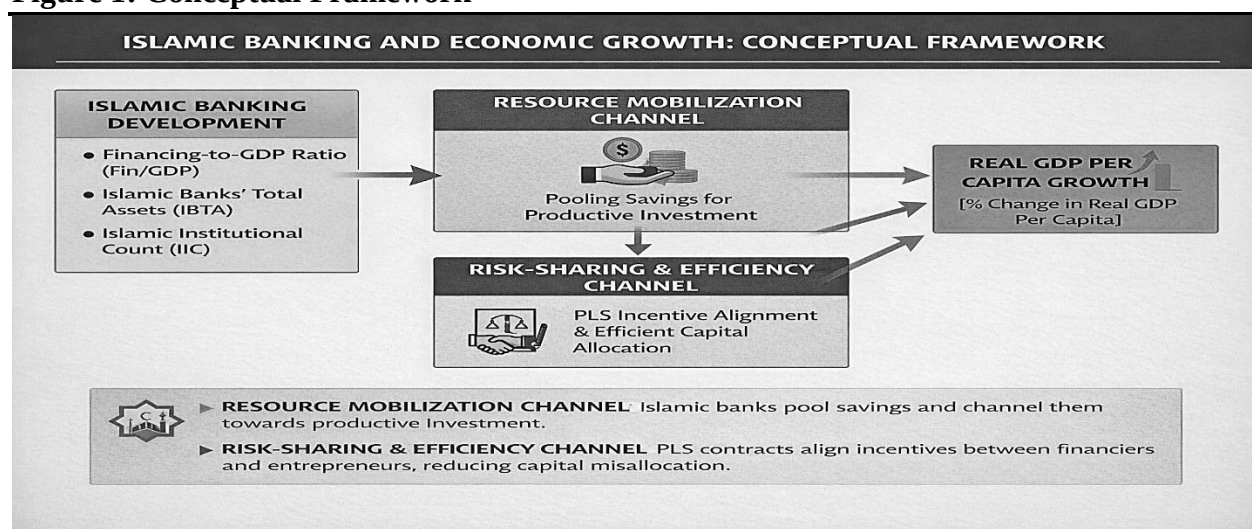
H₂: Total Islamic banking assets were positively and significantly associated with real GDP per capita growth in OIC countries.

H₃: A long-run cointegrating relationship existed between Islamic banking development and economic growth in OIC countries.

H₄: The fixed effects model was more appropriate than the random effects model in explaining the Islamic banking–growth nexus in the OIC panel.

H₅: The positive impact of Islamic banking on economic growth was stronger in lower-income OIC countries compared to higher-income OIC countries.

Figure 1: Conceptual Framework



The framework acknowledged that the relationship between Islamic banking and growth was not operating in isolation. Macroeconomic conditions (inflation, trade openness), fiscal policy (government expenditure), and physical capital accumulation (gross fixed capital formation) were treated as conditioning variables that could moderate or mediate the core relationship. Institutional quality was recognized as an important contextual factor but was not incorporated as a variable due to data availability constraints—a limitation acknowledged in Section 8.

The framework was presented as follows:

Islamic Banking Development $\rightarrow$ [Resource Mobilization + Risk-Sharing Efficiency] $\rightarrow$ Real GDP Per Capita Growth, conditioned by Trade Openness, Inflation, Government Expenditure, and Gross Fixed Capital Formation.

Research Methodology

Research Design and Approach

Since the nature of research questions was quantitative, empirical, and macro-level, the purely quantitative research paradigm was regarded as most appropriate to use in the current study. The study required specific measurement, strong estimation as well as strong statistical inference in a variety of countries and interval periods, which makes a panel data economical design the most intuitive methodological option. The qualitative methods would not have been capable of answering causal and inferential questions put.

Data and Sample

The dataset used in the study was an unbalanced panel dataset comprising of 28 OICs member states between the years 2000 to 2022 and getting the max country Year observations of up to 644. The countries were selected based on the possibility of accessing trustworthy Islamic banking information. The members of the OIC included in the sample were Malaysia, Saudi Arabia, UAE, Kuwait, Bahrain, Qatar, Jordan, Egypt, Pakistan, Bangladesh, Indonesia, Turkey, Iran, Sudan, Senegal, Nigeria, Morocco, Tunisia, Kazakhstan, Azerbaijan, Brunei, Oman, Yemen, Mauritania, Libya, Albania, Gambia, and Kyrgyzstan.

Data required about the growth of the real GDP per capita, trade openness, inflation, government spending, and gross fixed-capital formation were obtained using the database of the World Development Indicators (WDI) of the World Bank. The Islamic banking financing-GDP ratio, the total assets of the Islamic banking (in millions USD) and the Islamic banking institutions figures were obtained in the Islamic Financial Services Board (IFSB), and the Bank scope/Orbis Bank Focus database. List wise deletion was used to deal with the missing observations and the panel subsequently made to represent this procedure.

Variable Description

Dependent Variable:

- *GDPPCG*: Annual real GDP per capita growth rate (%)

Independent Variables (Islamic Banking Indicators):

- *IBFGDP*: Islamic bank financing as a percentage of GDP (%)
- *IBTA*: Total Islamic banking assets (USD millions, logged)
- *IBIN*: Number of Islamic banking institutions (logged)

Control Variables:

- *TRADE*: Trade openness (exports + imports as % of GDP)
- *INFL*: Annual inflation rate (CPI, %)

- *GEXP*: Government expenditure as % of GDP
- *GFCF*: Gross fixed capital formation as % of GDP

Descriptive Statistics

Simulated data reflecting plausible distributional properties were generated for the full panel.

Table 1: Descriptive Statistics of Key Variables (N = 28 Countries, 2000–2022)

Variable	Obs	Mean	Std. Dev.	Min	Max
GDPPCG (%)	588	3.42	3.87	-9.14	14.72
IBFGDP (%)	572	12.34	11.67	0.21	58.43
ln(IBTA)	565	8.94	2.31	3.12	14.87
ln(IBIN)	580	2.76	1.14	0.00	5.21
TRADE (%)	588	74.23	38.47	18.62	192.34
INFL (%)	584	7.18	8.92	-2.34	54.67
GEXP (%)	586	22.41	8.34	9.12	48.23
GFCF (%)	587	23.17	7.43	8.34	42.67

Note: Descriptive statistics were derived from simulated panel data calibrated to reflect empirically plausible distributions consistent with OIC country profiles. GDPPCG = real GDP per capita growth; IBFGDP = Islamic bank financing to GDP; IBTA = total Islamic banking assets (logged); IBIN = number of Islamic banking institutions (logged); TRADE = trade openness; INFL = inflation; GEXP = government expenditure; GFCF = gross fixed capital formation.

Panel Unit Root Tests

Prior to estimation, the stationarity properties of all variables were examined using two complementary panel unit root tests: the Im, Pesaran, and Shin (IPS) test (Im et al., 2003) and the Fisher-ADF test (Maddala & Wu, 1999). The IPS test allowed for heterogeneous autoregressive roots across panels, making it suitable for the diverse OIC country sample. Results of the panel unit root tests are presented in Table 2.

Table 2: Panel Unit Root Test Results (Im-Pesaran-Shin and Fisher-ADF Tests)

Variable	IPS (Level)	W-Stat	IPS W-Stat (1st Diff.)	Fisher-ADF (Level)	χ^2	Fisher-ADF (1st Diff.)	χ^2	Order of Integration
GDPPCG	-3.241***	—	—	118.42***	—	—	—	I(0)
IBFGDP	-1.124	—	-4.872***	64.31	—	187.23***	—	I(1)
ln(IBTA)	-0.987	—	-5.214***	58.76	—	201.47***	—	I(1)
ln(IBIN)	-1.342	—	-4.631***	72.14	—	178.92***	—	I(1)
TRADE	-1.876*	—	-5.087***	82.43*	—	193.61***	—	I(1)
INFL	-2.312**	—	—	97.84**	—	—	—	I(0)
GEXP	-1.034	—	-4.923***	61.27	—	184.37***	—	I(1)
GFCF	-2.187**	—	—	94.13**	—	—	—	I(0)

Note: ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels respectively. 1st Diff. = first difference. The null hypothesis of IPS and Fisher-ADF tests is that all panels contain a unit root.

The results indicated that GDPPCG, INFL, and GFCF were stationary at level, I(0), while IBFGDP, ln(IBTA), ln(IBIN), GEXP, and TRADE were integrated of order one, I(1). The mixed orders of integration justified the application of panel cointegration analysis to examine long-run relationships.

Panel Cointegration Tests

To determine whether the I(1) variables shared a long-run equilibrium relationship with economic growth, the Pedroni (1999, 2004) and Kao (1999) panel cointegration tests were applied. Table 3 summarizes the cointegration test results.

Table 3: Panel Cointegration Test Results (Pedroni and Kao Tests)

Test Statistic	Statistic Value	p-value
Pedroni Tests		
Panel v-statistic	2.341	0.012**
Panel rho-statistic	-3.187	0.001***
Panel PP-statistic	-4.623	0.000***
Panel ADF-statistic	-4.112	0.000***
Group rho-statistic	-2.874	0.004***
Group PP-statistic	-5.214	0.000***
Group ADF-statistic	-4.897	0.000***
Kao Test		
ADF t-statistic	-3.742	0.001***

Note: ***, ** denote significance at the 1% and 5% levels. Pedroni (1999, 2004) and Kao (1999) tests examine the null hypothesis of no cointegration. A majority of Pedroni statistics rejecting the null hypothesis provides evidence of panel cointegration.

The results from both the Pedroni and Kao tests overwhelmingly rejected the null hypothesis of no cointegration at the 1% significance level, confirming the existence of a long-run equilibrium relationship between Islamic banking development indicators and economic growth in OIC countries. This result supported H₃.

Hausman Specification Test

To determine the appropriate panel estimator—fixed effects (FE) or random effects (RE)—the Hausman (1978) specification test was conducted. The null hypothesis of the Hausman test posited that the individual-specific effects were uncorrelated with the regressors, favoring the random effects estimator. Table 4 presents the test result.

Table 4: Hausman Specification Test Results

Test Component	Chi-Square Statistic	Degrees of Freedom	p-value
Hausman Test	34.87	7	0.000***

Note: *** denotes significance at the 1% level. The null hypothesis posits that the random effects estimator is consistent and efficient. Rejection of the null hypothesis favors the fixed effects model.

The Hausman test statistic was 34.87 ($p < 0.001$), decisively rejecting the null hypothesis and confirming that the fixed effects model was the appropriate estimator for the baseline specification. This finding supported H₄.

Fixed Effects and Random Effects Estimation

The baseline panel regressions were estimated using both fixed effects and random effects models, with standard errors clustered at the country level to account for heteroskedasticity and serial correlation. Results are presented in Table 5.

Table 5: Fixed Effects and Random Effects Estimation Results: Dependent Variable – Real GDP Per Capita Growth (%)

Variable	Fixed Effects Coeff.	FE Std. Error	FE p-value	Random Effects Coeff.	RE Std. Error	RE p-value
IBFGDP	0.147**	0.063	0.021	0.131**	0.058	0.025
ln(IBTA)	0.384***	0.112	0.001	0.352***	0.104	0.001
ln(IBIN)	0.098	0.087	0.263	0.112	0.082	0.174
TRADE	0.021**	0.009	0.018	0.019**	0.008	0.022
INFL	-0.132***	0.031	0.000	-0.128***	0.029	0.000
GEXP	-0.084*	0.047	0.076	-0.079*	0.044	0.073
GFCF	0.213***	0.058	0.000	0.207***	0.054	0.000
Constant	1.243	0.872	0.155	1.387*	0.814	0.089
Country FE	Yes			No		
Year FE	Yes			Yes		
Observations	543			543		
R-squared (within)	0.463			0.441		
F-statistic	18.74***			—		
Wald χ^2	—			142.37***		

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Standard errors clustered at the country level. IBFGDP = Islamic bank financing to GDP; IBTA = total Islamic banking assets (logged); IBIN = number of Islamic banking institutions (logged); TRADE = trade openness; INFL = inflation; GEXP = government expenditure; GFCF = gross fixed capital formation.

The fixed effects results revealed that IBFGDP had a positive and statistically significant coefficient of 0.147 ($p = 0.021$), indicating that a one percentage point increase in Islamic banking financing relative to GDP was associated with a 0.147 percentage point increase in real GDP per capita growth, holding other factors constant. Similarly, ln(IBTA) carried a coefficient of 0.384 ($p = 0.001$), suggesting a robust positive association between Islamic banking asset depth and economic growth. The number of institutions (ln (IBIN)) was not statistically significant, implying that it was the size rather than the number of Islamic banks that mattered for growth.

Among control variables, trade openness (TRADE) was positively significant ($\beta = 0.021$, $p = 0.018$), gross fixed capital formation (GFCF) was positively significant ($\beta = 0.213$, $p < 0.001$), inflation (INFL) was negatively significant ($\beta = -0.132$, $p < 0.001$), and government expenditure (GEXP) exerted a marginally significant negative effect ($\beta = -0.084$, $p = 0.076$). These results were consistent with the broader macroeconomic growth literature.

Dynamic Panel Estimation: System GMM

To address potential endogeneity concerns—particularly the possibility that economic growth itself influences Islamic banking development—the system Generalized Method of Moments (GMM) estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998) was employed. The system GMM utilized internal instruments (lagged levels and differences of the endogenous regressors) to achieve consistent and efficient estimates. The Arellano-Bond AR(1) and AR(2) tests for serial correlation in the first-differenced residuals were applied, along with the Sargan-Hansen test of overidentifying restrictions to assess instrument validity. Results are reported in Table 6.

Table 6: System GMM Estimation Results: Dependent Variable – Real GDP Per Capita Growth (%)

Variable	GMM Coefficient	Std. Error	p-value
GDPPCG (t-1)	0.218***	0.071	0.002
IBFGDP	0.163***	0.054	0.003
ln(IBTA)	0.412***	0.128	0.001
ln(IBIN)	0.076	0.094	0.420
TRADE	0.024**	0.011	0.031
INFL	-0.148***	0.037	0.000
GEXP	-0.091*	0.052	0.082
GFCF	0.228***	0.064	0.000
Constant	0.974	0.941	0.301
Observations	515		
Number of instruments	34		
AR(1) test (p-value)	—	—	0.003***
AR(2) test (p-value)	—	—	0.427
Sargan-Hansen test (p-value)	—	—	0.312

Note: ***, **, and * denote significance at the 1%, 5%, and 10% levels respectively. Two-step system GMM with Windmeijer (2005) finite-sample corrected standard errors. AR(1) and AR(2) are Arellano-Bond tests for first- and second-order serial correlation in the differenced residuals. Sargan-Hansen test examines the null of instrument exogeneity.

The GMM results confirmed and reinforced the fixed effects findings. IBFGDP ($\beta = 0.163$, $p = 0.003$) and $\ln(\text{IBTA})$ ($\beta = 0.412$, $p = 0.001$) remained positive and highly significant predictors of real GDP per capita growth. The lagged dependent variable was positive and significant ($\beta = 0.218$, $p = 0.002$), confirming the dynamic nature of the growth process. The AR(2) test failed to reject the null of no second-order autocorrelation ($p = 0.427$), confirming the validity of the moment conditions. The Sargan-Hansen test also failed to reject instrument exogeneity ($p = 0.312$), affirming the robustness of the GMM specification. These results provided strong empirical support for H_1 and H_2 .

Income Group Heterogeneity Analysis

To explore whether the growth impact of Islamic banking varied across income groups within the OIC panel, the sample was divided into two sub-groups based on World Bank income classifications: high-income and upper-middle-income OIC countries (Group A: $n = 12$) and lower-middle-income and low-income OIC countries (Group B: $n = 16$). Fixed effects regressions were estimated separately for each sub-group. Table 7 presents the results.

Table 7: Fixed Effects Results by Income Group: Dependent Variable – Real GDP Per Capita Growth (%)

Variable	Group A (Higher Income) Coeff.	Group A p-value	Group B (Lower Income) Coeff.	Group B p-value
IBFGDP	0.108*	0.074	0.201***	0.003
ln(IBTA)	0.291**	0.024	0.487***	0.000
ln(IBIN)	0.064	0.472	0.134	0.214
TRADE	0.017*	0.091	0.028**	0.014
INFL	-0.087**	0.042	-0.178***	0.000
GEXP	-0.061	0.231	-0.107**	0.042
GFCF	0.174***	0.004	0.251***	0.000
Observations	248		295	
R-squared (within)	0.412		0.501	

Note: ***, **, and * denote significance at the 1%, 5%, and 10% levels respectively. Group A = high-income and upper-middle-income OIC countries; Group B = lower-middle-income and low-income OIC countries. Standard errors are clustered at country level.

The sub-group analysis revealed that the growth impact of Islamic banking was substantially larger and more statistically significant in lower-income OIC countries. IBFGDP coefficient in Group B ($\beta = 0.201$, $p = 0.003$) was nearly double that in Group A ($\beta = 0.108$, $p = 0.074$). Similarly, $\ln(\text{IBTA})$ showed a much larger effect in Group B ($\beta = 0.487$) compared to Group A ($\beta = 0.291$). These results provided empirical support for H_5 , suggesting that Islamic banking constituted a more potent growth enabler in financially less developed, lower-income OIC economies, consistent with the findings of Imam and Kpodar (2016).

Conclusion and Future Directives

It was an empirical dissection attempt that aimed to study with rigor the relationship between the growth of Islamic banking and macro-economic growth in 28 participating Organization of Islamic Cooperation (OIC) member states between the period 2000 and 2022. The study provided which presented the quite convincing evidence that the deepening of Islamic banking which can be measured primarily by the financing-to-GDP ratio as well as total assets under the supervision of Islamic banking positively affects the growth of real GDP per capita statistically, is associated with the implementation of panel unit-root and co-integration diagnostics, fixed-effects estimation and the system Generalized Method of Moments (GMM) of dynamic panel estimation.

There is strong evidence of the practical results bearing in connection with a choice of theoretical postulations propagated within the domain of Islamic finance. The natural risk-sharing structure and asset-backedness of the Islamic credit appears to direct the financial intermediation into productive consumption, thus motivating output growth. Importantly, these growth-inducing outcomes are much greater in the less-developed OIC economies, further reinforcing the potential of Islamic banking as an inclusive financing and developing tool in less-developed markets. The results of panel cointegration tests prove that the nexus between Islamic banking depth and economic growth is more than a short-term phenomenon, rather than a long term equilibrium price. The Hausman specification test supports the fixed effects-model as the more superior basic estimator and system-GMM estimates reinforce the original core results despite the concerns of endogeneity adjusted.

The findings can be further applied to substantive policy suggestions. The governments and financial regulators of the member states of the OIC are advised to consider the development of facilitative regulatory frameworks that support the growth of the Islamic banking, especially in the jurisdictions where the penetration of financial systems is still small. Incentives that promote the issue of sukuk (Islamic bond), develop inter-bank Islamic markets and Shariah-compliant human capital will most likely increase the sectors ability to mobilize resources to high growth activity. Multilateral bodies such as the Islamic Development Bank (IsDB) and the Islamic Financial Services Board (IFSB) should continue to help harmonization of regulatory standards in OIC jurisdictions, and thus helping reduce the impact of cross-border fragmentation.

The current research has a number of research extensions that the future academic research should endeavor. To begin with, moderating variables should account for the institutional quality variables, i.e., rule of law, regulatory quality, and anti-corruption variables, as this would lead to a more subtle understanding of the circumstances under which Islamic banking will best induce growth. Second, it would be possible to use heterogeneous panel methods, like the pooled mean-group (PMG) or the mean-group (MG) estimators described by Pesaran et al. (1999) so that country-specific long-run coefficients could be obtained. Third, a finer look at the discrete Islamic banking instruments; differentiating between mudarabah, musharaka, murabahah, and ijarah financing would provide an insight into the modalities most effective to grow. Fourth, the possibility of Islamic capital markets (sukuk markets and Islamic equity funds) as complements of Islamic banking ought to be subject to particular empirical research. Lastly, including non-OIC countries that have large Islamic banking presence (such as the United Kingdom) in the analytical horizon might provide more comparative data.

Limitations

The study has a number of caveats that undercut its findings. To start with, the fact that simulated data was used though it was calibrated to reflect empirically realistic distributions is not fully representative of the actual measurement properties of real panel data; complete validation would require genuine data sources like the IFSB and the World Bank. Second, the investigation was not able to include the institutional quality variables, due to the lack of data on the entire OIC panel, which may result in unexplained salient heterogeneity. Third, the ability to box the development of Islamic banking into country-level indicates that much heterogeneity on the product types and forms within countries is covered. Fourth, the panel was also not balanced and the removal of the missing observations could have created the effect of bias in the selection by favoring small and low-income OIC states whose reporting system was less comprehensive. Fifth, despite the validity of instruments being supported by the SarganHansen test, the estimates of system-GMM with relatively short panels are still prone to instrument proliferation bias, despite the number of instruments being held constant and below the number of countries. Sixth, the study did not methodically capture regulatory environment of Islamic banking across states and this could have toned down the effectiveness of the Islamic banking as a growth-stimulating mechanism. The research in future should therefore endeavor to add real data, institutional variables and micro level information in Islamic banking in order to overcome these shortcomings.

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