



Unveiling Profitability Drivers in ASEAN Islamic Banking: A Panel Data Analysis

*Ibnu Muttaqin**

Universitas Islam Negeri Sunan Kudus, Indonesia

**Corresponding Author: ibnu.m@iainkudus.ac.id*

Abstract:

This study examines the determinants of profitability in Islamic banking across five Association of Southeast Asian Nations (ASEAN) countries, including Indonesia, Malaysia, Brunei Darussalam, the Philippines, and Thailand, from 2018 to 2022. Using panel data regression, the study examines both Return on Assets (ROA) and Return on Equity (ROE) as measures of profitability. The population consists of all Islamic banks operating in the ASEAN region. Through purposive sampling, the study selected 127 data observations from banks with complete and consistent financial data. The models were estimated using Fixed Effect Models (FEM) with robust standard errors to correct for heteroskedasticity. The findings reveal that efficiency, Market Concentration (HHI), and inflation consistently have a positive and significant impact on both ROA and ROE. Financing to Deposit Ratio (FDR) positively affects only ROE, while Gross Domestic Product (GDP) unexpectedly shows a negative relationship with ROE. Other variables such as bank size, market share, and the Sharia Supervisory Board (SSB) are statistically insignificant. These results suggest that internal efficiency and market structure are more critical to Islamic bank profitability than macroeconomic scale or governance mechanisms. This study fills the empirical gap in the literature by offering comparative insight into Islamic bank performance across the ASEAN region.

Keywords: Islamic Bank, Profitability, Sharia Supervisory Board, Bank-specific, Macroeconomic

JEL Classification Code: G21, C33, E44, G28, Z12

1. Introduction

Over the past two decades, Islamic banking has experienced substantial growth across the Association of Southeast Asian Nations (ASEAN) region. Countries such as Indonesia and Malaysia have emerged as global leaders in developing comprehensive Islamic financial ecosystems supported by regulatory frameworks, expanding product offerings, and increasing financial inclusion. Despite this upward trajectory, concerns regarding the profitability of Islamic banks remain a central issue for practitioners, regulators, and scholars. Profitability is not only an indicator of institutional efficiency but also plays a pivotal role in ensuring long-term resilience, financial system stability, and contributions to national economic development (Iqbal et al., 2022).

Among the most widely used measures of bank profitability are Return on Assets (ROA) and Return on Equity (ROE). ROA reflects the efficiency of a bank in utilizing its assets to generate earnings, while ROE indicates how effectively a bank generates returns for its shareholders. Understanding the determinants of ROA and ROE is essential for Islamic banks to remain



competitive in a market increasingly influenced by digital disruption, Market Concentration (HHI), and evolving macroeconomic dynamics (Ferilli et al., 2024; Ghouse et al., 2022; O'Connell, 2023; Ur Rehman et al., 2022).

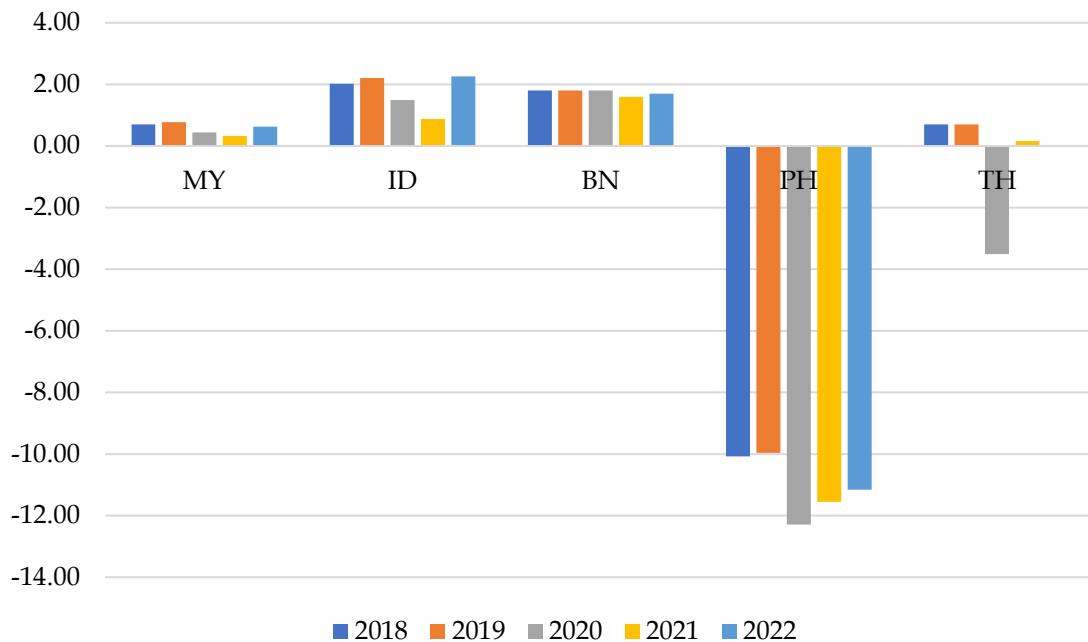


Figure 1: Profitability (ROA) Fluctuations of Islamic Banks in ASEAN

Notes: Each bank's financial statements (2023), MY (Malaysia), ID (Indonesia), BN (Brunei Darussalam), PH (Philippines), and TH (Thailand)

Despite the growth of Islamic banking in ASEAN, profitability levels—particularly ROA—remain inconsistent across member states. As illustrated in Figure 1, while countries such as Malaysia (MY), Indonesia (ID), and Brunei Darussalam (BN) have maintained positive average ROA levels between 2018 and 2022, Islamic banks in the Philippines (PH) and Thailand (TH) consistently recorded negative ROA values, with the Philippines showing critically low levels below -10% throughout the five-year period. This striking divergence suggests structural and institutional disparities in Islamic banking performance across ASEAN nations, underscoring the need for a comparative empirical analysis of profitability drivers within the region. The data was compiled from each country's central banking authority, highlighting an urgent call to examine what factors promote or hinder profitability in Islamic banks across different ASEAN jurisdictions.

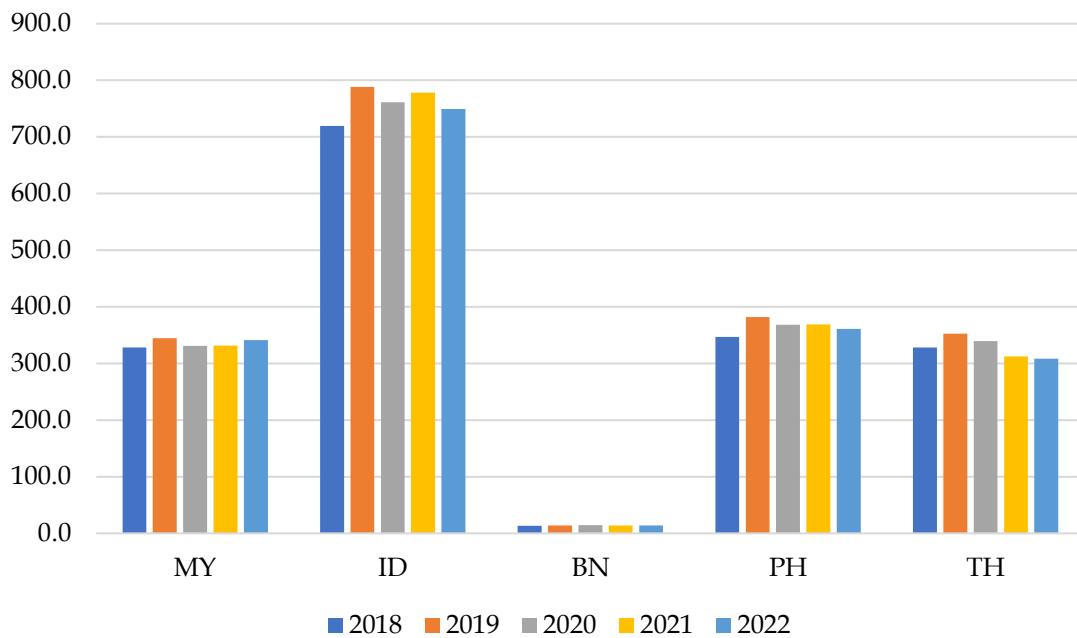


Figure 2: GDP growth in ASEAN

Note: ASEAN Secretariat (2023)

This disparity in Islamic banking profitability becomes even more striking when juxtaposed with the region's macroeconomic context. As shown in Figure 2, ASEAN countries such as Indonesia, Philippines, and Thailand have demonstrated relatively stable and sizeable Gross Domestic Product (GDP) levels between 2018 and 2022 in Billion USD. For instance, Indonesia consistently maintained GDP above USD 700 billion, while the Philippines and Thailand fluctuated around USD 350 billion. These figures suggest that negative ROA levels, particularly in the Philippines and Thailand cannot be solely attributed to macroeconomic downturns, as GDP in these countries remained relatively resilient even during the COVID-19 pandemic period. This disconnects between economic scale and bank profitability signals the possible influence of other structural, institutional, or bank-specific factors such as HHI, operational efficiency, or governance mechanisms like the Sharia Supervisory Board (SSB) which may mediate or moderate the profitability of Islamic banks. Hence, a rigorous empirical investigation is warranted to uncover these underlying profitability drivers in the ASEAN Islamic banking landscape.

Despite the growing body of literature on Islamic banking, comparative empirical studies focusing on profitability determinants in the ASEAN region remain limited (Bawana et al., 2025; Solihin et al., 2016; Wafi & Rosdiana, 2025). Most existing works concentrate on single-country analyses or emphasize either macroeconomic or bank-specific factors in isolation. Furthermore, limited attention has been given to the role of HHI and Sharia governance particularly the SSB within integrated econometric frameworks (Derbali, 2021; O'Connell,



2023; Umar et al., 2023). This creates a gap in understanding how different levels of economic maturity, regulatory environments, and institutional governance interact to shape Islamic bank profitability across ASEAN. Addressing this gap requires a cross-national, multi-dimensional approach that integrates internal, industry level, and macroeconomic drivers using robust statistical methods such as panel data regression.

Previous empirical studies have investigated the determinants of profitability in various banking contexts. For example, Fidanoski et al., (2018) in Croatia and Derbali, (2021) in Morocco found that HHI and Operational Efficiency (EFF) positively impact ROA. Majumder & Li, (2018) also confirmed a similar finding in Bangladesh. However, these findings may not be directly transferable to the ASEAN context, where banking structures, governance models, and market maturity differ significantly. Moreover, research on Islamic banking profitability in ASEAN countries remains sparse and fragmented. Iqbal et al., (2022) focused primarily on the vulnerability of Islamic banks in ASEAN, identifying ROE as one factor affecting bank vulnerability, but failed to analyze broader drivers of profitability such as market structure, efficiency, or macroeconomic variables. Similarly, studies addressing the role of the SSB offer mixed evidence. Quttainah et al., (2013) found no significant impact of SSB on earnings management, while Baklouti, (2020) observed that certain characteristics of the SSB such as board size and meeting frequency, positively influence financial performance in Islamic banks operating in the MENA region. This indicates a lack of consensus in the literature and highlights a gap regarding the SSB's influence in the ASEAN context.

Empirical results concerning efficiency as a profitability driver are also inconsistent. For instance, while Derbali, (2021) and Majumder & Li, (2018) found a significant positive relationship between efficiency and profitability, Bougatef, (2017) in Tunisia discovered that efficiency significantly impacts ROE but not ROA. These contradictory results underscore the need for context-specific studies, especially within the ASEAN region, where banking institutions are at different stages of development and face distinct regulatory and economic environments. Given these theoretical and empirical gaps, this study aims to provide a comprehensive analysis of the determinants of profitability in Islamic banks across the ASEAN region using panel data regression. The independent variables considered in this research include Herfindahl-Hirschman Index (HHI), market share, efficiency, Financing to Deposit Ratio (FDR), GDP, inflation, bank size, and the characteristics of the SSB. By incorporating bank-specific, industry-specific, and macroeconomic factors in one unified framework, this study seeks to deepen the understanding of what drives profitability in ASEAN Islamic banking.

This research contributes to the literature in three main ways. First, it addresses the lack of empirical evidence in the ASEAN context, which has been largely overlooked despite the region's strategic importance for the global



Islamic finance industry. Second, it evaluates understudied variables such as HHI and governance through SSBs that are highly relevant to Islamic banks. Third, it integrates both ROA and ROE as dependent variables to capture a broader perspective of profitability.

This research offers valuable insights for policymakers, bank managers, and financial regulators aiming to enhance the performance and competitiveness of Islamic financial institutions in a dynamic and increasingly integrated regional financial environment. While previous studies have examined subsets of these determinants, most have focused on single-country contexts or limited variables. Comprehensive cross-country studies within ASEAN Islamic banking remain limited. Moreover, very few studies integrate market structure, bank-specific, macroeconomic, and Islamic governance variables into a single panel data framework. Given the diversity within ASEAN in terms of economic development, regulatory maturity, and Islamic finance infrastructure, a comparative empirical investigation is needed to bridge this gap.

2. Literature Review

This research draws upon two major theoretical frameworks: the Structure Conduct Performance (SCP) paradigm and Agency Theory, both of which offer complementary insights into the profitability of Islamic banks. The SCP model, initially developed by (Bain, 1951), posits that a firm's performance is influenced by the market structure in which it operates. A more concentrated market (as measured by the Herfindahl-Hirschman Index or market share) allows firms to exercise greater pricing power, resulting in superior profitability. This theory is widely applied in banking studies to explore how industry structure influences financial outcomes through firm conduct and strategy (O'Connell, 2023). In Islamic banking, the SCP model requires modification to account for faith-based conduct and non-interest principles, which shape how banks behave under similar market structures.

In parallel, Agency Theory (Jensen & Meckling, 1976) provides a framework to analyze governance-related determinants of profitability. This theory highlights potential conflicts of interest between shareholders (principals) and management (agents), particularly in financial institutions with complex operational structures. In Islamic banking, SSB function as a unique governance mechanism, designed to mitigate agency problems by aligning managerial actions with both owners' financial interests and Sharia principles. The effectiveness of the SSB, as an internal control body, may thus influence profitability outcomes depending on its independence, expertise, and oversight frequency (Baklouti, 2020). By integrating SCP and Agency Theory, this study offers a more comprehensive lens through which both external market conditions and internal governance structures can be examined in relation to Islamic bank profitability.



Profitability is most commonly measured using ROA and ROE (Derbali, 2021). ROA measures how effectively a bank utilizes its assets to generate net income, while ROE reflects the return provided to shareholders (O'Connell, 2023). In the Islamic context, profitability is not only an economic outcome but also a reflection of financial integrity and Sharia compliance (Jan et al., 2019; Molla & Rahaman, 2022; Solihin et al., 2016). Due to Islamic banks' unique structure—such as the prohibition of interest), risk-sharing contracts, and adherence to Islamic jurisprudence—their profitability dynamics may diverge from their conventional counterparts (Khandelwal & Aljifri, 2021). Hence, studying the determinants of Islamic banks' profitability requires both a conventional analytical lens and an Islamic governance framework.

Profitability in Islamic banks is closely tied to internal factors that reflect operational efficiency, institutional capacity, and financing strategy. This section examines key variables such as efficiency, bank size, and the FDR as core drivers of financial performance at the firm level. EFF is a key determinant of profitability in banking. Numerous studies have found a positive relationship between efficiency and ROA or ROE (Derbali, 2021; Majumder & Li, 2018). Efficient banks tend to utilize their resources more productively, leading to higher margins. However, Bougatet (2017) found efficiency to be insignificant for ROA but significant for ROE in Tunisian Islamic banks, indicating that the impact of efficiency may vary across contexts and performance indicators. In addition, Bank size is often associated with economies of scale, improved risk diversification, and enhanced technological capabilities. Santoso et al. (2021) and Derbali (2021) found that larger banks tend to have higher profitability. Nevertheless, some studies warn of the diseconomies of scale, where increased size may lead to bureaucratic inefficiencies, particularly in markets where banking infrastructures are still maturing. While, the FDR reflects a bank's liquidity position and risk appetite (Majumder & Li, 2018). Basri (2020) reported a positive and significant relationship between FDR and ROA in Malaysia, suggesting that higher financing activity improves asset returns. Sobarsyah et al. (2020) confirmed this in the Indonesian context, reinforcing FDR's relevance as a bank-specific profitability driver.

Beyond internal characteristics, a bank's profitability is also influenced by the structure of the industry in which it operates. This section highlights how HHI and market share shape the competitive dynamics and financial outcomes of Islamic banks. According to the SCP framework, HHI affects banks' pricing power and profitability (Derbali, 2021; Gök & Peker, 2017). Fidanoski et al. (2018) and Derbali (2021) provide evidence that higher concentration leads to improved ROA. However, O'Connell (2023) found no support for the SCP hypothesis in the UK banking context, indicating that concentration effects may be moderated by regulatory environments and market maturity. In addition, Market Share is also considered a proxy for a bank's competitive advantage. Abbas et al. (2022) linked marketability with earnings growth, suggesting that banks with stronger



presence in the market tend to be more profitable. However, market share in Islamic banking may also depend on customer awareness, financial literacy, and trust in Sharia compliance (Yarmanti A. et al., 2025; Yenice & Orhan, 2025).

Profitability is also contingent upon broader economic conditions. A country's GDP growth reflects the overall economic environment in which banks operate. Studies by Buallay et al. (2021) and Abaidoo & Anyigba (2020) found that higher GDP growth correlates with increased profitability, as it improves lending opportunities and reduces credit risk. Nevertheless, this relationship is not always linear, as demonstrated by the weak correlation between ROA and GDP in countries like the Philippines and Thailand. While, Inflation can either improve or erode bank profitability (O'Connell, 2023), depending on whether banks can adjust their pricing and margins in time (Abaidoo & Anyigba, 2020). O'Connell (2023) observed a significant effect of long-term inflation on United Kingdom (UK) banks' ROA, highlighting its role as a macroeconomic determinant of profitability.

In Islamic banking, governance mechanisms rooted in Sharia principles play a critical role. The role of the SSB in influencing financial performance has been the subject of ongoing debate (Prati et al., 2024). Baklouti (2020) found that board size and meeting frequency positively affect both ROA and ROE in Middle East and North Africa (MENA) Islamic banks. In contrast, Quttainah et al. (2013) reported no significant impact of SSB presence on earnings management, though characteristics like SSB affiliation and expertise did show some effects. This variation suggests that governance quality, not mere existence, may be key to linking SSB to bank performance.

Hypothesis

- H1a : Efficiency has a significant effect on ROA
- H1b : Efficiency has a significant effect on ROE
- H2a : Size has a significant effect on ROA
- H2b : Size has a significant effect on ROE
- H3a : FDR has a significant effect on ROA
- H3b : FDR has a significant effect on ROE
- H4a : HHI has a significant effect on ROA
- H4b : HHI has a significant effect on ROE
- H5a : Market Share has a significant effect on ROA
- H5b : Market Share has a significant effect on ROE
- H6a : GDP has a significant effect on ROA
- H6b : GDP has a significant effect on ROE
- H7a : Inflation has a significant effect on ROA
- H7b : Inflation has a significant effect on ROE
- H8a : SSB has a significant effect on ROA
- H8b : SSB has a significant effect on ROE



3. Research Methods

This study employs a quantitative research design using panel data regression analysis to investigate the determinants of profitability in Islamic banks across five ASEAN countries—Indonesia, Malaysia, Brunei Darussalam, the Philippines, and Thailand—over the period of 2018 to 2022. The population of this study includes all Islamic banks operating in ASEAN, identified from official records of national financial authorities and Islamic banking directories. The study uses a purposive sampling technique, selecting banks with complete and consistent financial data for the observation period. The final sample comprises 127 bank-year observations, with Indonesia contributing 9 Islamic banks, Malaysia 15 banks, and the remaining countries one Islamic bank each. Financial and macroeconomic data were collected from annual bank reports, central bank publications, and ASEAN official site. The dependent variables used to measure bank profitability are ROA and ROE. The independent variables include Herfindahl-Hirschman Index (HHI), market share, efficiency ratio, FDR, GDP, inflation, bank size, and the presence of a SSB.

Table 1: The Measurement of the Each Variables

Variables	Measurement
ROA	Net income/total assets (O'Connell, 2023)
ROE	Net income/total equity (O'Connell, 2023)
HHI	Total revenue individual bank/total revenue 5 biggest banks (Derbali, 2021)
MS	Total asset individual bank/total asset whole banks (Abbas et al., 2022)
EFF	Operating expenses/operating income (Derbali, 2021)
FDR	Financing/customer's deposits (Basri, 2020)
GPD	Natural log of Gross Domestic Product (O'Connell, 2023)
INF	Inflation ratio (O'Connell, 2023)
SIZE	Natural log Total assets (O'Connell, 2023)
SSB	Natural log of members amount of SSB (Baklouti, 2020)

Note: Data processed by author

The data were analyzed using EViews software, employing panel data regression techniques including Fixed Effect Model (FEM) and Random Effect Model (REM). Panel data analysis is used to capture both cross-sectional and time-series variations, allowing for more robust and comprehensive insights into profitability determinants across countries and over time (Baltagi, 2005). To determine the most appropriate estimation model, the study conducted Chow test to compare FEM against the pooled Ordinary Least Squares (OLS) model, and Hausman test to select between FEM and REM. Additionally, Lagrange Multiplier (LM) test was used to assess the necessity of REM over pooled regression (Ibrahim & Arundina, 2022). These diagnostics ensured the robustness of model specification by accounting for heterogeneity across banks and over time. Panel regression was chosen due to its ability to capture both cross-sectional



and temporal variations in the data, thus enhancing empirical validity (Baltagi, 2005).

This research estimates two panel regression models with different dependent variables (ROA and ROE), while maintaining the same set of explanatory variables. The models are specified as follows:

Model 1

$$ROA_{it} = \beta_0 + \beta_1 HHI_{it} + \beta_2 MS_{it} + \beta_3 EFF_{it} + \beta_4 FDR_{it} + \beta_5 \ln(GDP_{it}) + \beta_6 INF_{it} + \beta_7 \ln(SIZE_{it}) + \beta_8 \ln(SSB_{it}) + \varepsilon_{it}$$

Model 2

$$ROE_{it} = \beta_0 + \beta_1 HHI_{it} + \beta_2 MS_{it} + \beta_3 EFF_{it} + \beta_4 FDR_{it} + \beta_5 \ln(GDP_{it}) + \beta_6 INF_{it} + \beta_7 \ln(SIZE_{it}) + \beta_8 \ln(SSB_{it}) + \varepsilon_{it}$$

Where:

ROA	: Profitability of bank in Model 1
ROE	: Profitability of bank in Model 2
HHI	: Herfindahl-Hirschman Index (Market Concentration)
MS	: Market Share
EFF	: Efficiency
FDR	: Financing to Deposit Ratio
Ln (GDP)	: Gross Domestic Product
INF	: Inflation
Ln (SIZE)	: Total Assets
Ln (SSB)	: The Members Amount of SSB

4. Finding and Discussion

Descriptive statistics of all variables are shown in Table 1. The average value of ROA is 0.5050, while ROE is 1.7138, indicating that Islamic banks in ASEAN are generating modest profitability. The standard deviation of both ROA (1.07) and ROE (2.31) suggests considerable variation across banks and years.

The mean of EFF is 4.86 with a relatively low standard deviation (1.12), suggesting consistent efficiency levels across banks. The FDR has an average of 5.09, while HHI averages at 1.58. The variables GDP and Bank Size have been transformed logarithmically, showing mean values of 6.66 and 22.30 respectively.

Table 2: Descriptive statistics

Test	ROA	ROE	EFF	FDR	HHI	MS	GDP	INF	SIZE	SSB
Mean	0.505	1.714	4.865	5.097	1.576	1.392	6.667	1.090	22.30	2.085
Median	0.640	2.610	4.860	5.170	1.600	1.220	6.530	1.230	22.66	2.310
Maximum	3.300	4.130	7.220	5.970	4.590	4.050	7.360	2.500	25.60	3.000



Minimum	-3.200	-6.220	-5.910	4.050	-2.210	0.000	3.280	-1.020	16.56	0.880
Std. Dev.	1.074	2.308	1.119	0.267	1.439	1.104	0.761	0.959	2.044	0.494
Skewness	-1.268	-1.869	-6.404	-1.612	0.027	0.605	-2.977	-1.004	-1.091	-0.667
Kurtosis	7.347	6.004	65.21	7.675	2.151	2.336	14.29	3.132	4.147	2.453
Observations	135	135	135	135	135	135	135	135	135	135

Note: Data processed by author

Two main classical assumption tests were conducted: multicollinearity and heteroskedasticity. The Variance Inflation Factor (VIF) values are all below 10 (Basuki & Prawoto, 2021), with the highest being market share (7.75), indicating no serious multicollinearity problem among independent variables.

Table 3: Multicollinearity test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.712221	734.5013	NA
EFF	0.003668	24.74220	1.234371
FDR	0.088977	627.7824	1.701611
HHI	0.004839	5.950613	2.694803
MS	0.023684	20.18073	7.753001
GDP	0.011064	134.8808	1.720535
INF	0.004808	2.734674	1.187887
SZ	0.004474	607.4599	5.023377
SSB	0.049654	61.70360	3.257652

Note: Data processed by author

Breusch-Pagan test results indicated heteroskedasticity ($p < 0.05$). To address this, the study applied robust standard errors (White cross-section) in the FEM for both ROA and ROE, ensuring valid statistical inference despite non-constant error variance (White, 1980).

Model selection tests support the use of FEM for both ROA and ROE regressions (Chow and Hausman tests, $p < 0.05$, table 4).

Table 4: Estimation Model Determination

Test	Model	Statistic	d.f.	Prob.	Result
Chow Test	Model 1	20.470496	(26,100)	0.0000	FEM
	Model 2	17.311118	(26,100)	0.0000	FEM
Hausman Test	Model 1	17.078097	8	0.0293	FEM
	Model 2	18.476113	8	0.0179	FEM

Note: Data processed by author

After conducting the model selection test, the FEM regression results for both ROA and ROE as dependent variables are presented in Table 5.



Table 5: Panel Data Regression

Model	Variable	Coeff.	t-stat.	Prob.	R ² Square	f-stat.	Prob.
Model 1 (ROA)	EFF	0.159951	7.283161	0.0000	0.913867	42.81579	0.000000
	FDR	-0.163203	-0.453248	0.6514			
	HHI	0.685217	6.864023	0.0000			
	MS	0.175174	0.300601	0.7643			
	GDP	0.894276	0.734017	0.4647			
	INF	0.082098	4.911152	0.0000			
	SIZE	-0.164905	-0.549413	0.5839			
	SSB	0.040948	0.364606	0.7162			
Model 2 (ROE)	EFF	0.287649	2.916852	0.0044	0.874488	28.45956	0.000000
	FDR	0.852069	2.828361	0.0057			
	HHI	1.659463	10.38698	0.0000			
	MS	0.482461	0.276631	0.7826			
	GDP	-4.817824	-3.350457	0.0011			
	INF	0.253204	4.070955	0.0001			
	SIZE	-0.166738	-0.169356	0.8659			
	SSB	0.098876	0.314559	0.7538			

Note: Data processed by author

The ROA model has an adjusted R² of 0.9139, and the ROE model 0.8745, indicating strong explanatory power. For the ROA model, the variables significantly affecting profitability are: EFF ($\beta = 0.160$, $p = 0.0000$), HHI ($\beta = 0.685$, $p = 0.0000$), INF ($\beta = 0.082$, $p = 0.0000$). Other variables such as FDR, MS, GDP, SIZE, and SSB are statistically insignificant.

In the ROE model, the significant variables are: EFF ($\beta = 0.288$, $p = 0.0044$), FDR ($\beta = 0.852$, $p = 0.0057$), HHI ($\beta = 1.659$, $p = 0.0000$), INF ($\beta = 0.253$, $p = 0.0001$), GDP ($\beta = -4.818$, $p = 0.0011$), MS, SIZE, and SSB remain insignificant for ROE as well.

This statistical evidence underscores the robustness of the FEM, with high adjusted R² values indicating that approximately 91% (ROA) and 87% (ROE) of the variation in profitability are explained by the selected variables. The consistently significant predictors EFF, HHI, and INF, demonstrate strong predictive validity and align with theoretical expectations. The low p-values across these variables confirm a high level of statistical confidence, suggesting reliable and stable relationships across the panel data sample over time and across countries.

Efficiency significantly affects both ROA and ROE, confirming H1a and H1b. This supports the argument that operational excellence through cost control and optimal resource use enhances both asset-based and equity-based returns. This aligns with prior findings by Derbali (2021) and Majumder & Li (2018), and emphasizes the need for Islamic banks to prioritize lean and agile operations. The results confirm that EFF is a key profitability driver. Banks that are more efficient



can minimize costs and optimize resource allocation, directly boosting both ROA and ROE across the ASEAN Islamic banking sector (Derbali, 2021; Fidanoski et al., 2018; Mateev et al., 2024).

Bank size does not have a significant effect on either ROA or ROE, leading to the rejection of H2a and H2b. This suggests that economies of scale are not yet effectively captured by Islamic banks in ASEAN, or that increased size may be offset by management complexity. This contrasts with findings in more mature banking markets and supports Derbali's (2021) observation that size-profitability relationships are context-dependent. However, it is in line with Muttaqin's & Qomar's (2022) findings that bank size has no impact on ROE in Islamic banks. Bank size shows no significant impact, indicating that larger Islamic banks do not necessarily enjoy higher profitability (Muttaqin & Qomar, 2022). This may be due to operational complexity or underutilized scale advantages within emerging ASEAN financial systems (Riani et al., 2024).

FDR is not significant for ROA but is positively significant for ROE (H3a rejected, H3b accepted). This indicates that while financing activities may not immediately affect asset profitability, they do influence returns to shareholders potentially through higher leverage or aggressive profit-sharing models. This finding is slightly different from Bougatet's (2017) research, both have an effect on ROE but this research is not in line with the effect on ROA. FDR significantly influences ROE but not ROA, suggesting that higher financing enhances shareholder returns, though it may not immediately affect asset-based profitability due to risk or delayed revenue realization (Sulistyorini et al., 2024).

HHI has a consistently strong and positive impact on both ROA and ROE, supporting H4a and H4b and validating the SCP theory. Banks in more concentrated markets seem to benefit from higher pricing power and less competitive pressure, as also confirmed by Fidanoski et al. (2018) and O'Connell (2023). For policymakers, this implies a trade-off between promoting competition and preserving bank stability. Higher HHI leads to greater profitability. Banks in less competitive environments likely benefit from pricing power and market control, supporting the SCP theory in the Islamic banking context (Abou-El-Sood & Shahin, 2023).

Market share is insignificant in both models, leading to rejection of H5a and H5b. This could imply that market dominance alone does not guarantee profitability, especially in Islamic banking where customer loyalty is often influenced by non-commercial factors such as Sharia compliance and trust (Roberts-Lombard & Petzer, 2025). Market share does not significantly influence profitability, implying that mere dominance in the market does not guarantee better performance, especially in sectors where trust and compliance are crucial (Syamlan et al., 2025).

GDP has no effect on ROA but a negative effect on ROE, leading to rejection of H6a and acceptance of a reversed H6b. This counterintuitive result suggests that macroeconomic expansion may not benefit Islamic banks'



shareholder returns possibly due to regulatory constraints, or increased cost of capital in larger economies. A similar phenomenon was observed by Iqbal et al. (2022) in the context of ASEAN banking vulnerabilities. GDP negatively affects ROE and has no significant impact on ROA. This unexpected result suggests that macroeconomic growth alone does not benefit Islamic banks, possibly due to structural inefficiencies or regulatory constraints (Saif-Alyousfi et al., 2020).

Inflation is positively significant for both ROA and ROE, thus supporting H7a and H7b. This indicates that Islamic banks are able to adjust returns or pricing in inflationary periods, maintaining their profitability. It reflects pricing agility in *murabaha* or *ijarah*-based contracts that are often indexed or repriced regularly. The results of this research are supported by Abaidoo & Anyigba (2020) in the context of US banking sector, and O'Connell (2023) in the context of UK banking sector. Inflation positively influences both ROA and ROE, indicating that Islamic banks can adjust their pricing structures to inflationary conditions, maintaining profitability through flexible contract mechanisms like *murabaha* and *ijarah* (Abaidoo & Anyigba, 2020; O'Connell, 2023).

The member amount of a SSB is not statistically significant in either model, resulting in the rejection of H8a and H8b. This may indicate that SSBs, while central to Sharia governance, do not directly influence financial performance. This aligns with (Quttainah et al., 2013), who found that not the mere existence, but rather the characteristics of SSB (e.g., expertise, independence, meeting frequency) drive performance impact. SSB does not directly contribute to profitability, but rather to legal risk avoidance and Islamic compliance (Umar et al., 2023). The SSB does not significantly influence profitability. This suggests that compliance oversight, while essential, does not directly affect financial outcomes unless supported by strong governance characteristics (Baklouti, 2020; Karbhari et al., 2020).

5. Conclusions

This study concludes that profitability in ASEAN Islamic banking is primarily driven by operational efficiency, HHI, and inflation resilience. Efficiency proves to be a consistent enhancer of both ROA and ROE, while HHI supports the SCP hypothesis by showing that concentrated markets tend to yield better financial outcomes. FDR influences shareholder return (ROE), suggesting the role of financing intensity, whereas inflation responsiveness reflects pricing agility in Islamic contracts. Conversely, variables such as market share, bank size, and SSB show no significant impact, indicating that institutional scale and formal Sharia governance mechanisms may not directly translate to financial performance. Additionally, the negative effect of GDP on ROE calls attention to the complexity of macroeconomic interactions with bank-level profitability.

These findings imply that Islamic bank managers should enhance EFF through digitalization and cost control to improve profitability. Regulators may



consider maintaining a balanced market structure that supports stability, as higher concentration correlates with better performance. Additionally, governance bodies should focus on strengthening the quality not just the existence of SSB to improve oversight. The positive link between inflation and profitability also highlights the need for adaptive pricing mechanisms in Islamic financial contracts.

This study is limited by its reliance on secondary data, potentially excluding newer Islamic banks with incomplete records. The SSB variable also lacks depth, as it only measures board presence. Future research should explore board characteristics, apply dynamic panel techniques (e.g., GMM), and consider fintech integration or cross-regional comparisons to deepen understanding of Islamic bank profitability.

References

Abaidoo, R., & Anyigba, H. (2020). Bank performance variability and strands of inflationary conditions. *European Journal of Management and Business Economics*, 29(3), 235–253. <https://doi.org/10.1108/EJM-BE-09-2018-0100>

Abbas, A., Triani, N., Rayyani, W. O., & Muchran, M. (2022). Earnings growth, marketability and the role of Islamic financial literacy and inclusion in Indonesia. *Journal of Islamic Accounting and Business Research, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/JIABR-12-2021-0322>

Abou-El-Sood, H., & Shahin, R. (2023). Bank competition, regulatory capital, and risk taking: International evidence. *Managerial Finance*, 49(10), 1614–1640. <https://doi.org/10.1108/MF-06-2022-0277>

ASEAN Secretariat. (2023, Desember). *ASEAN Statistical Yearbook 2023*. Jakarta: ASEAN Secretariat. <https://asean.org/book/asean-statistical-yearbook-2023/>

Bain, J. S. (1951). Relation of Profit Rate to Industry Concentration: American Manufacturing 1936-1940. *The Quarterly Journal of Economics*, 65(4), 602. <https://doi.org/10.2307/1882581>

Baklouti, I. (2020). Is the Sharia supervisory board a friend or an enemy of Islamic banks? *Journal of Islamic Marketing*, 13(2), 526–541. <https://doi.org/10.1108/JIMA-04-2020-0118>

Baltagi, B. H. (2005). *Econometric Analysis of Panel Data* (Third). John Wiley & Sons Ltd.

Basri, M. F. (2020). Competition and market structure of the Malaysian Islamic banking industry. *Journal of Islamic Accounting and Business Research*, 11(3). <https://doi.org/10.1108/JIABR-08-2017-0127>

Basuki, A. T., & Prawoto, N. (2021). *Analisis Data Panel dalam Penelitian Ekonomi dan Bisnis* (1st ed.). Rajawali Press.

Bawana, T. A., Mansor, F., & Noordin, K. (2025). Promoting ASEAN Islamic Banking Integration: Prospect and Inclusive Framework. *Online Journal of*



Islamic Management and Finance, 5(1).
<https://vmis.um.edu.my/index.php/OJIMF/article/view/60809>

Bougatef, K. (2017). Determinants of bank profitability in Tunisia: Does corruption matter? *Journal of Money Laundering Control*, 20(1), 70-78. <https://doi.org/10.1108/JMLC-10-2015-0044>

Buallay, A., Al Hawaj, A. A., & Hamdan, A. (2021). Integrated reporting and performance: A cross-country comparison of GCC Islamic and conventional banks. *Journal of Islamic Marketing*, 12(8), 1619-1636. <https://doi.org/10.1108/JIMA-08-2017-0084>

Derbali, A. (2021). Determinants of the performance of Moroccan banks. *Journal of Business and Socio-Economic Development*, 1(1), 102-117. <https://doi.org/10.1108/JBSED-01-2021-0003>

Ferilli, G. B., Altunbas, Y., Stefanelli, V., Palmieri, E., & Boscia, V. (2024). Fintech governance and performance: Implications for banking and financial stability. *Research in International Business and Finance*, 70, 102349. <https://doi.org/10.1016/j.ribaf.2024.102349>

Fidanoski, F., Choudhry, M., Davidović, M., & Sergi, B. S. (2018). What does affect profitability of banks in Croatia? *Competitiveness Review: An International Business Journal*, 28(4), 338-367. <https://doi.org/10.1108/CR-09-2016-0058>

Ghouse, G., Ejaz, N., Bhatti, M. I., & Aslam, A. (2022). Performance of Islamic vs conventional banks in OIC countries: Resilience and recovery during Covid-19. *Borsa Istanbul Review*, 22, S60-S78. <https://doi.org/10.1016/j.bir.2022.11.020>

Gök, O., & Peker, S. (2017). Understanding the links among innovation performance, market performance and financial performance. *Review of Managerial Science*, 11(3), 605-631. <https://doi.org/10.1007/s11846-016-0198-8>

Ibrahim, M., & Arundina, T. (2022). *Practical Panel Modelling with Application in Islamic Banking and Finance Research*. National Committee of Islamic Economy and Finance (KNEKS).

Iqbal, M., Kusuma, H., & Sunaryati, S. (2022). Vulnerability of Islamic banking in ASEAN. *Islamic Economic Studies*, 29(2), 159-168. <https://doi.org/10.1108/IES-10-2021-0040>

Jan, A., Marimuthu, M., & @ Mat Isa, M. P. bin M. (2019). The nexus of sustainability practices and financial performance: From the perspective of Islamic banking. *Journal of Cleaner Production*, 228, 703-717. <https://doi.org/10.1016/j.jclepro.2019.04.208>

Jensen, M. C., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Finance Economic*, 3, 305-360.

Karbhari, Y., Alam, Md. K., & Rahman, Md. M. (2020). Relevance of the application of institutional theory in Shariah governance of Islamic banks.



PSU Research Review, 5(1), 1–15. <https://doi.org/10.1108/PRR-05-2020-0015>

Khandelwal, S., & Aljifri, K. (2021). Risk sharing vs risk shifting: A comparative study of Islamic banks. *Journal of Islamic Accounting and Business Research*, 12(8), 1105–1123. <https://doi.org/10.1108/JIABR-08-2018-0121>

Majumder, Md. T. H., & Li, X. (2018). Bank risk and performance in an emerging market setting: The case of Bangladesh. *Journal of Economics, Finance and Administrative Science*, 23(46), 199–229. <https://doi.org/10.1108/JEFAS-07-2017-0084>

Mateev, M., Sahyouni, A., Moudud-Ul-Huq, S., & Nair, K. (2024). Bank performance and financial stability during the COVID-19 pandemic: Lessons from the MENA region. *EuroMed Journal of Business*. <https://doi.org/10.1108/EMJB-07-2023-0182>

Molla, Md. I., & Rahaman, Md. K. B. (2022). Effect of advertising spending on operating and market performance of banks: Empirical evidence from Bangladesh. *Asian Journal of Accounting Research*, 7(1), 97–110. <https://doi.org/10.1108/AJAR-06-2021-0084>

Muttaqin, I., & Qomar, M. N. (2022). Pengaruh Risiko Kredit dan Bank Size Terhadap Profitabilitas Bank Umum Syariah milik BUMN di Indonesia Sebelum Merger. 7(1), 16. <http://dx.doi.org/10.29300/ba.v7i1.6224>

O'Connell, M. (2023). Bank-specific, industry-specific and macroeconomic determinants of bank profitability: Evidence from the UK. *Studies in Economics and Finance*, 40(1), 155–174. <https://doi.org/10.1108/SEF-10-2021-0413>

Prati, A. H., Ashfaq, M., Ullah, S., & Hasan, R. (2024). Performance of shariah-compliant and non-shariah-compliant ETFs: A comparative study. *International Journal of Islamic and Middle Eastern Finance and Management*, 18(1), 121–141. <https://doi.org/10.1108/IMEFM-04-2024-0181>

Quttainah, M. A., Song, L., & Wu, Q. (2013). Do Islamic Banks Employ Less Earnings Management? *Journal of International Financial Management & Accounting*, 24(3), 203–233. <https://doi.org/10.1111/jifm.12011>

Riani, R., Ikhwan, I., & Rusydiana, A. S. (2024). Evaluating Islamic Bank Efficiency and Productivity in ASEAN: Does Technological Advancement Play a Role? *AL-MUZARA'AH*, 12(2), 233–255. <https://doi.org/10.29244/jam.12.2.233-255>

Roberts-Lombard, M., & Petzer, D. J. (2025). You want my loyalty? Treat me fairly! A study of Islamic banking customers in South Africa. *Journal of Islamic Marketing*, 16(2), 627–650. <https://doi.org/10.1108/JIMA-06-2023-0178>

Saif-Alyousfi, A. Y. H., Md-Rus, R., Taufil-Mohd, K. N., Mohd Taib, H., & Shahar, H. K. (2020). Determinants of capital structure: Evidence from Malaysian firms. *Asia-Pacific Journal of Business Administration*, 12(3–4), 283–326. <https://doi.org/10.1108/APJBA-09-2019-0202>



Santoso, W., Yusgiantoro, I., Soedarmono, W., & Prasetyantoko, A. (2021). The bright side of market power in Asian banking: Implications of bank capitalization and financial freedom. *Research in International Business and Finance*, 56, 101358. <https://doi.org/10.1016/j.ribaf.2020.101358>

Sobarsyah, M., Soedarmono, W., Yudhi, W. S. A., Trinugroho, I., Warokka, A., & Pramono, S. E. (2020). Loan growth, capitalization, and credit risk in Islamic banking. *International Economics*, 163, 155–162. <https://doi.org/10.1016/j.inteco.2020.02.001>

Solihin, S., Achsani, N. A., & Saptono, I. T. (2016). The Islamic Banking and The Economic Integration in ASEAN. *Buletin Ekonomi Moneter dan Perbankan*, 19(1), 81–106. <https://doi.org/10.21098/bemp.v19i1.601>

Sulistyorini, E., Sarasmitha, C., June, C. G. T., & Jauhari, B. (2024). Financial Performance: A Study of CAR and FDR Impact on ROA in Indonesian Islamic Banks. *Business Management Research*, 3(1), 42–57. <https://doi.org/10.26905/bismar.v3i1.13505>

Syamlan, Y. T., Wahyuni, S., Heruwasto, I., & Hamsal, M. (2025). Exploring sharia compliance parameters in marketing to foster innovation and collaboration within Islamic finance. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-04-2024-0172>

Umar, U. H., Abduh, M., & Besar, M. H. A. (2023). Shari'a Supervisory Board and Islamic Banks' Insolvency Risk. *Journal of Islamic Monetary Economics and Finance*, 9(3), 419–442. <https://doi.org/10.21098/jimf.v9i3.1635>

Ur Rehman, A., Aslam, E., & Iqbal, A. (2022). Intellectual capital efficiency and bank performance: Evidence from islamic banks. *Borsa Istanbul Review*, 22(1), 113–121. <https://doi.org/10.1016/j.bir.2021.02.004>

Wafi, I., & Rosdiana, R. (2025). *The Impact Of Islamic Banking On Financial Inclusion In Developing Countries: A Systematic Literature Review*. 7(1).

White, H. (1980). A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity. *JSTOR*, 48(4), 817–838. <https://doi.org/10.2307/1912934>

Yarmanti A., V., Ardo, A. M., & Bustami, A. W. (2025). Islamic Banking Innovation and Customer Satisfaction: A Case Study of Indonesia and Nigeria. *BANCO: Jurnal Manajemen Dan Perbankan Syariah*, 7(1). <https://doi.org/10.35905/banco.v7i1.11018>

Yenice, A. C., & Orhan, Z. H. (2025). Exploring the strengths and weaknesses of Islamic banking in Türkiye: A multi-generational perspective. *Qualitative Research in Financial Markets*. <https://doi.org/10.1108/QRFM-11-2024-0345>