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Determinants of Financing Risk Dynamics in Southeast Asian Islamic Banking

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Abstract

This study aims to analyze the integration of internal fundamental factors, bank performance metrics, and macroeconomic dynamics in determining financing risk among full-fledged Islamic commercial banks across Southeast Asia. A quantitative approach was utilized with a balanced panel regression (2012–2024) of eleven Southeast Asian Islamic commercial banks in EViews, using Chow, Hausman, and Lagrange Multiplier tests. The findings show that internal factors mitigate non-performing financing, while asset growth and macroeconomic expansion increase risk; inflation and systemic pandemic disruptions have no impact. Internal strength absorbs macro-financial volatility, obligating executives and regulators to prioritize operational efficiency and prudent growth. This study integrates Muslim-majority and minority nations, PSFR ratios, COVID-19 shocks, and Business Cycle Theory to reveal Non-Performing Financing dynamics.

Keywords : Financing Risk; Non-Performing Financing; Islamic Banking; Panel Data Analysis; Southeast Asia

INTRODUCTION

Islamic banking has recorded exponential growth at the global level, with total assets reaching USD 3.32 trillion by the end of 2025 (Cambridge Institute of Islamic Finance, 2025), driven by a projected annual growth rate of 15–20% across both Muslim-majority and Muslim-minority nations (Ali, 2021; Grira & Labidi, 2021). Within this constellation, Southeast Asia is a strategic hub and holds three of the top global Islamic asset shares (Iqbal et al., 2022). Nevertheless, the region exhibits significantly varied market structures. Countries with mature dual-banking systems, such as

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Malaysia (33.2% market share) and Brunei Darussalam (62.8%), have demonstrated advanced institutional integration (Islamic Financial Services Board, 2025; Othman & Gabbori, 2024).

Conversely, large economies like Indonesia still face structural optimization challenges, retaining a relatively low market share of 7.3% despite its massive Muslim population (Rau, 2025; Wafa, 2025). Meanwhile, Muslim-minority countries such as Thailand, the Philippines, and Singapore remain in the early development phase or operate within niche markets (Chowdhury & Haron, 2021; Rau, 2025). Despite their role as agents of development and financial intermediaries allocating 70–80% of funds to financing (Farah et al., 2025; Mardhiyaturrositaningsih, 2022), the accelerated financing expansion coupled with ASEAN economic integration intensifies competitive pressure and operational exposure, thereby placing financing risk as the foremost threat to institutional stability (Lee & Rosenkranz, 2019; Widarjono & Sidiq, 2022).

This financing risk is directly reflected in Non-Performing Financing (NPF), which accounts for up to 70% of total bank risk exposure and triggers three-quarters of Islamic bank failures globally (Arunkumar & G.Kotreshwar, 2015). As a lagging outcome of systemic risk management weaknesses (Ferreira, 2023), elevated NPF deteriorates balance sheet structures and triggers cross-border domino effects within the interconnected ASEAN financial system (Naili & Lahrichi, 2022; Vuong et al., 2024). This vulnerability is further exacerbated by the inherent complexity of Islamic contracts, specifically the duality between profit-loss sharing (PLS) and trade-based (non-PLS) schemes, which induces higher adverse selection and moral hazard risks compared to conventional credit models (Abdiriva & Yaya, 2025; Dibooglu et al., 2022). Consequently, NPF mitigation is not merely an operational necessity, but a regulatory imperative under Basel III standards to preserve capital efficiency and systemic stability (Aldoseri, 2021; Pambuko et al., 2025).

Although prior empirical studies have extensively explored the internal and external determinants of NPF (Arintoko et al., 2024; Hartanto & Samputra, 2023), current ASEAN-focused literature suffers from crucial geographical and methodological limitations. Previous research has predominantly focused on Muslim-majority jurisdictions (Fransiska & Siregar, 2023; Misman et al., 2020), while largely ignoring comparative dynamics within Muslim-minority environments. Furthermore, contract-

specific Islamic indicators, such as the Profit-Sharing Financing Ratio (PSFR), are often overlooked and instead use general banking metrics. At the same time, major macroeconomic shocks like COVID-19 are rarely modeled directly as predictor variables to capture structural shifts. To address these literature gaps, this study offers empirical novelty by synthesizing fundamental factors (bank size, PSFR), bank performance (ROA, BOPO), and macroeconomic factors (inflation, GDP growth, and a pre/post-COVID-19 dummy variable) across a comprehensive multi-country ASEAN sample that encompasses both Muslim-majority (Indonesia, Malaysia, Brunei) and Muslim-minority (Singapore, Thailand, the Philippines) contexts.

Grounded in Business Cycle Theory, this study unravels the underlying causal mechanisms driving NPF accumulation under varying institutional and macroeconomic conditions. Conceptually, bank size and ROA reflect risk diversification capacity, governance maturity, and operational efficiency (Hartanto & Samputra, 2023). Conversely, high BOPO and elevated PSFR expose banks to operational inefficiencies, information asymmetry, and agency conflicts inherent in profit-sharing contracts (Lekpek, 2018; Suprayitno & Hardiani, 2021). Externally, inflationary pressures erode borrower repayment capacity, whereas GDP growth acts as a counter-cyclical buffer (Cortes & Soriano, 2024). By integrating the COVID-19 shock alongside contract-specific and macro-level predictors across diverse ASEAN regulatory regimes, this research provides an actionable empirical framework for regulators and bank management to optimize risk mitigation, enhance financing analysis quality, and reinforce financial stability within dual-banking ecosystems.

This study's novelty lies in its holistic and comprehensive framework for mapping the determinants of Non-Performing Financing (NPF) in Southeast Asian Islamic banking through several major contributions. First, it integrates samples from both Muslim-majority nations (Indonesia, Malaysia, Brunei Darussalam) and Muslim-minority nations (Singapore, Thailand, the Philippines), addressing the limitations of prior literature that largely focused on homogeneous samples. Second, it explicitly incorporates the Profit Sharing Financing Ratio (PSFR) to capture the unique characteristics of profit-and-loss sharing contracts often neglected in NPF modeling, while combining it with bank size, internal performance metrics (Return on Assets and BOPO), and

macroeconomic indicators (inflation, GDP growth, and a pre-to-post COVID-19 dummy variable as a systemic shock predictor). Third, theoretically, this study triangulates Business Cycle Theory to unravel the underlying causal mechanisms and structural accumulation driving NPF formation as a lagging outcome, rather than merely evaluating statistical correlational relationships.

LITERATUR REVIEW

Business Cycle Theory

Business Cycle Theory posits that economies undergo recurring aggregate fluctuations driven by systemic shifts in market expectations, credit conditions, and policy adjustments (Vianna, 2023). Recent theoretical and empirical literature emphasizes that systemic movements during expansionary and contractionary phases leave distinct structural footprints on developing financial systems (Sultan et al., 2021; Vianna, 2023). Within banking ecosystems, macroeconomic expansion periods foster pro-cyclical risk-taking and over-investment, which systematically transition into credit quality deterioration during cyclical decelerations (Cortes & Soriano, 2024). Furthermore, exogenous macroeconomic dislocations interact with institutional mechanisms, influencing debtor repayment capacity and overall asset-quality dynamics (Anggraini & Widhiastuti, 2020; Perdana & Yasa, 2021). Ultimately, this theoretical framework provides a robust foundation for understanding how macroeconomic cycle transitions compress borrower liquidity, escalate operational friction, and accelerate the accumulation of Non-Performing Financing (NPF) across commercial banking institutions (Abdiriva & Yaya, 2025; Vuong et al., 2024).

Return on Assets (ROA) and NPF

High ROA reflects efficient asset utilization and sound risk management, which lowers NPF (Febrianto & Nabila, 2025; Habibi et al., 2022; Hartanto & Samputra, 2023; Jazila et al., 2021; Listiyanti & Shofawati, 2018; Muslimin et al., 2023; Syarifah & Rosman, 2024). Low ROA signals the opposite: weak asset and risk management, reduced profitability, and higher NPF (Fauji & Diana, 2023). This relationship is confirmed across

prior studies (Badarin et al., 2025; Fahmi et al., 2023; Hardana et al., 2023; Juliana et al., 2022; Muhammad et al., 2020).

H1: ROA significantly affects NPF.

BOPO and NPF

BOPO (operating costs to operating income ratio) measures Islamic banks' cost efficiency by comparing operational expenses to operational income (Dewi & Hakim, 2022; Juliana et al., 2022). Lower BOPO indicates greater efficiency, while higher BOPO signals inefficiency, reduced profitability, and weak credit risk mitigation (Habibi et al., 2022; Rizqa & Haryono, 2023). Rising operational costs largely stem from intensified monitoring, collection, and restructuring efforts during NPF resolution, consistent with "the bad management hypothesis" linking inefficiency to poor managerial quality (Rahmadania, 2021). Empirical studies consistently confirm the significant relationship between BOPO and NPF (Ramadini & Ruhana, 2025; Retnowati & Jayanto, 2020; Zulkifli et al., 2025).

H2: BOPO significantly affects NPF.

Profit Sharing Financing Ratio (PSFR) and NPF

PSFR, based on the proportion of PLS financing (mudharabah (Islamic profit-sharing partnership) and musyarakah (equity partnership)), reflects the core identity and operational partnership foundation of Islamic banking (Antonio, 2021; Mubarok & Yasin, 2025; Vegirawati & Junaidi, 2025). PLS schemes offer long-term return potential and mitigate individual credit risk through outcome-sharing between banks and clients (Samad, 2021), but carry higher risk than trade-based contracts due to direct exposure to business risk, adverse selection, and moral hazard, alongside reliance on debtor integrity and business performance (Annizar & Junarsin, 2025; El et al., 2022) PLS financing's significant impact on NPF is empirically confirmed by prior studies (Hardana et al., 2023; Saputri & Ahmadi, 2022; Sugiarto & Surahman, 2025; Widarjono et al., 2025).

H3: PSFR significantly affects NPF.

Bank Size and NPF

Bank size, proxied by total assets, indicates intermediation capacity, operational scale, and managerial complexity in Islamic banks (Dwi R et al., 2020; Hartanto & Samputra, 2023). Larger asset bases can reduce NPF through portfolio diversification and optimal resource allocation for risk management (Dwi R et al., 2020; Haryanto et al., 2024; Lutfiana & Andraeny, 2025), but may also drive aggressive credit expansion, moral hazard from "too-big-to-fail" expectations, and organizational complexity that impairs risk control (Bertay et al., 2015; Isnaini et al., 2019; Misman & Bhatti, 2020). Bank size significant influence on NPF is confirmed by prior evidence (Astrini et al., 2018; Hardana et al., 2023; Harimurti et al., 2022; Khan et al., 2023; Rahmi et al., 2024).

H4: Bank Size significantly affects NPF.

Inflation and NPF

Inflation reflects continuous price increases in goods and services, as measured by the CPI, and indicates macroeconomic stability (Anggraini & Widhiastuti, 2020; Jazila et al., 2021; Reni, 2020; Salim et al., 2021). Rising inflation erodes real income and purchasing power while raising production costs, disrupting debtor cash flow and operational efficiency (Arintoko et al., 2024; Syarifah & Rosman, 2024). As a macroeconomic distress indicator, inflation accelerates credit risk transmission by increasing business uncertainty and debtor default probability, exposing Islamic bank portfolios to elevated NPF, a relationship well-supported by empirical literature (Azmi et al., 2024; Harahap et al., 2019; Mpofu & Nikolaidou, 2018; Nkusu, 2011; C. Setiawan et al., 2024).

H5: Inflation significantly affects NPF.

Gross Domestic Product (GDP) and NPF

GDP measures total domestic output, economic growth, and national income (Arwendi & Himmati, 2023; Raysharie et al., 2024; Yulianti et al., 2022). During expansion, GDP growth raises household income and strengthens business cash flows, improving debtor repayment capacity and lowering NPF (Cortes & Soriano, 2024; Kusmayadi et al., 2017; Nabela & Thamrin, 2022). During contraction, declining GDP causes economic sluggishness, unemployment, and income loss, eroding repayment

capacity and deteriorating asset quality. This transmission mechanism confirms GDP's significant influence on NPF, corroborated by prior empirical studies (Arintoko et al., 2024; Hernawati et al., 2021; Isnaini et al., 2019; Iswanto & Ibadurrahman, 2022; Juliana et al., 2022; Kjosevski & Petkovski, 2017).

H6: GDP significantly affects NPF.

COVID-19 Dummy Variable and NPF

The COVID-19 pandemic triggered a global health crisis, causing systemic disruptions and economic contraction (Fitriyanti & Arfiansyah, 2023; Hartawan et al., 2023; I. Setiawan, 2021). As an exogenous shock, it shifted the economy from stability into extreme contraction marked by mobility restrictions, supply chain disruptions, and market volatility (Svoboda, 2023), eroding debtor income and cash flow and impairing debt repayment capacity. A COVID-19 dummy variable captures this structural transition, confirming that exogenous macroeconomic shocks significantly increase NPF (Dewi & Hakim, 2022; Suradi et al., 2021).

H7: The COVID-19 Dummy Variable significantly affects NPF.

RESEARCH METHOD

The target population comprises all full-fledged Islamic commercial banks in six Southeast Asian countries: Malaysia, Indonesia, Brunei Darussalam, Singapore, the Philippines, and Thailand. Purposive sampling (Sugiyono, 2019) was used based on five criteria: (1) full-fledged Islamic commercial bank status, not a window or unit; (2) active operation within the designated jurisdictions; (3) official registration and supervision by relevant national authorities (Bank Negara Malaysia, Indonesia Financial Services Authority, Brunei Darussalam Central Bank, Monetary Authority of Singapore, Bangko Sentral ng Pilipinas, Bank of Thailand); (4) consistent publication of audited annual financial statements for 2012–2024; and (5) complete data availability for Bank Size, PSFR, ROA, and BOPO.

The final sample comprised 11 full-fledged Islamic commercial banks, forming a balanced panel dataset over 13 years. Secondary data from audited annual financial reports were analyzed using EViews, applying panel data regression across three specifications: Common Effect

Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), which were systematically selected through classic diagnostic procedures, including the Chow, Hausman, and Lagrange Multiplier tests, to ensure accurate and reliable structural estimations among the research variables.

RESULTS AND DISCUSSION

Results

Descriptive Analysis

Table 1. Descriptive Analysis

	NPF_Y	ROA_X1	BOPO_X2	PSFR_X3	TA_X4	INF_X5	GDP_X6	DUMMY_X7
Mean	0.045446	0.000772	0.519947	0.244290	1.32E+08	0.024099	0.038243	0.384615
Median	0.017461	0.007278	0.422071	0.094334	39577927	0.021815	0.048431	0.000000
Maximum	0.574578	0.107700	0.997700	0.955100	1.16E+09	0.084781	0.097568	1.000000
Minimum	0.000000	-0.123909	0.000000	0.000000	0.000000	-0.016107	-0.095183	0.000000
Std. Dev.	0.086231	0.032917	0.269184	0.284612	2.23E+08	0.019448	0.031707	0.488214
Observ.	143	143	143	143	143	143	143	143

Source: Data processed using EViews, 2026

Descriptive statistics show notable heterogeneity across the sampled Islamic commercial banks and macroeconomic indicators. Mean NPF is 4.54% (SD = 0.0862; range 0.00%–57.46%) and mean ROA is 0.08% (SD = 0.0329; range -12.39%–10.77%), both showing high dispersion relative to their means, indicating substantial cross-bank variability in asset quality and profitability. BOPO averages 51.99% (SD = 0.2692; range 0.00%–99.77%) and PSFR averages 24.43% (SD = 0.2846; range 0.00%–95.51%), reflecting divergent operational structures and risk-sharing credit allocation. Total Assets average 132 million (SD = 223 million; range 0–1.16 billion), highlighting structural size disparities. Inflation and GDP growth show relatively stable trajectories with low deviation, averaging 2.41% (SD = 0.0194; range -1.61%–8.48%) and 3.82% (SD = 0.0317; range -9.52%–9.76%), respectively. The COVID-19 dummy has a mean of 0.3846 (SD = 0.4882), indicating 38.46% of the panel captures the pandemic period.

Model Selection

Chow Test

Table 2. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	41.804293	(10,125)	0.0000
Cross-section Chi-square	210.049074	10	0.0000

Source: Data processed using EViews, 2026

The results of the redundant fixed effects test yield a Cross-section F-statistic of 41.804 (df = 10, 125, $p < 0.001$) and a Cross-section Chi-square statistic of 210.049 (df = 10, $p < 0.001$). Because both p-values are well below the 5% significance threshold, the null hypothesis of redundant cross-sectional fixed effects is strongly rejected. This confirms significant heterogeneity across entities, indicating that the Fixed Effects Model (FEM) is statistically superior to the Pooled OLS (Common Effect Model).

Hausman Test

Table 3. Hausman Test

Test Summary	Chi-Sq. Statistic	d.f.	Prob.
Cross-section random	80.317048	7	0.0000

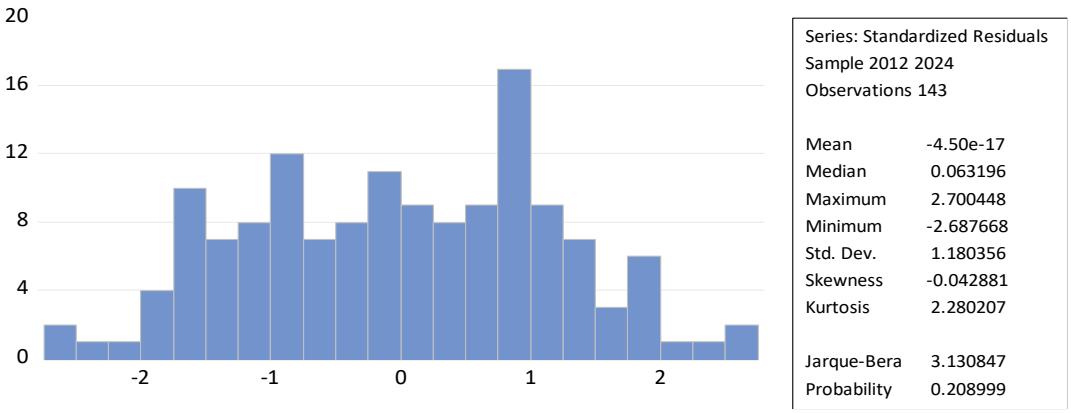
Source: Data processed using EViews, 2026

The probability value of 0.0000 (< 0.05) supported FEM selection, eliminating the need for the LM test, which compares CEM against REM. The Chow test yielded a probability value of 0.0000 (< 0.05), indicating that FEM outperforms CEM, while the Hausman test also yielded a probability value of 0.0000 (< 0.05), confirming FEM superiority over REM. FEM was thus selected for capturing individual heterogeneity across the sampled banks, providing more consistent and accurate estimates. Subsequent classical assumption testing, panel regression estimation, and hypothesis testing proceed using this model.

Classical Assumption Tests

Normality Test

Figure 1. Normality Test



Source: Data processed using EViews, 2026

The Jarque-Bera normality test yielded a probability value of 0.208999 ($p > 0.05$), confirming that the standardized residuals follow a normal distribution. This satisfies the classical normality assumption and validates subsequent hypothesis testing and parametric inference.

Multicollinearity Test

Table 4. Multicollinearity Test

	ROA_X1	BOPO_X2	PSFR_X3	TA_X4	INF_X5	GDP_X6	DUMMY_X7
ROA_X1	1.000000	-0.039764	0.042183	-0.689975	-0.081954	-0.024481	0.038233
BOPO_X2	-0.039764	1.000000	0.592926	-0.214202	0.331186	0.001823	0.051725
PSFR_X3	0.042183	0.592926	1.000000	-0.221783	0.261431	-0.009649	0.179831
TA_X4	-0.689975	-0.214202	-0.221783	1.000000	0.162559	0.159339	0.141434
INF_X5	-0.081954	0.331186	0.261431	0.162559	1.000000	0.474420	-0.022183
GDP_X6	-0.024481	0.001823	-0.009649	0.159339	0.474420	1.000000	-0.275642
DUMMY_X7	0.038233	0.051725	0.179831	0.141434	-0.022183	-0.275642	1.000000

Source: Data processed using EViews, 2026

The multicollinearity test shows correlation coefficients between all independent variables well below the critical threshold of 0.80, confirming the model is free from severe multicollinearity and satisfies this classical assumption.

Autocorrelation Test

Table 5. Autocorrelation Test

Cross-section fixed	Coefficient
Durbin-Watson stat	1.150357

Source: Data processed using EViews, 2026

The Durbin-Watson test examined whether residuals in the panel regression model exhibit serial correlation. The DW statistic of 1.150257 falls within the acceptable range (1 < DW < 3), indicating no severe autocorrelation. The model thus satisfies the classical assumption of no autocorrelation, ensuring unbiased and efficient standard errors for statistical inference.

Heteroscedasticity Test

Table 6. Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic
C	0.313985	0.302433	1.038197
ROA_X1	2.371617	3.477877	0.681915
BOPO_X2	0.729516	0.440305	1.656842
PSFR_X3	0.044780	0.510176	0.087774
TA_X4	-3.41E-10	9.72E-10	-0.351259
INF_X5	-3.361573	3.379597	-0.994667
GDP_X6	3.365821	2.042154	1.648172
DUMMY_X7	0.242441	0.140362	1.727254

Source: Data processed using EViews, 2026

The Glejser test assessed heteroscedasticity by regressing absolute residuals on all independent variables. P-values for Bank Size (0.496), PSFR (0.100), ROA (0.930), BOPO (0.726), Inflation (0.321), GDP (0.101), and COVID-19 Dummy (0.086) all exceed 0.05. This confirms constant residual variance, satisfying the classical assumption of homoscedasticity.

Panel Data Regression Analysis

Table 7. Panel Data Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.090189	0.019084	4.725803	0.0000
ROA_X1	-1.405449	0.219465	-6.403984	0.0000
BOPO_X2	-0.062640	0.027785	-2.254477	0.0259
PSFR_X3	-0.079848	0.032194	-2.480225	0.0145
TA_X4	6.06E-42	6.13E-11	2.987993	0.0325
INF_X5	-0.207329	0.213263	0.972176	0.3328
GDP_X6	0.121825	0.128866	2.945359	0.0346
DUMMY_X7	0.001901	0.008857	0.214673	0.8304

Source: Data processed using EViews, 2026

The estimated panel regression model shows distinct dynamics governing NPF across Southeast Asian Islamic banks. The baseline intercept ($\alpha = 0.0902$) indicates a fundamental NPF rate of 9.02% when all explanatory variables are held constant. ROA (-1.4054) exerts a substantial negative effect on NPF, confirming that stronger profitability enhances credit risk absorption. BOPO (-0.0626) and PSFR (-0.0798) also show inverse relationships with NPF. Total Assets shows a positive but negligible coefficient ($\beta = 6.06 \times 10^{-11}$), indicating minimal marginal effect despite asset expansion. Externally, GDP growth (0.1218) positively influences NPF, while inflation ($\beta = -0.2073$) and the COVID-19 dummy ($\beta = 0.0019$) lack statistical significance under partial hypothesis testing.

T-Test

Table 8. Hypothesis Test

Variable	t-Statistic	Prob.	Decision
ROA → NPF	-6.403984	0,0000	H1 Accepted
BOPO → NPF	-2.254477	0,0259	H2 Accepted
PSFR → NPF	-2.480225	0,0145	H3 Accepted
Total Assets → NPF	2.987993	0,0325	H4 Accepted
Inflasi → NPF	0.972176	0,3328	H5 Reject
GDP → NPF	2.945359	0,0346	H6 Accepted
Dummy COVID-19 → NPF	0.214673	0,8304	H7 Reject

Source: Data processed using EViews, 2026

The partial significance test (t-statistic) indicates that internal bank performance indicators and macroeconomic conditions significantly drive NPF, while external shocks show limited explanatory power. ROA (p = 0.0000), BOPO (p = 0.0259), PSFR (p = 0.0145), Total Assets (p = 0.0325), and GDP Growth (p = 0.0346) all fall below the 5% significance threshold, supporting acceptance of H1–H4 and H6 with statistically significant effects on NPF. Inflation (p = 0.3328) and the COVID-19 Dummy (p = 0.8304) exceed the 5% threshold, leading to rejection of H5 and H7 due to statistical insignificance.

Determinant Test (R2)

Table 9. R-squared Test

Cross-section fixed	Coefficient
R-squared	0.836907
Adjusted R-squared	0.814726

Source: Data processed using EViews, 2026

The Adjusted-R^2 of 0.814726 (≈81.47%) indicates strong model fit, with ROA, BOPO, PSFR, Total Assets, Inflation, GDP Growth, and the COVID-19 Dummy, together with cross-sectional and period fixed effects, collectively explaining 81.47% of NPF variance. The remaining 18.53% is attributable to factors outside the model specification.

Discussion

The Effect of Return on Assets (ROA) on NPF

Return on Assets (ROA) has a statistically significant negative effect on NPF, supporting H1. Grounded in Business Cycle Theory, higher profitability provides a vital internal capital buffer that absorbs default losses during economic shifts. Profitable banks maintain strict underwriting standards and high operational governance, avoiding loose credit expansion during boom periods. This outcome validates the "bad management hypothesis", which links low profitability to poor post-disbursement monitoring. Ultimately, internal earnings retention remains the primary line of defense against credit risk deterioration across ASEAN jurisdictions (Arintoko et al., 2024).

The Effect of BOPO on NPF

Operational inefficiency, referring to BOPO, exhibits a statistically significant positive effect on NPF, supporting H2. Within Business Cycle Theory, escalating operational costs signal severe institutional resource misallocation during aggressive credit expansion. Rising operational friction weakens post-disbursement monitoring, collateral tracking, and early-warning risk assessments. This structural inefficiency heightens information asymmetry, elevating adverse selection and moral hazard risks between banks and borrowers (Lekpek, 2018). Consequently, Islamic bank executives must adopt automated credit scoring and digital transformation to maintain operational discipline and asset quality.

The Effect of Profit Sharing Financing Ratio (PSFR) on NPF

The Profit Sharing Financing Ratio (PSFR) exerts a statistically significant negative impact on NPF, supporting H3. Contrary to conventional banking literature that assumes equity-based contracts elevate credit risk, these results show that profit-and-loss sharing (PLS) structures act as systemic stabilizers. Under Business Cycle Theory, PLS contracts align bank-borrower incentives through contractual risk-sharing, easing rigid debt-service pressures during economic contractions. This offers empirical novelty by proving that PLS arrangements serve as real counter-cyclical risk buffers (Abdiriva & Yaya, 2025), rather than default drivers.

The Effect of Bank Size on NPF

Bank size (Total Assets) displays a statistically significant negative relationship with NPF, supporting H4. In the context of Business Cycle Theory, larger Islamic banks leverage economies of scale, sectorial diversification, and advanced risk modeling under Basel III to absorb cyclical volatility. Scale enables institutions to implement sophisticated risk-governance frameworks that insulate their portfolios from localized economic contractions. This outcome refutes the "too-big-to-fail" moral hazard assumption, instead confirming the risk-diversification hypothesis across Southeast Asian Islamic banking markets (Lee & Rosenkranz, 2019).

The Effect of Inflation on NPF

Inflation shows a statistically insignificant effect on NPF, rejecting H5. Business Cycle Theory indicates that macro-level price pressures did not directly trigger credit defaults, as central bank monetary adjustments and targeted government subsidies cushioned borrower cash flows across ASEAN economies. Furthermore, flexible mark-up pricing structures in Islamic contracts allowed institutions to absorb moderate inflationary shocks without destabilizing repayment capacities. This empirical finding demonstrates that macro price volatility was effectively decoupled from micro-level credit risk transmission channels (Cortes & Soriano, 2024).

The Effect of GDP on NPF

GDP growth exerts a statistically significant positive effect on NPF, supporting H6. This positive direction reveals pronounced pro-cyclical lending behavior among ASEAN Islamic commercial banks. Grounded in Business Cycle Theory, rapid economic growth induces market optimism, prompting banks to aggressively expand financing while loosening credit screening standards to capture market share. As the business cycle saturates, these underwritten assets deteriorate rapidly, confirming pro-cyclical risk accumulation and highlighting the critical necessity for macro-prudential authorities to enforce dynamic Counter-cyclical Capital Buffers (Vuong et al., 2024).

The Effect of the COVID-19 Pandemic Shock on NPF

The COVID-19 shock (Dummy) exhibits a statistically insignificant positive relationship with NPF, rejecting H7. Interpreted through Business Cycle Theory, aggressive regulatory interventions such as loan restructuring, liquidity support, and payment moratoria across ASEAN nations created an artificial counter-cyclical buffer. These targeted extraordinary policy interventions successfully insulated Islamic bank balance sheets, preventing exogenous systemic shocks from transmitting into credit default spikes. This finding adds empirical novelty by confirming that decisive state intervention can suspend standard business-cycle default dynamics (Naili & Lahrichi, 2022).

CONCLUSION

Grounded in Business Cycle Theory, this study re-evaluates the structural mechanisms driving Non-Performing Financing (NPF) across 11 ASEAN Islamic commercial banks (2012–2024). The panel regression confirms that credit risk accumulation is driven by endogenous pro-cyclical behavior, operational friction, and contractual agency costs rather than external shocks. Return on Assets (ROA), BOPO, Profit Sharing Financing Ratio (PSFR), Total Assets, and GDP Growth exert statistically significant effects on NPF, whereas Inflation and the COVID-19 pandemic shock remain statistically insignificant. This shows that internal risk governance and operational discipline explain balance sheet quality far better than exogenous macroeconomic disruptions across Southeast Asian jurisdictions.

Furthermore, these empirical findings provide decisive answers to the three core dimensions of novelty advanced by this research. First, internal risk governance, rather than demographic market maturity, dictates asset stability across both Muslim-majority and Muslim-minority jurisdictions. Second, contract-specific mechanisms confirm that expanding equity-based structures requires real-time auditability to mitigate information asymmetry and moral hazard. Third, targeted regulatory interventions effectively decoupled severe exogenous shocks from standard business cycle transmission channels during the pandemic crisis. Ultimately, these insights mandate that ASEAN regulators and bank executives prioritize controlling pro-cyclical credit expansion and implementing dynamic counter-cyclical capital buffers (CCB) to preserve long-term systemic financial stability.

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